

KNOWN PROBLEMS IN OVAL

You should be aware of the following problems that have been identified in the OVAL Run-time environment. The bulk of the problems occur when using dBaseIII/IV databases. Their format is not native to the Psion platform, and mapping them onto the database routines built into the SIBO O/S proved difficult.

Therefore, whenever possible use the native Psion *.DBF* format for storing data on the Workabout and Series3. When the files need to be sent to a host PC, then make use of the converters in PsiWin and similar products, or export the data in CSV format, which most database applications can import directly.

1) **IND1-6:** The **Format** function:

- a) Doesn't use the International Settings value to determine how to display a decimal point. It always uses a “.” (period), which is the standard character used in the UK.
- b) Tends to get the format wrong when breaking up numbers into triads.
- c) Doesn't round floating point numbers but instead truncates them when displaying them.

Solution [for point (c)]: Add “5” to the digit being lost before invoking Format.

- 2) **IND1-40:** A customer reported various issues when Tabbing through a set of EditBoxes. These were not completely reproducible, and some of the issues may have been resolved. However, there were reported circumstances where two boxes were highlighted at the same time.
- 3) **IND1-41:** Occasionally, dBaseIII tables are not updated correctly when records are modified.
- 4) **IND1-42:** The **Seek** function of the Table object on dBaseIV databases doesn't work - it always returns “NoMatch”.
- 5) **IND1-45:** Adding a field of type DB_BOOLEAN to a database causes an error. This can be prevented by avoiding this field type.
- 6) **IND1-46:** Deleting an index from a database table causes a general failure.
- 7) **IND1-48:** The **Find...** functions don't find records of type “Double”.
- 8) **IND1-49:** Deleting a row from a Grid bound to an indexed table, then later trying to add a new record to the table, causes a “Duplicate key” error message.
- 9) **IND1-51:** If an error occurs when opening a multi-table database, any tables which were successfully opened are left open. As the database handle is now deemed invalid by OVAL, the app cannot close the database, and so the database is left unusable. It cannot be deleted, nor can the disk be reformatted, until the app itself is stop/started.
- 10) **IND1-61:** Binding a Grid to a dBase IV table causes an “Unknown file format” error.
- 11) **IND1-65:** A “Duplicate key” error is generated when editing a record from an indexed dBaseIV table.

As well as the above problems, a number of minor issues have been raised. These have not been fixed because either (a) a workaround is known, or (b) they have been deemed as too esoteric to address.

- 12) **IND1-3:** If a database Field or TableDef are declared locally rather than globally, the run-time complains that their Properties can only be set at design-time.

Solution: Declare such vars globally.

- 13) **IND1-5, IND1-17:** If some hidden controls, such as the Scanner or Machine control, are unloaded, an app can suffer a “Panic 25” if they are subsequently reloaded. This applies mainly to controls that use other resources.

Solutions: (a) Put all hidden controls on the base form so they are never unloaded; or,
(b) Use *.Hide* rather than *.Unload* to “remove” a form that contains a hidden control.

- 14) **IND1-11:** Status window size isn’t toggle-able with Ctrl-M when a FileSelector has focus.

Solution: Avoid this scenario when designing the app.

- 15) **IND1-29:** The Picture control doesn’t accept *.PIC* files that don’t contain a grey plane.

Solution: Use a file with empty grey planes, open the file in B+W mode, and skip every other image.

- 16) **IND1-30:** Rapidly loading and unloading bitmaps into an Image control can cause memory leaks.

Solution: Avoid rapidly loading and unloading bitmaps into an Image control.

- 17) **IND1-34:** Assigning CHR(1) on its own to a string variable causes a panic. CHR(1) is a special feature of XWIM which means “indent the following string”.

Solution: Do not assign CHR(1) on its own to a string variable.

- 18) **IND1-43:** Deleting the last element of a Control array can GPF the Oval IDE. Since this is not a run-time bug, it will not be addressed.

Solution: Edit the *.OFR* file manually.

- 19) **IND1-47:** The return code from a *SystemCall.CallSys* routine is supposed to be an Integer, but only the low-byte is being correctly set when an error occurs. The high-byte can thus contain garbage.

Solution: Call a C routine beforehand that always leaves AH clear. There are various options (e.g. *IoShiftStates*, *FilLocChanged*, *TimDayOfWeek*, *GenGetLanguageCode*, *GenGetAutoMains*, or *HwGetBackLight*, etc.), but it has yet to be determined which is best.

- 20) **RMT_2:** A developer reported that continually updating a database generates leaks. The DB developer doesn’t agree and believes this problem was fixed with a DBS patch, which is now distributed with the OVAL release.

Solution: None needed.

- 21) **IND1-31:** Opening a file for append on a freshly-formatted SSD fails.
Solution: First create another file, which can also be immediately deleted.
- 22) **IND1-50:** The translator does not notice if the user fails to declare a variable that is used as the index to a Control array.
Solution: The user must always declare these variables.
- 23) **IND1-53:** An undefined EditBox can be translated successfully.
Solution: Always define EditBoxes.
- 24) **IND1-54:** Creating Form vars at run-time works, but attempts to change their fields produces “Property only available at design time” errors.
Solution: Do not create Form vars at run-time.
- 25) **IND1-56:** Dialog objects cannot be passed to a function as parameters. This causes a “Panic 60”.
Solution: Use global variables instead.
- 26) **IND1-59:** Setting the Tmode property of a GC object to G_TRMODE_REPL causes an “Illegal function argument” error at run-time.
Solution: This can be worked around by clearing the area to be updated and then using G_TRMODE_SET.
- 27) **IND1-64:** The Evaluate function does not work. It is rarely used, and it can be emulated fairly easily.
Solution: None needed.
- 28) **SW1-242:** The DatePart function does not work correctly. It doesn’t correctly identify where the first week in a year starts (ISO standard suggests it is the first week to contain 4 or more days of the new year - so sometimes 1/1/xxxx can be in week 1 of year xxxx and sometimes it is in week 53 of year xxxx-1). This is seldom used, and can be emulated if needed.
Solution: None necessary.
- 29) **HA-957:** Print method writes to both black and grey planes.
Solution: None needed.
- 30) **SW-54:** Redrawing some controls shows unnecessary flickering. This is cosmetic only.
Solution: None needed.