

*SantaCruz*TM

GroundWidgets[®]

Technical Information System Hardware Requirements



Based on the technical design architecture of the Santa Cruz application, the following hardware configuration is defined as **Recommended Requirements**.

Server Software

Server OS	Windows Server 2016 Standard 64Bit (or latest version of Standard Edition)
Database Server	Microsoft SQL Server 2016 - Standard or Enterprise. Microsoft SQL Server 2012 – Standard or Enterprise (For Current Licensed Users)
Communication Server	Virtualization (Hyper-V or VMware) is Supported
Web Server	Web Services – Static IP with Port 443 Forwarding (No Dynamic IP Allowed) SSL Certificate Required Virtualization (Hyper-V or VMware) is Supported

Database Server

Processor	Intel Xeon Processor E7-8894 v4 2.00GHz (16 Core) 2.4 GHZ or Higher
Memory	32 GB RAM
Storage	2 x 200 GB or Higher, 15K RPM Drives for Operating System in RAID 1 (SATA Not Recommended) 2 x 200 GB or Higher, 15K RPM Drives for Full System Logging in RAID 1 (SATA Not Recommended) 3 x 300 GB or Higher, 15K RPM Drives for Database in RAID 5 or 10 (SATA Not Recommended)
Network	Quad 1 GB Network Adapters with 2 NIC Teaming; Strongly recommended: 10 GB with 2 NIC Teaming
Backup	Local and Off-Site

For Large Enterprise Operators

Processor	Dual-Processor CPU Configuration Based on Standard Recommended Processor or Higher
Memory	64 GB RAM or Higher
Storage	For Database: 2 x Solid-State Drives (200 GB or Higher) – Based on Database Size Estimates
Network	4 x 10 GB Network Adapters with 2 NIC Teaming Required

Web Server

Processor	Intel Xeon Processor E7-4850 v4 (Quad Core) 3.2 GHz or Higher Dual Processor CPU Configuration for Virtualized Environment (With Communications Server)
Memory	16 GB RAM
Storage	2 x 200 GB or Higher, 15K RPM Drives for Operating System in RAID 1 (SATA Not Recommended)
Network	2 x 1GB Network Adapters with 2 NIC Teaming Required

Network Switch Configuration

Main Network Switch	2 or 4, 10 GB Uplink Ports if Database Server equipped with 10 GB Network Adapter TwinX Cable Connectivity
Redundant Switch	Highly Recommended

Communications Server

Processor	Intel Xeon Processor E7-4850 v4 (Quad Core) 3.2 GHz or Higher Dual Processor CPU Configuration for Virtualized Environment (with Web Server)
Memory	16 GB RAM
Storage	2 x 200 GB or Higher, 15K RPM Drives for Operating System in RAID 1 (SATA Not Recommended)
Network	2 x 1GB Network Adapters with 2 NIC Teaming Required

Workstation Software

Workstation OS	Windows 10 Professional (Home Edition Not Supported)
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Standard Workstation

Processor	Intel i5 – 7600 (7 th Generation) 4.10 GHz Processor or Higher Or Intel i7 (6 th Generation) 3.60 GHz Processor
Memory	8 GB RAM or Higher (Based on 3 rd Party Installed Applications)
Graphics	4GB NVidia GeForce GTX 745 or Higher
Monitor	1920 x 1080 HD Resolution or Higher
Storage	200 GB or Higher
Network	1 GB Network Adapter

For Dispatcher Workstation

Processor	Intel i7 – 7700 (7 th Generation) 4.20 GHz Processor or Higher
Memory	16 GB RAM
Monitor	2 x 1920 x 1080 HD Resolution or Higher (24" inch Monitors or Higher, Recommended)

Disclaimer

The final server and workstation hardware configuration will be determined by Client’s final configuration and is coordinated with Client’s IT Service Administrator. Please note that each client’s environment is unique, and we may be able to use existing servers, workstations, and modify the configuration if needed.

We strongly recommend that you consult with your IT Administrator about your overall technology requirements unrelated to SantaCruz (i.e. office applications, VOIP phones, etc.) which can impact the overall usage of SantaCruz alongside existing applications. Your IT Admin should be able to provide guidance and assessment of your overall requirements.

GroundWidgets is available for discussions and or recommendations on hardware setup with your IT Admin to provide guidance and recommendations based on our experience.

If you plan to operate SantaCruz in a Hosted Environment, please note that performance using RDP or Citrix for remote applications will be marginally different than a locally hosted environment. We have many clients who use Remote systems and are pleased with the overall performance as having their systems in a data center is more important to them.

We also strongly recommend dedicated hardware servers for the SQL database vs a virtual SQL server as we have observed disk/resource performance issues.

The Web and Communication Servers can be setup as Virtual Servers. We advise consultation with your IT Admin on ideal setup with enough resources for memory, processors, etc.

GroundWidgets is not responsible for the performance of your servers, workstations or network environment. We are available to provide guidance or assist with troubleshooting, but it is your IT Administrator who should be the first point of contact for any hardware related issues.