

Q: How can my program tell whether it is running on a system with a color screen?

A: The PostScript graphics model allows you to do all your rendering in 24 bit color, and have the WindowServer display it in the best way possible (dithering down to 2 bits, if necessary). If there are situations in which you need to use the "inquire and adapt" approach, the AppKit provides you with a method in the Application class called **colorScreen** that returns the most colorful screen available to your application. By examining this data structure, you can determine how deep your color screen is. Below is a code fragment that does this:

```
#import <appkit/Application.h>
```

```
#import <appkit/screens.h>
...
{
    const NXScreen *deepestScreen;

    deepestScreen=[NXApp colorScreen];

    switch ( deepestScreen->depth ) {

        case NX_TwelveBitRGBDepth :
            /* Twelve Bit Color */
            break;
```

```
case NX_TwentyFourBitRGBDepth :
```

```
    /* True Color */
```

```
    break;
```

```
case NX_TwoBitGrayDepth :
```

```
default :
```

```
    /* Greyscale */
```

```
    break;
```

```
}
```

```
}
```

Q: How can I tell whether a View can display color or not?

A: The previous question does not answer which kinds of rendering commands you should be sending for a given View. There are two headed systems, and other circumstances where the window you are drawing in is not based on the value of **colorScreen**. The most common thing you want to do is different rendering based on whether this View can display color or not. One way to do this is to use the **shouldDrawColor** method of View. Do the following in your `drawSelf::` method for the View:

```
- drawSelf:(NXRect *)rects :(int)count
{
    if ([self shouldDrawColor]) {
        ... color-specific drawing ...
    } else {
        ...
    }
    ...
}
```

If you need to know the actual depth of a given window, use the **depthLimit** method of Window. Here's some code for that:

```
NXWindowDepthLimit depth;
if ((depth = [myWindow depthLimit]) == NX_DefaultDepth) {
    depth = [Window defaultDepthLimit];
}
```

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Valid for 2.0, 3.0

