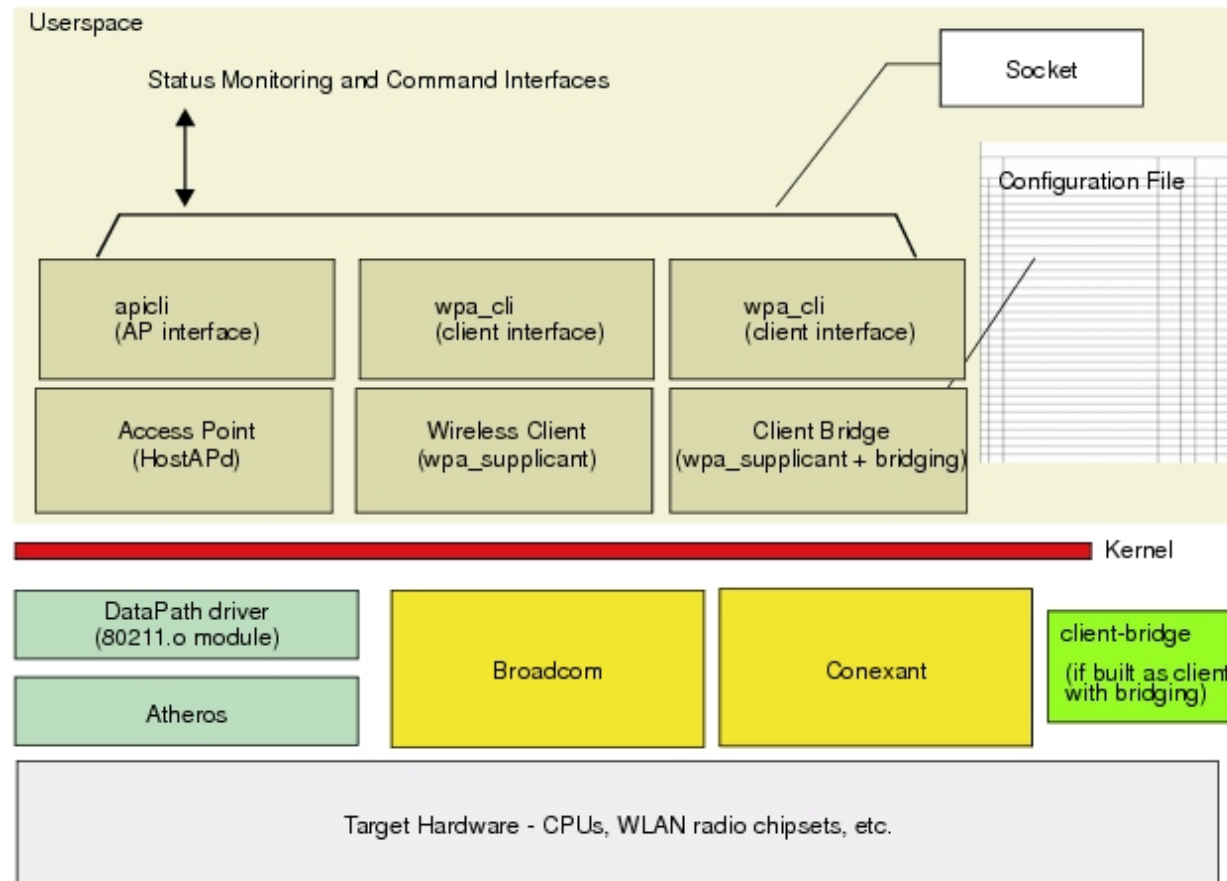


Devicescape Inc. Summary

- Wi-Fi software specialist Instant80211 has renamed itself Devicescape Software Inc. (<http://www.devicescape.com/>) in Feb 2005.
- Devicescape mainly sells Universal Wireless Platform (UWP) product which includes
 - *Linux kernel*
 - *Devicescape wireless subsystem (a device-independent IEEE 802.11 software core)*
 - *An Eclipse based integrated development environment (Devicescape Studio) & command-based development environment.*
 - *Wireless-specific tools for the 802.11 subsystem*
 - *GNU toolchain*
 - *Build scripts and makefiles*
- UWP supports Atheros (AR5213), Broadcom (BCM4306/4309/4320), Conexant radios.

Architecture Diagram for Devicescape Inc. UWP



Summary on Linux 802.11 stack situation

- There exists a wireless-2.6 tree on kernel.org maintained by John Linville. Upcoming in-kernel stack/drivers will be pushed upwards (to Linus) via this tree.
- There are two candidate stacks on the tree:
 - **softmac stack**: based on the current *ieee80211* stack in the kernel with improvements+recent patches.
 - **devicescape (a.k.a dscape, or d80211) stack**: is another stack written and recently GPL'ed by Devicescape Inc.
- Although devicescape has some advantages in functionality (like full WPA support), softmac is likely to be merged into upstream due to some issues in stability, compatibility etc.
- Both stacks seem to stay under concurrent development (at least for a while)

Functions Supported at d80211 stack

- Obvious Functions : various send/receive, lower/higher layer interfaces etc.
- BSS join/scan
- 802.11e/WMM parameter set handling, and packet->queue classification
- (De)authentication
- Encryption (wep, wpa, tkip/aes)
- IBSS create/find/join/merge
- Basic stat/info dump to /proc
- A simple rate control algorithm
- Interface for HostAPd
- Accessible from kernel.org as a 'git project' via linux/kernel/git/linville/wireless-dev.git