FreeBSD Desktop Distributions

BY DREW GURKOWSKI

FreeBSD desktop distributions have taken the FreeBSD operating system in a new direction while still relying on the incredibly powerful and stable base operating system of FreeBSD. From integrated desktop environments, portable USB-based systems, to data recovery tools, FreeBSD has been used by a wide variety of open-source projects.

FuryBSD

Novice to Advanced Users
Project Website

"FuryBSD is a brand-new, open-source, FreeBSD desktop. FuryBSD pays homage to desktop BSD projects of the past like PC-BSD and TrueOS with its graphical interface and adds additional tools like a live, hybrid USB / DVD image."

What Makes FuryBSD Unique?

System Attributes:
- A deployment vessel including:
  - Stock FreeBSD,
  - FreeBSD-update, pkg, bsdconfig, bsdinstall,
  - Firefox,
  - XFCE desktop environment.
- Small 1.8GB download size.
- Adds a live, hybrid USB / DVD image to stock FreeBSD.
- A read write filesystem that verifies the hardware works before committing to disk.
- Minimizes disk commitment.
- Automatically installs a graphical desktop environment.
- Pristine copy of FreeBSD, allowing the system to continue updating FreeBSD tools.
- Allows for the configuration of devices for mass deployments. Automation with possible configuration for each step.
- Latest patchset is updated quarterly, so users don't have to update using FreeBSD-update.
  - The build system uses Poudriere image to ensure the jail is up-to-date.
- Offers .iso media including RELEASE + FreeBSD-update patches.
- If FuryBSD depreciates, system can still be used by updating FreeBSD.

User-end Attributes:
- Boots the user directly to desktop of choice, connects to network automatically (Ethernet), or provides a tool to make connecting to WiFi easier.
  - Minimizes the need for a potentially confusing setup process for novice users.
- Includes an Xorg tool to allow users to try various driver combinations without having to install each one.

○Allows for various combinations of drivers without having to test each one.
- Every user change is saved unless the system is rebooted without installing.
- Recently released their own forum for FuryBSD users.

Notable Future Plans:
- Creating more documentation for the project, focused on how to get started and troubleshooting any possible issues.
- Out-of-box printing support.
- A way to load 3rd-party drivers and wireless adaptors.
- More default applications to provide a broader desktop experience.
- Continuous integration for application updates.
- A custom pkg repo.

MidnightBSD

Novice to Advanced Users
Project Website

"MidnightBSD is a BSD-derived operating system developed with desktop users in mind. It includes all the software you'd expect for your daily tasks—email, web browsing, word processing, gaming, and much more."

What Makes MidnightBSD Unique?

System Attributes:
- New window and login manager.
- Initially forked from FreeBSD 6.1 beta.
    ○To allow customization of ports and system configuration.
    ○Includes syncs from later FreeBSD versions.
- Fully integrated environment with a focus on stability and optimization for desktop users.
- Scheduling, allocation, security, and app support are uniquely tailored for desktop users.
- Less emphasis on server optimization.
- Includes a range of tools and utilities, including:
    ○ZFS,
    ○Hast,
    ○OpenSSH,
    ○Perl.
- Imported features from DragonFlyBSD/OpenBSD/NetBSD.
- Improved security with ipfw and sudo.

User-end Attributes:
- New window and login manager.
- Centralized system preferences.
- Emphasis on easy-to-use graphical interfaces for new users.
- BSD-styled command line.
- Graphical ports and package manager.

- Large user community, including mailing lists and community forums.
- Extensive documentation.
- Bugzilla for troubleshooting.

Notable Future Plans:
- Expanded security capabilities.
- Rewriting the package cluster system.
- Maintaining and updating ports.

GhostBSD
Novice to Advanced Users
Project Website

"GhostBSD is a simple, user-friendly operating system, based on the legendary security and stability of the FreeBSD operating system. GhostBSD provides all the benefits of the FreeBSD operating system combined with a focus on simplicity for newcomers."

What Makes GhostBSD Unique?

System Attributes:
- Maintains the stability and security of FreeBSD.
- Optimized for modern workstations, desktop setups.
- Massively simplified.
- Free and open with source code on GitHub.
- Optimized codecs for multimedia files.
- Project release as well as community releases.
- A GhostBSD package repository with 30,000+ applications.
  - Slow-moving rolling release.
- Can be updated by command line.
- Switched to TrueOS in 2018.
  - Built from 12.0-STABLE.
  - TrueOS depreciated in 2020.

User-end Attributes:
- Shipped with a simplified installer.
- Choice between desktop environments.
- Comes with preinstalled commonly used software.
- Robust community controlled wiki.
- Easy to contribute to the project/report bugs.
- Community has full control of the GhostBSD community releases.
- Community forums for GhostBSD and FreeBSD questions/discussion.

Notable Future Plans:
- Possibility of a community release around the plasma5 desktop.
- Movement toward a rolling release schedule.
- Post TrueOS development.

NomadBSD

Novice to Advanced Users
Project Website

"NomadBSD is a persistent live system for USB flash drives, based on FreeBSD. Together with automatic hardware detection and setup, it is configured to be used as a desktop system that works out of the box, but can also be used for data recovery, for educational purposes, or to test FreeBSD's hardware compatibility."

What Makes NomadBSD Unique?

System Attributes:
- Extremely low system requirements.
  - Can be run by computers with a 1.2GHz CPU and 1GB of RAM.
- A fully integrated desktop environment optimized by the operating system.
- Further executable programs with some settings adjustments.
- Requires a more advanced USB, USB3 preferred.
- The desktop environment is curated specifically for the OS.
- Tons of support for using the OS as a test environment.
- Minimal size while including a curated collection of applications.
- Automatic hardware detection and setup.
- Because of the boot process, can be used for data recovery.
- Small development team, more unified vision.
- Uses a live USB, allowing changes to be saved to a portable system.

End-user Attributes:
- Automated, simplified setup with limited device configuration.
- Can serve as a tool for FreeBSD developers. (testing/data recovery).
- Focus on easy-to-use, guided computing.
- Innovative desktop features.
- New community forums created in March 2020.
- Extremely portable due to size/live USB setup.

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