Why ClearOS

2021-07-20: WikiSuite will now support all major Linux distros. Thus, the information below is no longer updated. It may still be valid, or not. It will be eventually removed from this site, so anything relevant should be moved to the appropriate site. For anything related to ClearOS, please search among the following: ClearOS site, code base, Developer docs, Wiki or forum.

Please contact us if you would like to help out.

ClearOS was picked as the underlying operating system for WikiSuite.

> Tiki Wiki CMS Groupware is to Drupal / Joomla! / WordPress what ClearOS is to CentOS / openSUSE / Ubuntu. #tikiwiki #clearos
>
> — Marc Laporte (@MarcLaporte) September 16, 2017

Why?

- Most use cases covered by apps in various categories: cloud, network, gateway, server, system and reports.
  - It's designed for projects to add apps, which we have done: ClearOS Apps contributed by WikiSuite
- The vast majority of the administration of ClearOS is done via the web interface. And thus, it's easy to see how things are configured, and to train others to manage, and avoid the problem of sysadmins doing undocumented tweaks via the command line.
- ClearOS adds a layer on top of many diverse and useful tools.
  - It provides semantic names to make it easier for new administrator. Ex.: Fail2ban is offered as "Attack Detector"
  - This layer permits great integration and interoperability. For example, the Two Factor Authentication app works with the Dynamic Firewall app when both are installed.
  - It provides a consistent user experience for configuring the server via the GUI
  - It facilitates management: A simple configuration backup file contains information for multiple apps. So it's easy to restore that config on a fresh ClearOS instance
  - It facilitates automation: A common API to deal with 80+ apps. The WikiSuite project will participate to enhance this for the Orchestrator
- The apps are written in PHP which is used by 83.1% of all websites, up from 72.5% eight years ago. ClearOS uses the CodeIgniter PHP framework to make life easier. Developers, please see: https://docs.clearos.com/
- Tight integration with Cyrus IMAP, which is central to our JMAP strategy
- Built-in (but optional) OpenLDAP support
- As per Marc Laporte's suggestion, they moved to Bootstrap in v7
- Nice services from ClearCenter (remote backups, security audits, domain names, etc.)
- Strong feature set for *on premise* (Gateway and Networking)
- Generally satisfies the usual component criteria
- Pre-installed on some HPE hardware, including the HPE ProLiant MicroServer Gen10, which retails for less than USD$600. It is even available at department stores
  - See unboxing video of HPE ProLiant MicroServer Gen10.

Why not CentOS

CentOS is a general purpose operating system. On a fresh install, it does very little. You need to pick and choose amongst tens of thousands of applications to get the functionality you need. And there is very little if any functionality to make the various apps work together.

It is easy to convert a CentOS to ClearOS: How to upgrade a fresh install of CentOS to ClearOS

Why not Ubuntu

Although there are variations (Ubuntu Desktop vs Ubuntu Server vs Ubuntu Server for Cloud), Ubuntu is a general purpose operating system. On a fresh install, it does very little. You need to pick and choose amongst tens of thousands of applications to get the functionality you need. And there is very little if any functionality to make the various apps work together.

Why not ISPConfig

ISPConfig was the original server admin panel component for WikiSuite (It was still called Tiki Suite back then), as you can see in slides from 2011

But ClearOS was picked.

WikiSuite is about having all the tools for one organization, and available *on premise* or in a data center.

- ISPconfig
  - is for hosting many projects / customers on one server
  - is focused on being in a data center (and not really tailored to an *on premise* installation)
- ClearOS
  - is designed to have multiple tools for one domain, so not multi-domain (well, you can have a some mirror domains, but it's not multi-tenant)
  - is originally designed for hosting *on premise*, and has evolved to the cloud
  - is offered pre-installed on hardware: ClearBOX and HPE.

For an eventual offering of WikiSuite as SaaS, we will need a platform to manage multiple virtual machines, not a platform to manage shared hosting applications. See: Orchestrator.

We have been working with the ClearOS community to improve it as a hosting platform, and get some of the benefits of ISPconfig.

When is ISPConfig better? If you are a provider of shared hosting.

Why not Webmin / Virtualmin

> *Webmin doesn't do much to hide the complexity. It just gives you a web interface and a little syntax checking but you still have to know what programs you need to manage and what all the options mean to modify any particular service. ClearOS/SME/NethServer management interfaces are much more task/function oriented and you generally manage them without needing to know much at all about the details of the underlying programs. Some of the form actions may in fact affect more than one program's settings.*
>
> *Source: https://lists.centos.org/pipermail/centos-devel/2014-January/009460.html*

- Webmin is mostly in Perl, while ClearOS is PHP

Why not SME

- Release cycle is too slow (vs upstream)

Why not Zentyal

- Zentyal is more in Perl (while we preferred ClearOS's PHP)

On the good side, Zentyal is based on Ubuntu which has a nice and predictable release schedule.

Long after we started working with ClearOS, Zentyal chose to remove lots of functionality, including the web server.

In contrast, the WikiSuite project has lead to multiple enhancements to ClearOS as a web server (ex: Let's Encrypt, PHP version selection, better configs, better handling of multiple sites, etc.)

Why not NethServer

- 1st announcement of Nethserver on Distrowatch is in 2015, and the work with ClearOS was already underway.
- As of 2017, NethServer looks like a serious contender to ClearOS.

See also

- Why
- Why Cyrus IMAP and Cypht
- Why Free Libre Open Source software
- Why Not
- Why Openfire
- Why Syncthing
- Why Tiki Wiki CMS Groupware