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.
When you are developing VR or AR, 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.

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Recommended Dell Solutions
All VR projects are different and require you to think through your needs for today and into the future. Depending on how you plan to use your VR set-up, for development or consumption or both, you want a solution that gives you the performance and reliability that matches your project 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
For the highest level of performance needed for XR development, such as for healthcare, engineering, energy, media & entertainment, look no further than the Precision 7920 Tower. This dual-socket tower provides for top-level performance and reliability for developing VR/AR/XR experiences. This system is available with premium professional components, including top-end NVIDIA and AMD graphics and Intel® processors, scalable storage and expansive memory, to deliver optimized performance to help meet the most demanding schedules and requirements, where costs aren’t the highest priority of the projects.

B. Dell Precision 5820 Tower
The 5820 Tower is smaller than the 7920 and is a great solution for VR development, the single-socket tower option 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 bigger projects. It offers many of the same components as the 7920 Tower, but at a smaller scale.

C. Dell Precision 3630 Tower
For 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 price/performance platform for consuming their VR/AR applications. This solution also provides a unique platform for organizations such as in the education space, where there are multifunctional work and development requirements, such as eSports and emerging technologies, like VR. The system is available with both reliable professional and cost-effective consumer graphic cards.

D. Dell Precision 7740
The Precision 7740 delivers the ultimate mobile VR solution that provides for extreme performance for development needs as well as providing a cost-effective mobile platform for consumption environments. The 17” display gives plenty of viewing space and the system provides the capability to utilize memory configurations up to 128GB as well as the latest top-end professional graphic cards such as the NVIDIA Quadro® RTX 3000, 4000 and 5000 graphic cards.

E. Dell Precision 7540
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 environments. Get up to an HDR display, up to 6TB of storage and memory configurations up to 128GB, as well as high-end professional graphic cards, up to the NVIDIA Quadro(r) RTX 5000.
Recommended Dell Solutions

A. Alienware Aurora
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 9th generation Intel Core processors, graphics options that include NVIDIA GeForce RTX or AMD Radeon RX graphics, and memory configurations that reach up to 64GB of 2933MHz XMP DDR4 memory there isn’t much this desktop can’t do.

B. Alienware Area-51m
The world’s most powerful and most upgradeable notebook, the Area-51m is the world’s first gaming laptop to incorporate Intel Core i9-9900K 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 based on a magnesium alloy material meant to deliver optimized size, weight, and structural rigidity.

C. Alienware m15 and m17 (R2)
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 8-phase graphics voltage regulation and 6-phase processor voltage regulation enabling high performance for long sustained timeframes on components such as Intel® Core™ processors and NVIDIA GeForce RTX 2080 Max-Q graphics cards. These notebooks use SSD storage exclusively.

D. OptiPlex 7071 Tower
The OptiPlex 7071 Tower is optimized for commercial VR consumption and is ideal for businesses using VR content for activities such as training or retail environments. With premium performance, multiple expansion options and accessories tailored to the needs of today’s users. The most powerful OptiPlex yet, the 7071 tower can be configured with 9th Generation Intel® Core™ processors up to the new 95W, 8-core Core i9 CPU with optional vPro™ technology. The recommended configuration should have an NVIDIA GeForce RTX 2080 to ensure the best viewing quality.

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

<table>
<thead>
<tr>
<th>Product</th>
<th>Processor</th>
<th>Graphic card</th>
<th>Memory</th>
<th>Storage</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precision 7920</td>
<td>Intel® Xeon® Dual Gold</td>
<td>NVIDIA® RTX 6000</td>
<td>128GB</td>
<td>1TB</td>
<td>Yes</td>
</tr>
<tr>
<td>Precision 5820</td>
<td>Intel® Xeon®</td>
<td>NVIDIA® RTX 6000/2080 B</td>
<td>64GB</td>
<td>1TB</td>
<td>Yes</td>
</tr>
<tr>
<td>Precision 3630</td>
<td>Intel® Xeon®</td>
<td>NVIDIA® RTX 2080</td>
<td>32GB</td>
<td>1TB</td>
<td>Yes</td>
</tr>
<tr>
<td>Precision 7740</td>
<td>Intel® Core™ i7, i9, Xeon®</td>
<td>NVIDIA® RTX 5000</td>
<td>16/32GB</td>
<td>1TB</td>
<td>Yes</td>
</tr>
<tr>
<td>Precision 7540</td>
<td>Intel® Core™ i7, i9, Xeon®</td>
<td>NVIDIA® RTX 3000</td>
<td>16/32GB</td>
<td>1TB</td>
<td>Yes</td>
</tr>
</tbody>
</table>

For consuming and experiencing the latest VR technologies, Alienware’s complete 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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Processor</th>
<th>Graphic card</th>
<th>Memory</th>
<th>Storage</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alienware Aurora</td>
<td>Intel® Core™ i9K</td>
<td>NVIDIA® GeForce RTX 2080 Ti</td>
<td>64GB</td>
<td>2TB (Boot) + 2TB (Storage)</td>
<td>Yes</td>
</tr>
<tr>
<td>Alienware Aurora Ryzen Edition</td>
<td>AMD Ryzen™ 9 3950X</td>
<td>NVIDIA® GeForce RTX 2080 Ti</td>
<td>64GB</td>
<td>2TB (Boot) + 2TB (Storage)</td>
<td>Yes</td>
</tr>
<tr>
<td>Alienware Area 51m</td>
<td>Intel® Core™ i9K</td>
<td>NVIDIA® GeForce RTX 2080</td>
<td>64GB</td>
<td>2TB (Boot) + 2TB (Storage)</td>
<td>Yes</td>
</tr>
<tr>
<td>Alienware m17</td>
<td>Intel® Core™ i9K</td>
<td>NVIDIA® GeForce RTX 2080 Max-Q</td>
<td>16GB</td>
<td>4TB</td>
<td>Yes</td>
</tr>
<tr>
<td>Alienware m15</td>
<td>Intel® Core™ i9K</td>
<td>NVIDIA® GeForce RTX 2080 Max-Q</td>
<td>16GB</td>
<td>4TB</td>
<td>Yes</td>
</tr>
<tr>
<td>OptiPlex 7071</td>
<td>Intel® Core™ i9</td>
<td>NVIDIA RTX 2080</td>
<td>32GB</td>
<td>256GB (boot) + 256GB (storage)</td>
<td>Yes</td>
</tr>
</tbody>
</table>
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 line, 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.