

# AT&T to Release “DANOS” Software Framework Into Open Source to Accelerate Network White Box Adoption



**AT&T is working to provide the industry with a more open, flexible, and cost-effective alternative to traditional integrated networking equipment.** We intend to open source a project that we call the Disaggregated Network Operating System, or DANOS, hosted by The Linux Foundation.

The DANOS project will provide a software framework to speed the adoption and use of white boxes in a service provider’s infrastructure. This will mean software developers, network operators, cloud providers, hardware makers, and networking application developers can quickly create new white box infrastructure to meet evolving customer requirements. And do it in a more cost-effective way.

Historically, creating a Network Operating System has been challenging due to the magnitude and complexity of hardware and software requirements. Hardware is only as useful as the software that runs on it. We need an open and flexible operating system to take full advantage of open platforms, like white box routers and switches.

White box hardware is a critical component of our own network, and we’ve been [publicly discussing our deployment](#) for quite a while. The ONAP platform is well on its way to being accepted as the global industry platform for SDN and NFV, with members representing nearly 60 percent of the world’s mobile subscribers. But each individual device in the network needs its own operating system. That’s what the DANOS project does — it fosters an ecosystem of application and hardware options from multiple vendors.

Just as the ONAP platform has become the open network operating system for the network cloud, the DANOS project aims to be the open operating system for white box. The project will support existing network protocols, but it will also offer expansion capabilities to support new tools, like the [open source programming language P4](#). Resources from AT&T Labs and [AT&T Vyatta](#) will be key contributors to the project.

*“Our goal with open sourcing the DANOS project is to create a community around an open framework to software-enable industry-standard white box hardware designs, such as those contributed to the Open Compute Project,” said John Medamana, VP of Packet Optical Network, AT&T. “We’re excited to work with The Linux Foundation to bring this concept to reality. We invite others to join us to build the community and support this effort.”*

*“The Linux Foundation welcomes the DANOS project to the open source community,” said Arpit Joshipura, General Manager of Networking, The Linux Foundation. “The DANOS project will help create a network operating system community that will benefit existing Linux Foundation projects like FRRouting and OpenSwitch, and pave the way for future projects to help drive innovation at the lower layers of the network stack.”*

***Details were highlighted at The Linux Foundation’s Open Networking Summit (ONS) North America 2018.***