

# Hardware of the Datacenter

## Cisco UCS M5 (256GB RAM, 1.2TB HDD)

### NVIDIA T4

Instance	Description
m4.small instance	<p>The m4.small instance is designed for running smaller applications at the edge with high performance and efficiency. It features:</p> <ul style="list-style-type: none"> <li>• <b>2 vCPUs:</b> Ensures smooth and efficient processing for various applications.</li> <li>• <b>2GB of RAM:</b> Provides adequate memory for reliable application performance.</li> <li>• <b>40GB Dedicated HDD Storage:</b> Offers sufficient space for data storage needs.</li> </ul> <p>This instance is suitable for a range of workloads, including lightweight web services and small databases, ensuring reliable and consistent performance.</p>
m4.medium instance	<p>The m4.medium instance is tailored for applications requiring moderate resources and enhanced performance. It features:</p> <ul style="list-style-type: none"> <li>• <b>2 vCPUs:</b> Delivers reliable processing power for various applications.</li> <li>• <b>4GB of RAM:</b> Provides additional memory to support more demanding workloads.</li> <li>• <b>80GB Dedicated HDD Storage:</b> Offers ample space for increased data storage requirements.</li> </ul> <p>This instance is well-suited for a range of applications, including moderate web services and small to medium-sized databases, ensuring stable and efficient performance.</p>
m4.large instance	<p>The m4.large instance is designed for applications requiring higher resource levels and robust performance. It features:</p> <ul style="list-style-type: none"> <li>• <b>4 vCPUs:</b> Provides increased processing power for handling more intensive workloads.</li> <li>• <b>8GB of RAM:</b> Offers substantial memory to support more demanding applications and processes.</li> <li>• <b>80GB Dedicated HDD Storage:</b> Supplies ample space for extensive data storage needs.</li> </ul> <p>This instance is well-suited for applications that need additional compute and memory resources, including larger web services, medium-sized databases, and complex workloads, ensuring reliable and efficient performance.</p>
m4.xlarge instance	<p>The m4.xlarge instance is designed for demanding applications that require substantial computing power and memory. It features:</p> <ul style="list-style-type: none"> <li>• <b>4 vCPUs:</b> Delivers robust processing capability to handle intensive tasks.</li> <li>• <b>16GB of RAM:</b> Provides ample memory to support large-scale applications and complex processes.</li> <li>• <b>40GB Dedicated HDD Storage:</b> Offers sufficient disk space for substantial data storage requirements.</li> </ul> <p>This instance is ideal for high-performance applications, large-scale web services, and extensive data processing tasks, ensuring strong and reliable performance across various workloads.</p>
m4.xlarge.disk	<p>The m4.xlarge.disk instance is designed for applications that require substantial resources and high performance. It features:</p> <ul style="list-style-type: none"> <li>• <b>4 vCPUs:</b> Provides robust processing power for compute-intensive applications.</li> <li>• <b>16GB of RAM:</b> Offers ample memory to handle large workloads efficiently.</li> <li>• <b>500GB Dedicated HDD Storage:</b> Ensures significant space for extensive data storage needs.</li> </ul> <p>This instance is ideal for demanding applications, including large databases, high-traffic web services, and data-intensive tasks, delivering consistent and reliable performance.</p>
m4.xlarge.gpu instance	<p>The m4.xlarge.gpu instance is designed for applications that require both substantial computing power and advanced graphical processing capabilities. It features:</p> <ul style="list-style-type: none"> <li>• <b>4 vCPUs:</b> Provides robust processing power for demanding tasks.</li> <li>• <b>8GB of RAM:</b> Offers sufficient memory to support high-performance applications.</li> <li>• <b>160GB Dedicated HDD Storage:</b> Supplies ample space for extensive data storage needs.</li> <li>• <b>1 NVIDIA T4 GPU:</b> Delivers powerful graphics processing capabilities for tasks such as machine learning, data analysis, and high-performance computing.</li> </ul> <p>This instance is well-suited for GPU-accelerated applications, including advanced data processing, deep learning, and graphics-intensive tasks, ensuring exceptional performance and efficiency.</p>
m4.xxxlarge.gpu instance	<p>The m4.xxxlarge.gpu instance is tailored for applications that require significant computing power and advanced graphics capabilities. It features:</p> <ul style="list-style-type: none"> <li>• <b>8 vCPUs:</b> Delivers high processing performance for complex and resource-intensive tasks.</li> <li>• <b>16GB of RAM:</b> Provides ample memory to handle large-scale applications and processes.</li> <li>• <b>160GB Dedicated HDD Storage:</b> Offers generous disk space for extensive data storage needs.</li> <li>• <b>1 NVIDIA T4 GPU:</b> Enhances graphics processing power, ideal for tasks such as machine learning, data analysis, and video analytics.</li> </ul> <p>This instance is ideal for demanding GPU-accelerated applications, large-scale data processing, and computationally intensive tasks, ensuring optimal performance and efficiency.</p>