

BR_Monitor – Monitor Services

Revision history

2017-03-24	Robin Lamacraft	Original draft
2019-07-02	Don Ferguson	Revise completely

SCOPE

This module was intended to be used to retrieve settings about the current set of monitors used in the Client component of HRE. This includes any settings of multiple monitors and their pixel settings, etc.

ACTIONS

There is little value in this module existing in HRE, as the functionality required is embedded in the Java GraphicsDevice class.

For a full description, see <https://docs.oracle.com/javase/6/docs/api/java/awt/GraphicsDevice.html>

In a multi-screen environment, the GraphicsConfiguration objects can be used to render components on multiple screens. The following code sample demonstrates how to create a JFrame object for each GraphicsConfiguration on each screen device in the GraphicsEnvironment:

```
GraphicsEnvironment ge = GraphicsEnvironment.  
getLocalGraphicsEnvironment();  
GraphicsDevice[] gs = ge.getScreenDevices();  
for (int j = 0; j < gs.length; j++) {  
    GraphicsDevice gd = gs[j];  
    GraphicsConfiguration[] gc =  
        gd.getConfigurations();  
    for (int i=0; i < gc.length; i++) {  
        JFrame f = new  
            JFrame(gs[j].getDefaultConfiguration());  
        Canvas c = new Canvas(gc[i]);  
        Rectangle gcBounds = gc[i].getBounds();  
        int xoffs = gcBounds.x;  
        int yoffs = gcBounds.y;  
        f.getContentPane().add(c);  
        f.setLocation((i*50)+xoffs, (i*60)+yoffs);  
        f.show();  
    }  
}
```

USED BY

Any GUI requiring the OS screen information.

DATA UNDER CONTROL OF THIS MODULE

None.

REQUIRED EXTERNAL DATA UNDER CONTROL OF ANOTHER MODULE

None.

REQUIRED SERVICES

Operating system settings access.

APPLICATION PROGRAMMING INTERFACE (API)

Defined by Java, as above.