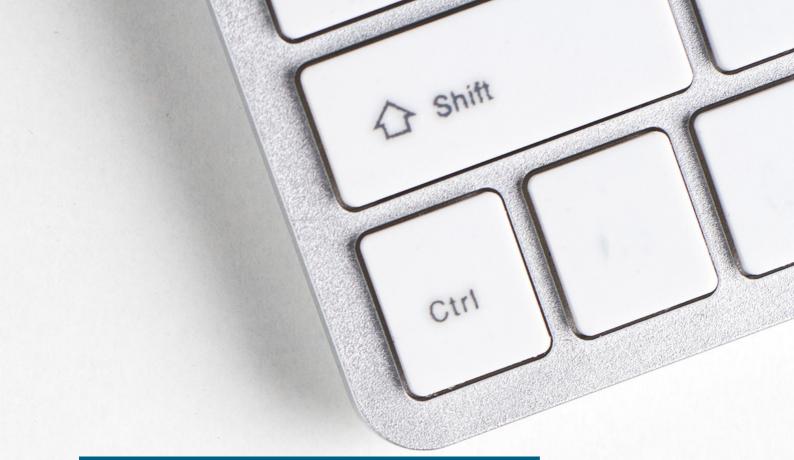


WORKSTATION RECOMMENDATIONS

A GUIDE TO HELP YOU CHOOSE THE HARDWARE BEST SUITED FOR YOUR NEEDS





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This guide has been designed to help you choose the right hardware for your business needs. It's based on the software you use, the activities you carry out and the types of models/workloads you work with. The recommended hardware has been categorised and ordered as below:

Admin = Lowest specification for everyday office applications and simple use. Integrated graphics only.
Entry = For everyday office applications, with entry level graphics and some additional software use.
Basic = For everyday office applications, with entry level graphics, and higher specification for increased use.
Standard = For most average design workloads and applications requiring mid-level graphics.
High = For use with graphics intensive applications, and a high user performance requirement.
Heavy = For users requiring cutting-edge, top-performing graphics and powerful processing. For a high intensity of work and high-end 3D

We recommend that you focus on your highest possible workload and base everything else on that. For instance if you work on both 100MB models and 500MB models, look at the hardware that is recommended for the higher workload. Or if you are a heavy Revit user, average AutoCAD user and average Office user, you will need a heavy specification system.

rendering and virtual reality (VR) applications.

Start by looking at the software you use and/or your primary activities to determine the hardware best suited to your needs. If you are unsure about your project workloads or do not feel that these suggestions fit your specific requirements, please <u>get in touch</u> with us to discuss a bespoke configuration.

SOFTWARE	WORKLOAD		
	MODEST	AVERAGE	DEMANDING
AutoCAD/LT (2D Modelling)	Entry	Entry	Standard
AutoCAD (3D Modelling)	Basic	Basic	Standard
Revit/LT	Standard	Standard	High
Navisworks	Entry	Entry	Standard
3ds Max	High	High	Heavy
Inventor Pro	High	High	Heavy
SketchUp	Entry	Entry	Standard
Enscape	Standard	High	Heavy
Adobe <u>Creative Cloud</u>	Entry	Standard	High
Microsoft Office Suite	Admin	Admin	Basic
ACC / BIM 360	Admin	Entry	Basic
Twinmotion	Standard	High	Heavy
Unreal Engine	High	Heavy	Heavy
Alias	High	Heavy	Heavy
	High	Heavy	Heavy
Unity	Heavy	Heavy	Heavy
V-Ray Vantage	Heavy	Heavy	Heavy

PRIMARY ACTIVITIES

ACTIVITY	WORKLOAD	
Office Worker*	Admin Basic	
Draughting in AutoCAD	Entry	
Working on <100MB Revit models	Entry	
Draughting in AutoCAD on large 3D models	Standard	
Working on 100MB - 500MB Revit models	Standard	
Working on 500MB+ Revit models	High	
Visualisation (Virtual Reality, Rendering)	Heavy	

*Recommended machine will either be admin or basic depending on your workloads.



ADMIN WORKLOAD



DELL OPTIPLEX

- Intel[®] Core[™] i5-13500 Processor 14 Cores, up to 4.80 GHz
- 8GB RAM
- Integrated Graphics
 Supports up to 3x Displays
- 512GB M.2 NVMe SSD Storage

HP PRO TOWER 400 G9

- Intel[®] Core[™] i5-12500 Processor
 6 Cores, up to 4.60 GHz
- 8GB RAM
- Integrated Graphics
 Supports up to 3x Displays
- 512GB M.2 NVMe SSD Storage





DELL LATITUDE 5540

- Intel[®] Core[™] i5-1345U Processor
 10 Cores, up to 4.70 GHz
- 8GB RAM
- Integrated Graphics
- 512GB M.2 NVMe SSD Storage

HP PROBOOK 450 G9

- Intel[®] Core[™] i5-1255U Processor 10 Cores, up to 4.70 GHz
- 8GB RAM
- Integrated Graphics
- 512GB M.2 NVMe SSD Storage



ENTRY WORKLOAD



DELL PRECISION 3460

- Intel[®] Core[™] i7-13700 Processor 16 Cores, up to 5.20 GHz
- 8GB RAM
- NVIDIA® T400, 4 GB
 Supports up to 3x Displays
- 512GB M.2 NVMe SSD Storage

HP Z2 MINI G9

- Intel[®] Core[™] i7-13700 Processor
 16 Cores, up to 5.20 GHz
- 8GB RAM
- NVIDIA[®] T400, 4 GB Supports up to 3x Displays
- 512GB M.2 NVMe SSD Storage





DELL PRECISION 3581

- Intel[®] Core[™] i7-13700H Processor 14 Cores, up to 5.00 GHz
- 8GB RAM
- NVIDIA[®] RTX A500, 4GB
- 512GB M.2 NVMe SSD Storage

HP ZBOOK FIREFLY G10

- Intel[®] Core[™] i7-13700H Processor 14 Cores, up to 5.00 GHz
- 8GB RAM
- NVIDIA® RTX A500 4GB
- 512GB M.2 NVMe SSD Storage



BASIC WORKLOAD



DELL PRECISION 3660

- Intel[®] Core[™] i7-13700 Processor
 16 Cores, up to 5.20 GHz
- 16GB RAM
- Nvidia[®] T1000, 8GB
 Supports up to 4x Displays
- 512GB M.2 NVMe SSD Storage

HP Z2 MINI G9

- Intel[®] Core[™] i7-13700 Processor
 16 Cores, up to 5.20 GHz
- 16GB RAM
- NVIDIA[®] T1000, 8 GB
 Supports up to 4x Displays
- 512GB M.2 NVMe SSD Storage





DELL PRECISION 3581

- Intel[®] Core[™] i7-13700H Processor 14 Cores, up to 5.00 GHz
- 8GB RAM
- NVIDIA® RTX A1000 6GB
- 512GB M.2 NVMe SSD Storage

HP ZBOOK FIREFLY G10

- Intel[®] Core[™] i7-13700H Processor 14 Cores, up to 5.00 GHz
- 16GB RAM
- NVIDIA® RTX A500 4GB
- 512GB M.2 NVMe SSD Storage



STANDARD WORKLOAD



DELL PRECISION 3660

- Intel[®] Core[™] i7-13700 Processor 16 Cores, up to 5.20 GHz
- 16GB RAM
- Nvidia[®] RTX A2000, 12GB Supports up to 4x Displays
- 512GB M.2 NVMe SSD Storage

HP Z2 MINI G9

- Intel[®] Core[™] i7-13700 Processor
 16 Cores, up to 5.20 GHz
- 16GB RAM
- Nvidia[®] RTX A2000, 12GB Supports up to 4x Displays
- 512GB M.2 NVMe SSD Storage





DELL PRECISION 5680

- Intel[®] Core[™] i7-13800H Processor 14 Cores, up to 5.20 GHz
- 16GB RAM
- NVIDIA[®] RTX A2000 Ada 8GB / A3500 Ada 12GB
- 512GB M.2 NVMe SSD Storage Drive

HP ZBOOK POWER G10

- Intel[®] Core[™] i7-13800H Processor 14 Cores, up to 5.20 GHz
- 16GB RAM
- NVIDIA® RTX A2000 Ada 8GB / A3500 Ada 12GB
- 512GB M.2 NVMe SSD Storage



HIGH WORKLOAD



DELL PRECISION 3660

- Intel[®] Core[™] i9-13900K Processor 24 Cores, up to 5.80 GHz
- 32GB RAM
- NVIDIA[®] RTX[™] A4500, 20 GB Supports up to 4x Displays
- 1TB M.2 NVMe SSD Storage

<u>HP Z2 G9</u>

- Intel[®] Core[™] i9-13900K Processor 24 Cores, up to 5.80 GHz
- 32GB RAM
- NVIDIA[®] RTX[™] A4500, 20 GB Supports up to 4x Displays
- 1TB M.2 NVMe SSD Storage





DELL PRECISION 7680

- Intel[®] Core[™] i9-13950HX Processor 24 Cores, up to 5.50 GHz
- 32GB Memory
- NVIDIA RTX™ 4000 12GB
- 1TB M.2 NVMe SSD Storage

HP ZBOOK STUDIO G10

- Intel[®] Core[™] i9-13950HX Processor 24 Cores, up to 5.50 GHz
- 32GB RAM
- NVIDIA RTX™ 4000 12GB
- 1TB M.2 NVMe SSD Storage



HEAVY WORKLOAD



DELL PRECISION 7960

- Intel[®] Xeon[®] w7-3465X Processor 28 Cores, up to 4.80 GHz
- 64GB RAM
- NVIDIA[®] RTX[™] A5500, 24 GB Supports up to 4x Displays
- 1TB M.2 NVMe SSD Storage

<u>HP Z8 G5</u>

- Intel[®] Xeon[®] w7-3465X Processor 28 Cores, up to 4.80 GHz
- 64GB RAM
- NVIDIA[®] RTX[™] A5500, 24 GB Supports up to 4x Displays
- 1TB M.2 NVMe SSD Storage





DELL PRECISION 7780

- Intel[®] Core[™] i9-13950HX Processor 24 Cores, up to 5.50 GHz
- 64GB RAM
- NVIDIA® RTX™ 5000 Ada 16GB GDDR6
- 1TB M.2 NVMe SSD Storage

HP ZBOOK FURY 16 G10

- Intel[®] Core[™] i9-13950HX Processor 24 Cores, up to 5.50 GHz
- 64GB RAM
- NVIDIA® RTX™ 5000 Ada 16GB GDDR6
- 1TB M.2 NVMe SSD Storage



* Specialist higher tier builds and bespoke configuration available on request *

RACK MOUNT

DELL PRECISION 7960 RACKMOUNT



- Intel[®] Xeon[®] Platinum 8460Y+ Processor 40 Cores, up to 3.70 GHz
- 64GB Memory
- NVIDIA[®] RTX[™] A5500, 24 GB
- 1TB M.2 NVMe SSD Storage

* Other Dell systems can also be rack mounted within a rack mount kit available separately

HP Z4R G4 RACKMOUNT

- Intel[®] Xeon[®] W-2295 Processor 18 Cores, up to 4.80 GHz
- 64GB Memory
- NVIDIA[®] RTX[™] A6000, 48 GB
- 1TB M.2 NVMe SSD Storage



* Other HP systems can also be rack mounted within a rack mount kit available separately





For customers working in a remote/hybrid environment, please contact <u>info@symetri.co.uk</u> for more information on how Teradici or HP Anyware can allow users to work on even the most compute and graphics-intensive applications from pretty much any device and enjoy the same amazing user experience from anywhere.

For more information on hybrid working, read our e-Book on '<u>The Evolution of the</u> <u>Hybrid Working Model</u>'. This e-book presents a 'check-list' of those areas of your IT infrastructure which now merit revisiting, to help you make sure that the way your business works is aligned to how the new business world has evolved.

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