

What are the System Requirements for a Metric Insights Server?

This article lists the minimum system requirements for the Metric Insights server. This assumes a single node for a [Simple Install](#). It can also apply to a single node for an [Orchestrated Deployment](#) (multi-node environment). The system requirements for Orchestrated Environments are listed for each pod (Kubernetes, OpenShift), the same applies for each service (Docker Swarm), or task (AWS ECS).

System Requirements for Production Instances

Simple Installation

MI application server:

- 8-Core CPU
- 32 GB RAM
- 1 TB+ disk total
 - If the disk is split into several partitions, please ensure enough space is allocated to the following directories:
 - `/var`
 - `/opt` or `/app`
 - `/home`
 - `/tmp`
 - Docker lives in `/var/lib/docker` by default. The MI filesystem lives in `/opt/mi` by default (or `/app/mi` alternatively)

On **AWS**, this equates to an *m5.2xlarge* EC2 instance type.

On **Azure**, this equates to a *D8ds v4* VM instance size.

On **GCP**, this equates to an *e2-standard-8* instance type.

Orchestrated Environments

RAM required by pod:

- Web Master 16 GB
- Web Slave 8 GB
- DataProcessor 16 GB

- Seed 4 GB
- Data Analyzer 8 GB
- Monitoring 1 GB

CPU is not less than 1 core per each pod, which is equivalent to 1000m in Kubernetes.

System Requirements for MySQL Server

The MySQL database must be running on a separate server, preferably on a database cluster managed by a DBA team or a native cloud solution like Amazon RDS.

- 8-Core CPU
- 32 GB RAM
- 1 TB+ HD total
 - If there are different volumes for specific filesystems, please ensure enough space is allocated to the following:
 - `/var`
 - MySQL data files by default live in `/var/lib/mysql`
- In Version 6.4.3: We support MYSQL 8.0.32 everywhere else except for GCP where only 8.0.26 works

On **AWS**, this equates to a *db.m5.2xlarge* RDS instance type.

On **Azure**, this equates to an *8 core Compute Gen 5* server.

System Requirements for Pilot Instances

Simple Installation

Single Server running both the application and MySQL:

- 4-Core CPU
- 16 GB RAM
- 500 GB disk total
 - If the disk is split into several partitions, please ensure enough space is allocated to the following directories:
 - `/var`
 - `/opt` or `/app`
 - `/home`
 - `/tmp`
 - Docker lives in `/var/lib/docker` by default. The MI filesystem lives in `/opt/mi` by default (or `/app/mi` alternatively)

On **AWS**, this equates to an *m5.xlarge* EC2 instance type.

On **Azure**, this equates to a *D4ds v4* VM instance size.

On **GCP**, this equates to an *e2-standard-4* instance type.

Orchestrated Environments

RAM required by pod:

- Web Master 1 GB
- Web Slave 1 GB
- DataProcessor 2 GB
- Seed 1 GB
- Data Analyzer 2 GB
- Monitoring 512 MB

CPU is not less than 1 core per each pod, which is equivalent to 1000m in Kubernetes.

i For pilot instances, the specs above should be more than sufficient. If there are plans to run *large datasets* and/or *large bursts* as part of the pilot, we recommend moving to an 8 core / 32 GB RAM server for better performance.

A Note about Virtual Machines

i See [Deploy Metric Insights as a Virtual Appliance](#) for more information.

Metric Insights can be deployed as a virtual appliance, for pilot instances as well as for production instances. If you choose this option, then your virtual machine should meet the requirements laid out above.

It's important to understand that the Metric Insights virtual appliance *is* a virtual machine. You do not need to create your own virtual machine to serve as a host. In fact, the host machine should be a *physical* machine, not a *virtual* machine. If your IT department offers to provide a virtual server to serve as a host for Metric Insights, then they must certainly be running one of the common virtualization environments. In that case, simply send the Metric Insights virtual appliance to them and ask them to 'import' it.