## Banner 9 Recommendation for Desktop Computers and Laptops

Your PC has to load each page into the Browser and run a lot of scripting in the browser, and **this** is where things get slow. Banner 9 performance problems are usually related to the Browser and/or CPU.

**Browser**: Firefox (latest "Quantum") or Chrome are recommended. Internet Explorer is slow. If you have Firefox ESR installed for Java/INB compatibility, don't install Firefox Quantum. Installing Quantum will break Firefox ESR. Just use Chrome instead.

## **Computer Hardware recommendations:**

You can see what you have by right clicking "computer" or "This PC" in windows file explorer. Go to properties.

CPU is the main bottleneck with processing the large amount of Javascript code that makes up Banner 9

**CPU**: A recent (>2012) **Intel i7 processor** (4 cores min), more is better.

**Operating System:** 64 bit windows 7, or 10. (32 bit windows will be slow)

**RAM**: Minimum of 8 GB. 16GB or 32GB is better if you are opening many other

applications at the same time.

**Note**: After a Banner 9 **Server restart**, Banner 9 rebuilds its cache of Admin pages, so the FIRST load of a page after ITS restarts a server will be much slower than normal. You'll see a spinning icon the first time a page is accessed by someone. After pages have been accessed once, Banner 9 from the Server TO your PC is very fast.

Additional technical reading if you are interested in what some other schools have found:

https://ecommunities.ellucian.com/docs/DOC-11491

https://ecommunities.ellucian.com/message/175277