

DELLTechnologies

Dell Provides the Ultimate VR Experience

WHETHER YOU ARE A VR DEVELOPER, A CONSUMER OF VR,
OR BOTH, DELL HAS A VR SOLUTION FOR YOU.



Developing VR/AR/XR for commercial applications



When you are developing VR or AR simulations, you need powerful systems that can scale to meet the needs of your creative ideas. Dell Precision workstations are the number one workstation in the world* and provide for a great platform for your development needs. Also, workstations in many cases are used for consumption of VR, making them a great dual-purpose system for customers.

Recommended Dell Solutions

All VR projects are different and necessitate a comprehensive plan to meet your requirements of today as well as those of the future. Depending on how you plan to use your VR set-up, for content creation or consumption or both, you want a solution that gives you the performance, flexibility and reliability that matches your project requirements or skill, without over-paying. Dell has broad and customizable solutions for you so you can get the best out of your work or pleasure. However, with the menu of products available, we want to provide you with some guidance.

A. Dell Precision 7920 Tower or Rack

For the highest level of performance needed for XR development, in verticals such as for healthcare, engineering, energy, media & entertainment, look no further than the Precision 7920 tower or rack. These dual-socket workstations provide for top-level performance and reliability for developing VR/AR/XR experiences through scalable high-end components, such as up to 3 GPUs, Xeon processors, and tons of memory and storage.

B. Dell Precision 5820 Tower

The 5820 Tower is smaller than the 7920 Tower and is a great solution for VR content creation and wireless simulation. The single-socket tower provides the mid-tier for Dell Precision workstations. Balance performance and cost with your industry requirements and still have the capability to scale in the future to take on your larger projects. It offers many of the same components as the 7920 Tower, but at a cost effective entry point.

C. Dell Precision 3640 Tower

A low-cost VR mini-tower solution that is great for companies and organizations looking to enter into the immersive technology space as well as provide customers with a price/performance platform for consuming their VR AR applications. This solution also provides a unique platform for organizations in the education space, where their is multifunctional work and development requirements, such as eSports and self-directed/distant learning environments taking advantage of emerging technologies such as VR. The system is available with both reliable professional and lower cost consumer graphic cards.

D. Dell Precision 3240 Compact

Dell's smallest workstation at 2.3L (volume) mounts perfectly behind your monitor or under a desk. An excellent solution for space constrained areas such as labs that need VR-ready performance required to utilize industry applications.

E. Dell Precision 7750

The Precision 7750 delivers the ultimate mobile VR solution that provides for extreme performance for content creation as well as running day to day industry applications. The 17" display gives plenty of viewing space and the system provides the capability to utilize large memory configurations as well as the latest top-end professional graphic cards.

F. Dell Precision 7550

A 15" display, high-end mobile solution that provides for extreme performance for VR/AR development needs and also provides for a cost effective mobile platform for consumption. Get up to an HDR display, scalable storage and memory configurations, as well as high-end professional graphic cards.

G. Dell Precision 5750

The newest member of the Precision Ready for VR family is the 5750, which boasts a 17" InfinityEdge 16:10 display. It is thin, light and exudes power on the inside and out, featuring up to an NVIDIA Quadro® RTX 3000 graphic card.



A



B



C



D



E



F



G

VR gaming, consumption, viewing and/or consumer



Alienware's mission is to deliver the most immersive gaming experience on the planet.

Recommended Alienware & Dell

A. Alienware Aurora 11

The PC of choice for esports, originally designed for VR and beyond 4K gaming experiences, this mid-tower desktop is Alienware's smallest to incorporate support for liquid cooled CPU overclocking and up to 600W of dedicated graphics horsepower.

Configured with up to Intel Core processors, graphics options that include NVIDIA GeForce® RTX or AMD Radeon™ RX graphics, and memory configurations that reach up to 128GB of 3200MHz XMP DDR4 memory there isn't much this desktop can't do.

B. Alienware Area-51m R2

The world's most powerful and most upgradeable notebook, the Area-51m is the world's first gaming laptop to incorporate Intel® Core™ i9-10900K processors with up to 64GB of memory, 2.5Gbps Killer Ethernet technology, and optional integrated Tobii eye tracking technology as well.

Based on the new Legend Industrial design, the Area-51m's construction is on a magnesium alloy material meant to deliver optimized size, weight, and structural rigidity.

C. Alienware m15 and m17 (R4)

Alienware's thinnest notebooks ever. Intended for users that need a thin notebook, without compromising performance or design, the m15 and m17, like the Area-51m are based off the Legend Industrial design and use a magnesium alloy shell to aid in thinness, reduce weight, and deliver the structural rigidity premium users desire. Performance is held to the max with HyperEfficient Voltage Regulation, that means we are delivering up to 12-phase graphics voltage regulation and 6-phase processor voltage regulation enabling high performance for long sustained timeframes on components such up to Intel® Core™ i9K processors and NVIDIA® GeForce RTX™ 3080 graphics cards. These notebooks use SSD storage exclusively.

D. OptiPlex 7080 and 5080 Towers

The OptiPlex 7080 and 5080 Towers are optimized for commercial VR consumption and ideal for businesses using VR content for activities such as training or to showcase goods and services in retail environments. With premium performance, multiple expansion options and accessories tailored to the needs of today's users. The most powerful OptiPlex yet, the 7080 tower can be configured with Intel® Core™ processors up to the new 125W, 10-core Core i9 CPU with optional vPro™ technology. The recommended configuration should have an NVIDIA® GeForce® RTX 2070 SUPER™ to ensure the best viewing quality or NVIDIA® GeForce® GTX 1660 SUPER™ with OptiPlex 5080.

* 460 PSU and discrete gfx card options required for the VR consumption experience.



A



B



C



D

Specification Table

For developing VR there are numerous combinations and configuration, all driven by the applications being used. With that said, here are some Dell preferred architectures to consider:

Product	Processor	Graphic card	Memory	Storage	Support
Precision 7920	Intel® Xeon® Dual Gold	NVIDIA Quadro™ RTX 6000	128GB	1TB	Yes
Precision 5820	Intel® Xeon®	NVIDIA Quadro™ RTX 6000/2080 B	64GB	1TB	Yes
Precision 3640	Intel® Xeon®	NVIDIA Quadro™ RTX 2080	32GB	1TB	Yes
Precision 3240	Intel® Core™ i7, i9, Xeon®	NVIDIA Quadro™ RTX 3000	32GB	1TB	Yes
Precision 7750	Intel® Core™ i7, i9, Xeon®	NVIDIA Quadro™ RTX 5000	16/32GB	1TB	Yes
Precision 7550	Intel® Core™ i7, i9, Xeon®	NVIDIA Quadro™ RTX 5000	16/32GB	1TB	Yes
Precision 5750	Intel® Core™ i7, i9, Xeon®	NVIDIA Quadro™ RTX 3000	16/32GB	1TB	Yes

Specification Table

For consuming and experiencing the latest VR technologies, Alienware's notebook and desktop product portfolio can meet, and, in many instances exceed the requirements for a modern immersive VR experience. Below are some of the best Alienware configurations for VR, alongside the Dell OptiPlex solution for VR consumption.

Product	Processor	Graphic card	Memory	Storage	Support
Alienware Aurora	Intel® Core™ i9K	NVIDIA® GeForce RTX™ 3090	128GB	2TB SSD (Boot) + 2TB (Storage)	Yes
Alienware Aurora Ryzen Edition	AMD Ryzen™ 9 5950X	NVIDIA® GeForce RTX™ 3090	128GB	2TB (Boot) + 2TB (Storage)	Yes
Alienware Area 51m	Intel® Core™ i9K	NVIDIA® GeForce RTX™ 2080	64GB	2TB (Boot) + 2TB (Storage)	Yes
Alienware m17	Intel® Core™ i9K	NVIDIA® GeForce RTX™ 3080	32GB	4TB	Yes
Alienware m15	Intel® Core™ i9K	NVIDIA® GeForce RTX™ 3080	32GB	4TB	Yes
OptiPlex 7080	Intel® Core™ i9K	NVIDIA® GeForce RTX™ 2070 SUPER™	128GB	2TB SSD (boot)+ 2TB SSD or 4TB HDD (storage)	Yes
OptiPlex 5080	Intel® Core™ i7	NVIDIA® GeForce® GTX 1660 SUPER™	64GB	2TB SSD or 4TB SSD	Yes

Understanding graphics cards



Let us help you build and explore new places, beyond reality. Contact your Dell representative to customize your VR/AR solution for you.

Understanding Professional and Consumer Graphics

The graphics card is an extremely important consideration when purchasing a VR/AR solution. A GPU or Graphical Processing Unit accelerates encoding, conversion and graphical tasks in many of today's creative and design applications. The choice between Professional Graphics, like NVIDIA Quadro® RTX cards, and Consumer Graphics, such as the NVIDIA® GeForce RTX™ or AMD Radeon™ RX lines, is made around determining how they will be used.

For professionals who are designing VR and AR, where they expect to get a return on their investment, they want to get maximum stability and certified performance for their creative applications. The graphics are typically bundled within a workstation with higher levels of processing power such as Intel® Xeon® and Error Correcting Code (ECC) memory for enhanced reliability.

For gaming and viewing purposes, the consumer graphics offer incredible performance and come at a lower price than the professional graphics. You aren't looking to design or run computer models with these sorts of graphics in most cases because they are designed to deliver performance over stability. A stagger or glitch when viewing a game is more bearable than a missed calculation in a design or model. You need to understand and weigh the risks you are willing to take to ensure you get the best graphic card for your use case.



DELL Technologies



Visit www.Dell.com/VR or call your Dell sales representative to learn more.