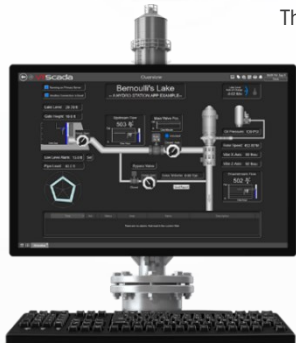


### HARDWARE & OPERATING SYSTEM RECOMMENDATIONS

The information below is a guide. Actual requirements will depend on your application architecture.



FOR INSTALLED VTScada LICENSES				
	Small Systems Up to 1K Licensed Tags	Medium Systems 1K to 25K Licensed Tags	Large Systems 25K to 100K Licensed Tags	Enterprise Systems Over 100K I/O
Windows <sup>®</sup> OS	32- or 64-bit	64-bit	64-bit	64-bit
Processor *	2 GHz Dual Core	3 GHz Quad Core	4 GHz Quad Core	4+ GHz Quad Core
RAM	8GB	16 GB	32 GB	48 GB
Hard Drive	500 GB	1 TB SSD	2 TB SSD	4 TB SSD
Historical Logging	1K data changes/sec requires 1,500 GB/year			

\* High clock speeds are more helpful than more cores.

#### Compatible Windows Operating Systems

Version	Win 11 IoT Enterprise	Win 11 64-Bit	Server 2022	Server 2019	Server 2016	Win 10 IoT Enterprise	Win 10 32/64-Bit	Server 2012 R2	Win 8.1 32/64-Bit	Server 2012	Win 8 32/64-Bit	Server 2008 R2	Win 7 64-Bit	Win 7 32-Bit	Server 2008	Vista 64-Bit	Vista 32-Bit
12.X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11.X				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10.X								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9.X												✓	✓	✓	✓	✓	✓
8.X												✓		✓	✓		✓

Microsoft has ended support for: XP<sup>®</sup>, Vista<sup>®</sup>, Windows 7<sup>®</sup>, Windows 8<sup>®</sup>, Windows 8.1<sup>®</sup>, Server 2008<sup>®</sup>, Server 2008 R2<sup>®</sup>, Server 2012<sup>®</sup>, and 2012 R2<sup>®</sup>.

#### Alarm Notifications

- Text-to-speech phone alerts require a voice modem, a VoIP-telephone system, or a web-based messaging service like Twilio<sup>®</sup>.
- Choosing Modems: [VTScada.com/modems](http://VTScada.com/modems)
- Connection to an email server for email notifications.
- Cell modem, email account, or Twilio (web-based messaging service) for text notifications.
- Sound card + speakers for local alarm annunciation.

#### Virtualized Servers

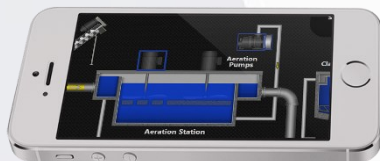
- VTScada is widely used on virtual Servers.
- Each virtual server instance needs its own VTScada license.
- Don't clone virtual servers with VTScada installed. Search 'virtual servers' in VTScada Help.
- Ensure host PCs have capacity for all VMs, e.g., CPU, RAM, drive space, ports, Ethernet bandwidth.
- Twilio (left) is a simple alternative to voice modems in virtual environments.

#### Performance Recommendations

- Load share services across servers.
- Use Master & Subordinate Apps.
- Keep VTScada & History on separate drive from OS.
- VTScada can use up to 4 CPU cores.
- Provide enough RAM for the OS and file cache (About twice the number reported in the VAM).
- See RAID Drives below.

#### RAID Drives

- VTScada supports all RAID modes for systems that specify their use.
- Applications with redundant, synchronized servers are resilient without using RAID.
- Some users have experienced performance issues with RAID. Troubleshoot this in the RAID controller not VTScada. (We may not be able to assist.)
- Configure RAID with solid-state drives (SSDs).



#### FOR THIN CLIENT CONNECTIONS

- Requires a connection to a running VTScada application server with Thin Clients enabled and configured.
- Does not require Remote Desktop Protocol<sup>®</sup> (RDP).
- Does not require dedicated thin client hardware such as Wyse<sup>®</sup> devices.
- Performance more related to the quality of the server and network rather than the power of end-user devices.
- Thin Clients work well over slower connections so long as the network latency is low.
- The VIC (below right) can support multi-monitors and graphical configuration tools.

##### The VTScada Anywhere Client

For HTML5 Browsers on Mobile Devices, PCs, Macs, and LINUX

**To Launch** - Enter a URL into one of the browsers below.

- Safari<sup>®</sup> (OS X, iOS)
- Chrome<sup>®</sup> (Windows<sup>®</sup>, Android<sup>®</sup>)
- Firefox<sup>®</sup> (Windows<sup>®</sup>)
- Edge<sup>®</sup>(Windows<sup>®</sup>)

**Phone Hardware** - 2 GB RAM (min 200 MBs free space)

**PC Hardware** - See "Small Systems" recommendations above.

##### The VTScada Internet Client (VIC)

For Windows Desktops, Laptops, and Servers

**To Launch**

- Enter a URL into a browser (Chrome<sup>®</sup>, Firefox<sup>®</sup>, or Edge<sup>®</sup>).
- or...
- Run a small desktop program (downloaded once from your application)

**PC Hardware** - See Small Systems recommendations above.

**PC OS** - Windows 12<sup>®</sup> or newer

Updated: November 12, 2024