

Off-Line Documentation template: Context change (background/for ground) switches

### **1) Operational Goals**

Provide all the house keeping operations needed for all context changes, like clip conversion and deactivating controls.

### **2) Fundamental, "key", or cornerstone architectural requirements (POSTMORTEM)**

- Need to decode the event and handle it
- Need to set flag `fInBackground` correctly
- Need to set `fSleepVal` correctly
- Need to convert clip (get a copy from system or give one to the system)
- Pass the `HandleOSEvent` message on the `fTarget` chain.

### **3) Model of the implementation fulfilling these key requirements (POSTMORTEM)**

- a) In response to an `OSEvent` where the application is changing its context the application needs to correctly set the `fInBackground` flag and `fSleepVal` correctly.
- b) The application also needs to perform any necessary clip conversion at that time too.
- c) All the windows and documents need to be given a chance to do any house keeping as the application changes its status with respect to being in the background.

### **4) Impact/scope of the implementation on the existing body of code (POSTMORTEM)**

- `DApplication::OSEvent` - decodes the event and if needed sets the `fInBackground` flag and `fSleepVal` correctly and it initiates the clip conversion process.
- `DEventHandler::HandleOSEvent` - provides for event handling of this type of event for all event handler objects
- `DScrollWindow::HandleOSEvent` makes sure that the scroll bars are correctly visible or NOT, by overriding the `DEventHandler::HandleOSEvent` member function.

### **5) Coding notes (gotchas, warnings, process thoughts, items to revisited later...)**

- Had a problem with the `HandleOSEvent` not getting to `TEditWind` (because I forgot to declare the override as virtual) resulting in highlighted text not being un-highlighted.
- For ThinkC users, make sure that the finder flags are set such that suspend/resume messages get sent to your application. (the flag settings are under the "Set Project type..." menu option.

### **6) Testing notes ( bug types, what made a bug hard to fix, what could have been done to catch it sooner....)**

- I failed to catch the incorrect handling of the visibility of the scrollbars until after the release of the `DinkClass` demo, even after all the other testing and tweaking I still missed that user interface guideline requirement. I need to think of a way to catch these kinds of bugs before the public finds them!!!!

### **7) Process notes ( what process did you follow, could it be improved)**

