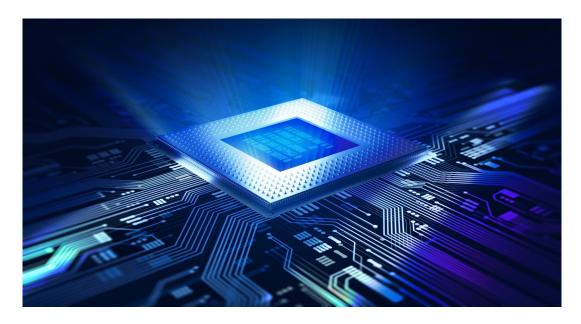


Network Software Stack AimOS Technology Brief



All product development cycles are different. Whether you have to meet tight deadlines, create cost-effective solutions or design for harsh environments, successful product designs are critical to the success of your organization!

At AimValley we understand your need to respond to the demanding requirements of your customers. Based on years of close co-operation with Broadcom® during the development of various 'Broadcom-based' products, AimValley has created the AimOS Family.

Whether you are looking for cost-effectiveness, convertible components or robustness, AimValley has the right software to help you design your Ethernet switch seamlessly.

AimOS Family

AimOS is a collection of software assets and tools to develop carrier grade telecom and datacom systems. It is a field proven solution with a first deployment in 2003 and has been used in more than 100,000 deployed systems. Some of these

systems are developed by AimValley as Original Equipment Manufacturer (OEM) and Original Design Manufacturer (ODM) systems, others are developed jointly with our customers.

AimOS can be customized for different application areas. Ranging from a high end carrier class Ethernet switch support SNMP, to a cost optimized industrial Ethernet switch with an embedded web GUI and from an SDH multiplexer to a WDM mobile front-haul system. A key part of AimOS, is a flexible hardware abstraction layer, which allows the use of different hardware architectures, for example an architecture based on Broadcom switching silicon or on AMD FPGAs.

All users benefit from the key advantages of the AimOS, being;

Flexible Software Stack
Carrier Grade System Support
Field Proven Solution





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AimOS Versions

AimOS is available in different flavors, each tailored for a specific application. Each version has key features required for any carrier grade solution, such as support for fail-safe software upgrades, hitless recovery and file system robustness.

The software supports a modular hardware abstraction layer and contains various components.

AimOS Generic

The generic version can be customized for different hardware platforms. This version supports features like a modular hardware abstraction layer, components for e.g. a POSIX compliant operating system abstraction, an XML driven management interface, support for SNMP, web interface, CLI and handling of hitless and fail-safe software upgrades.

AimOS Ethernet

This version of AimOS is customized for Ethernet switches based on the switch silicon SDK, for example the Broadcom Robo, StrataConnect and StrataXGS switches. AimOS Ethernet has been tailored specifically for integration with Broadcom SDK, enabling seamless Ethernet switch design. A license free binary version is available for evaluation.

AimOS Robo

The AimOS Robo version is designed for the Broadcom RoboSwitch 2 family using the embedded processor. This version is based on Broadcom's RoboOS which AimValley has hardened by adding various robustness features and is targeted at applications using the embedded CPU of this cost effective Ethernet switch family. Besides hardening AimValley also improved the webserver performance as can be seen in the video below. A license free binary version is available for evaluation.

White Paper

Feature List

White Paper

AimValley Software Expertise

AimValley helps you with product development based on the AimOS family. This collection of software assets and tools can also be used for other Broadcom switches, enabling us to help you with any 'Broadcom-based' design.

Services range from consultancy during your architecture phase, porting the AimOS to your own hardware, designing your hardware up to full system development including production, up until maintenance & support. We take care of every step in your development process, either based on your spec set or as a joint development project.

- Reliable partnership
- Design Flexibility
- Extensive experience in developing telecom and datacom systems
- Strong track record in delivering as planned and within budget
- Evaluation of jump-start product development
- AimOS supports various hardware platforms
- Key software and hardware expertise available for the RoboOS, StrataConnect and StrataXGS.



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Register for a free demo of our AimOS Ethernet switching software!

Our experienced engineering team with expertise in systems engineering, software, electronic and FPGA design can support you with all steps in your product development process. The Broadcom experience of our teams is well known in the industry.

Some of the Broadcom Ethernet switch evaluation boards can be used with a license free binary evaluation version of the AimOS, to quickly evaluate the AimOS and Broadcom devices. Register for a free demo today!

After registration, we will provide you with access to your private AimOS demo. The demo runs in a simulated environment and supports only a limited number of features as it is intended as a showcase for the look & feel of our AimOS Ethernet.



Why AimValley?

AimValley is a reliable provider of Video Streaming technology since 2003, delivering solutions for:

- High speed data processing applications
- Complex FPGA-based accelerated systems
- High speed, low power hardware equipment
- Robust embedded software
- Early adopter of Acceleration Technology

AimValley is a trusted partner of Tier 1 customers in Telecom and Industrial markets. Our customers enjoy the benefits of working with a strong team with more than 2 000 years engineering experience. Our combined skills represent all the important aspects required for developing end-to-end systems.