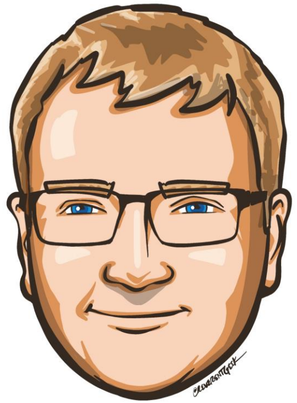
Microsoft Azure Virtual Machine Types

So, who am I?

My name is Luke Murray
Technical Consultant, a Microsoft MVP from Hamilton, and consumer of Microsoft technologies for more years than I would like to admit.



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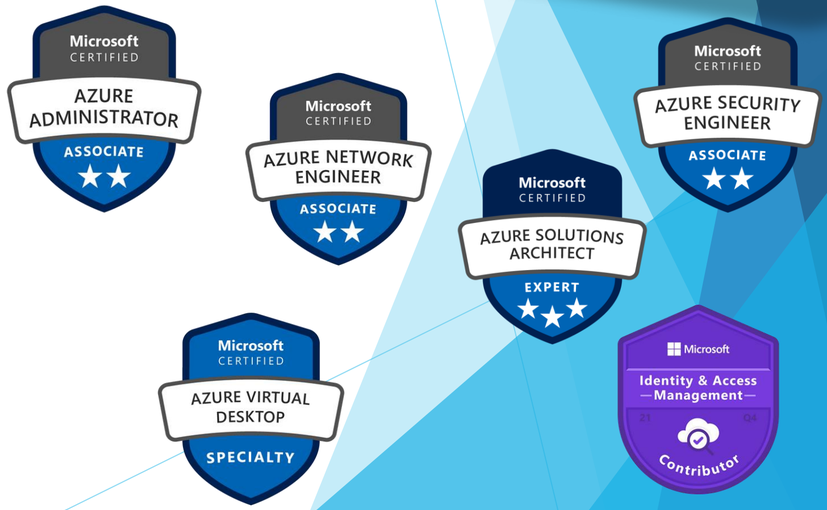

https://linktr.ee/lukemurray

Virtual Machine Sizes

General Purpose

Compute Optimized

Memory Optimized

Storage Optimized

GPU

High Performance Compute

General Purpose

General purpose VM sizes provide balanced CPU-to-memory ratio. Ideal for testing and development, small to medium databases, and low to medium traffic web servers.

A, Av2, B, Dsv3, Dv3, Dasv4, Dav4, DSv2, Dv2, Av2, DC, DCv2, Dv4, Dsv4, Ddv4, Ddsv4, Dv5, Dsv5, Ddv5, Ddsv5, Dasv5, Dadsv5

Compute Optimized

High CPU-to-memory ratio. Good for medium traffic web servers, network appliances, batch processes, and application servers.

F, Fs, Fsv2, FX

Compute Optimized

Memory Optimized

High memory-to-CPU ratio. Great for relational database servers, medium to large caches, and in-memory analytics.

Esv3, Ev3, Easv4, Eav4, Ebdsv5, Ebsv5, Ev4, Esv4, Edv4, Edsv4, Ev5, Esv5, Edv5, Edsv5, Easv5, Eadsv5, Mv2, M, DSv2, Dv2

Memory Optimized

Storage Optimized

High disk throughput and IO ideal for Big Data, SQL, NoSQL databases, data warehousing and large transactional databases.

Lsv2, Lsv3, Lasv3

Storage Optimized

GPU

High disk throughput and IO ideal for Big Data, SQL, NoSQL databases, data warehousing and large transactional databases.

NC, NCv2, NCv3, NCasT4_v3, ND, NDv2, NV, NVv3, NVv4, NDasrA100_v4, NDm_A100_v4

High Performance Compute

Our fastest and most powerful CPU virtual machines with optional high-throughput network interfaces (RDMA).

HB, HBv2, HBv3, HC, H

Options for all types of apps

General Purpose
A, Av2, B, Dsv3, Dv3, Dasv4, Dav4, DSv2, Dv2, Av2, DC, DCv2, Dv4, Dsv4, Ddv4, Ddsv4, Dv5, Dsv5, Ddv5, Ddsv5, Dasv5, Dadsv5

Compute Optimized
F, Fs, Fsv2, FX

Memory Optimized
Esv3, Ev3, Easv4, Eav4, Ebdsv5, Ebsv5, Ev4, Esv4, Edv4, Edsv4, Ev5, Esv5, Edv5, Edsv5, Easv5, Eadsv5, Mv2, M, DSv2, Dv2

Storage Optimized
Lsv2, Lsv3, Lasv3

GPU
NC, NCv2, NCv3, NCasT4_v3, ND, NDv2, NV, NVv3, NVv4, NDasrA100_v4, NDm_A100_v4

High Performance Compute
HB, HBv2, HBv3, HC, H

With all these different Compute types, how do I know which is the right one?

Try the Virtual machines selector tool to find other sizes that best fit your workload.

Virtual Machine Selector

Additional Resources

Thats great! Where can I find more information?

1. Virtual Machine documentation
2. Azure virtual machine sizes naming conventions
3. Azure subscription and service limits, quotas, and constraints