

Determining Features of Temporary Memory

Because the temporary memory routines are present only on systems that are running MultiFinder (or on systems in which the functionality of MultiFinder is a standard part of the Operating System) and because the features of those routines have changed in system 7.0, you should always check that those routines are available and that they have the features you require before calling them. This is easy to do if the **Gestalt** function is available because **Gestalt** includes a selector to determine whether those routines are present in the operating environment and, if they are, whether the temporary memory handles are real (that is, whether you can use the normal **Memory Manager** routines to manipulate them) and whether those handles are tracked. It is also possible to determine whether the routines are available even if the **Gestalt** function is not available.

You can determine whether the temporary memory routines are implemented by checking the return value of the **TempMemCallsAvailable** function that is defined in the code example below.

```
// Determining whether temporary memory routines are available

// Assuming inclusion of MacHeaders
#include <Gestalt.h>

#define _OSDispatch 0xA88F // trap number of temp memory routines

Boolean gHasGestalt; // global variable set if system has Gestalt or not

// Prototype your routine like this prior to using it
Boolean TempMemCallsAvailable(void);

Boolean TempMemCallsAvailable()
{
    OSErr myErr; // result code returned by Gestalt
    long myRsp; // response returned by Gestalt
    // prototype for error handling routine
    void DoError(OSErr);
    // Checking for availability of trap
    Boolean TrapAvailable(short trapNum);

    if ( gHasGestalt ) { // gHasGestalt is set by other code
        myErr = Gestalt(gestaltOSAttr, &myRsp);
        if ( myErr )
            DoError(myErr);
        else
            return myRsp & 0x0008; // test bit 4, which represents
                                   // tempmemsupport
    }
    else // Gestalt is not available
        return TrapAvailable(_OSDispatch);
    return FALSE;
}
```

The **TrapAvailable** function is defined in **Determining Whether a Trap Is Available** under **About Compatibility**. You can use similar code to determine whether temporary memory handles are real and whether the temporary memory is tracked (that is, you can hold temporary memory until your application terminates).