System Administration

Target Audience

This document and the installation and maintenance of a HUBzero system has a target audience of experienced Linux administrators.

Minimum System Requirements

A typical starter HUBzero installation might consist of a single physical server with dual 64-bit quad-core CPUs, 24 Gigabytes of RAM and a terabyte of disk.

Production systems should try to not limit hardware resources, HUBzero is designed to run on systems with many CPU cores and lots of RAM. If you are looking for a system to run a small site with limited physical or virtual resources this is probably not the system for you. However, for demonstration or development purposes we often create VM images with less than a gigabyte of RAM and 5 gigabytes of disk. While fully functional, these virtual machines would only be suitable for a single user doing development or testing.

System Architecture

All hardware, filesystem partitions, RAID configurations, backup models, security models, etc. and base configurations of the hosts (SSH server, network, etc.) are the responsibility of the system administrator managing the host.

The HUBzero software expects to be installed on a headless server from a minimal ISO with only one network interface (required by OpenVZ) with an MTU no less than ‘1500’. System accounts must not be created with an id of 1000 or greater - more about that in a forthcoming section.

End of Life for Debian Linux Distribution

HUBzero support for the Debian Linux distribution is no longer available, effective August 27, 2020.

You may continue to use Debian for a hub installation, however, support for HUBzero operating system packages and other related software will no longer receive updates. Maintenance and support for installed software, including security updates are the responsibility of the individual hub system administrators.

HUBzero will continue to offer its suite of open-source software on the CentOS Linux

distribution, allowing us to focus our efforts on maintaining and improving our code-base, as well as bringing you additional features and upgrades such as Docker which replaces OpenVZ for hub tool session containers.

For support or help migrating a hub to CentOS, please contact info@hubzero.org.