Mv2-series

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Applies to: ✔ Linux VMs ✔ Windows VMs ✔ Flexible scale sets ✔ Uniform scale sets

The Mv2-series features high throughput, low latency platform running on a hyper-threaded Intel® Xeon® Platinum 8180M 2.5GHz (Skylake) processor with an all core base frequency of 2.5 GHz and a max turbo frequency of 3.8 GHz. All Mv2-series virtual machine sizes can use both standard and premium persistent disks. Mv2-series instances are memory optimized VM sizes providing unparalleled computational performance to support large in-memory databases and workloads, with a high memory-to-CPU ratio that is ideal for relational database servers, large caches, and in-memory analytics.

Mv2-series VM's feature Intel® Hyper-Threading Technology

Premium Storage: Supported
Premium Storage caching: Supported
Live Migration: Not Supported
Memory Preserving Updates: Not Supported
VM Generation Support: Generation 2
Write Accelerator: Supported
Accelerated Networking: Supported
Ephemeral OS Disks: Supported
Nested Virtualization: Not Supported

Size	vCPU	Memory: GiB	Temp storage (SSD) GiB	Max data disks	Max cached and temp storage throughput: IOPS / MBps (cache size in GiB)	Max uncached disk throughput: IOPS / MBps	Max NICs	Expected network bandwidth (Mbps)
Standard_M208ms_v2[1]	208	5700	4096	64	80000 / 800 (7040)	40000 / 1000	8	16000
Standard_M208s_v2[1]	208	2850	4096	64	80000 / 800 (7040)	40000 / 1000	8	16000
Standard_M416ms_v2[1,2]	416	11400	8192	64	250000 / 1600	80000 / 2000	8	32000

Size	vCPU	Memory: GiB	Temp storage (SSD) GiB	Max data disks	Max cached and temp storage throughput: IOPS / MBps (cache size in GiB)	Max uncached disk throughput: IOPS / MBps	Max NICs	Expected network bandwidth (Mbps)
					(14080)			
Standard_M416s_v2[1,2]	416	5700	8192	64	250000 / 1600 (14080)	80000 / 2000	8	32000

[1] Mv2-series VMs are generation 2 only and support a subset of generation 2 supported Images. Please see below for the complete list of supported images for Mv2-series. If you're using Linux, see Support for generation 2 VMs on Azure for instructions on how to find and select an image. If you're using Windows, see Support for generation 2 VMs on Azure for instructions on how to find and select an image.

- Windows Server 2019 or later
- SUSE Linux Enterprise Server 12 SP4 and later or SUSE Linux Enterprise Server 15 SP1 and later
- Red Hat Enterprise Linux 7.6 or later, and 8.1 or later
- Oracle Enterprise Linux 7.7 or later, and 8.1 or later
- Ubuntu 18.04 with the 5.4.0-azure kernel or later

[2] Constrained core sizes available.

Size table definitions

- Storage capacity is shown in units of GiB or 1024^3 bytes. When you compare disks measured in GB (1000^3 bytes) to disks measured in GiB (1024^3) remember that capacity numbers given in GiB may appear smaller. For example, 1023 GiB = 1098.4 GB.
- Disk throughput is measured in input/output operations per second (IOPS) and MBps where MBps = 10^6 bytes/sec.
- Data disks can operate in cached or uncached modes. For cached data disk operation, the host cache mode is set to **ReadOnly** or **ReadWrite**. For uncached data disk operation, the host cache mode is set to **None**.

- To learn how to get the best storage performance for your VMs, see Virtual machine and disk performance.
- **Expected network bandwidth** is the maximum aggregated bandwidth allocated per VM type across all NICs, for all destinations. For more information, see Virtual machine network bandwidth.

  Upper limits aren't guaranteed. Limits offer guidance for selecting the right VM type for the intended application. Actual network performance will depend on several factors including network congestion, application loads, and network settings. For information on optimizing network throughput, see Optimize network throughput for Azure virtual machines. To achieve the expected network performance on Linux or Windows, you may need to select a specific version or optimize your VM. For more information, see Bandwidth/Throughput testing (NTTTCP).

Other sizes and information

- General purpose
- Memory optimized
- Storage optimized
- GPU optimized
- High performance compute
- Previous generations

Pricing Calculator: Pricing Calculator

More information on Disks Types : Disk Types

Next steps

Learn more about how Azure compute units (ACU) can help you compare compute performance across Azure SKUs.