

# MemVerge MemoryViewer

## Quick Start Guide

### Introduction

MemVerge MemoryViewer (MVMV) is a utility for monitoring DRAM and PMem memory in a Linux server.

- MemoryViewer displays a heat map of memory used by each process. Analyzing the behavior of active (hot) memory versus inactive (cold) memory helps in deciding whether higher capacity, less expensive PMem can replace lower capacity, more expensive DRAM to achieve similar (or in some cases, increase) application performance while improving financial metrics.
- MemoryViewer shows system memory topology, capacity, and usage, and also shows memory bandwidth at the system and DIMM levels.
- MemoryViewer provides downloadable memory usage reports for individual processes.

### Prerequisites

You must have a server account with `root` or `sudo` privileges to install and run MemoryViewer.

### Supported Systems

MemoryViewer supports physical or virtual servers with:

- CentOS, RHEL, Ubuntu, or Debian Linux
- DRAM and PMem, or DRAM only
- Second- or later-generation Intel® Xeon® CPUs, or AMD CPUs for DRAM-only configurations

### Installation

Install MemoryViewer using the package manager for your Linux distribution. The package manager checks dependencies and resolves them if necessary.

- For CentOS or RHEL, type: `sudo yum install <MVMV package>`
- For Ubuntu or Debian, type: `sudo apt install <MVMV package>`  
where `<MVMV package>` is the MVMV package for your Linux version.

### Running the MVMV Service

To start HTTP service on port 8080 of your host server, type:

```
mvmv server
```

To specify a particular IP address and port on the host server (the default is 0.0.0.0:8080), type:

```
mvmv server -a <MVMV host IP address>:<port>
```

Your firewall configuration must allow access to the port specified in the `mvmv` server command and to the IP address of the host running the MemoryViewer server.

## Using the MVMV Interfaces

MemoryViewer provides a Command Line Interface (CLI) and a Graphical User Interface (GUI):

- CLI: From a terminal on the host running the MemoryViewer server, type:  
`mvmv --help`  
to see available options.
- GUI: To view the MemoryViewer web interface, open a browser and go to:  
`http://<MVMV host>:<port>`  
where `<MVMV host>` is the name of the MemoryViewer host or its IP address, and `<port>` is the port you specified when starting the MemoryViewer server.
  - Use the *Topology* tab to view system memory configuration. The *Topology* tab is only available when MemoryViewer is installed on a bare-metal server.
  - Use the *Process Monitor* tab to view memory usage for individual processes and to download reports.

## MVMV Version

This guide applies to MemoryViewer version 0.4