## **Dialog Utilities**

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Dialog Utilities
// Assumes inclusion of <MacHeaders>
/* Return topLeft point to center standard file dialogs. */
Point DU_StdPutWhere(void);
Point DU_StdGetWhere(void);
    Pre-load and center ALRT/DLOG template resources. Changes do not affect
    the resource file, but if the ALRT/DLOG is created soon after the call
    it will use the modified (centered) template in memory. Both routines
    return the passed rsrc id to allow calls like:
            Alert(DU CenterALRT(alertID), filter);
            GetNewDialog(DU_CenterDLOG(dlogID),dStorage,behindWindow);
 */
short DU_CenterALRT(short rsrcId);
short DU_CenterDLOG(short rsrcId);
static Rect DU_MouseGDRect(void) {
/* Returns the gdRect of the screen device the mouse is currently in. */
    Point
                   p;
    Rect
                   r = screenBits.bounds;
    <u>GDHandle</u>
                   curDevice = GetDeviceList();
    GetMouse(&p);
    while(curDevice){
    if (<u>TestDeviceAttribute</u>(curDevice, <u>screenDevice</u>) &&
            <u>TestDeviceAttribute</u>(curDevice,<u>screenActive</u>) &&
            PtInRect(p,&(*curDevice)->gdRect))
            r = (*curDevice)->gdRect;
            curDevice = GetNextDevice(curDevice);
    }
    return r;
}
static void DU_CenterRect(Rect* rect_p){
 * Aligns *rect_p with screenBits.bounds - LR centered & with 1/3 of the
* empty space above the rect.
    Rect bRect = DU_MouseGDRect();
    bRect.top += GetMBarHeight();
    /* exactly centered */
    OffsetRect(rect_p, (bRect.right + bRect.left)/2 - (rect_p->right +
                   rect_p-><u>left</u>)/2, (bRect.<u>top</u> + bRect.<u>bottom</u>)/2 -
                   (rect_p -> top + rect_p -> bottom)/2);
```

```
/* 1/2 empty space above -> 1/3 empty space above */
    OffsetRect(rect_p,0,-(rect_p->top - bRect.top)/3);
}
static Point DU_Where(short rsrcId){
* Returns centering point for the topLeft corner of a dialog.
    Handle h = GetResource('DLOG',rsrcId);
    Rect
                  r = \{0,0,0,0\};
    if(h){
           r = *((\underline{Rect}^*)(^*h));
           DU_CenterRect(&r);
           ReleaseResource(h);
    }
    return topLeft(r);
}
Point DU StdPutWhere(void){
    return DU_Where(putDlgID);
}
Point DU_StdGetWhere(void){
    return DU_Where(getDlgID);
}
static short DU_Center(ResType type, short rsrcId){
* Reads in an 'ALRT' or 'DLOG' rsrc template & centers its display Rect.
    <u>Handle</u> h = <u>GetResource</u>(type,rsrcId);
    if(h)
           DU_CenterRect((Rect*)(*h));
    return rsrcld;
}
short DU_CenterALRT(short rsrcId){
    return DU_Center('ALRT',rsrcId);
}
short DU_CenterDLOG(short rsrcId){
    return DU_Center('DLOG',rsrcId);
}
```