



### Introduction

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 our years of close co-operation with Broadcom® during the development of various 'Broadcom-based' products, AimValley has created the AimOS Family.

### 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 OEM and ODM systems, others are developed jointly with our customers. All users benefit from the key advantages of the AimOS being;

- an advanced and flexible software stack,
- support for carrier grade systems,
- field proven solutions.

AimOS can be customized for different application areas. Ranging from a high end carrier class Ethernet switch supporting 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 the 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 Xilinx FPGAs.

### AimOS versions

AimOS is available in different flavors, each tailored for a specific application. Each version has key features required for any carrier grade solutions, 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, such as;

- fault correlation,
- performance monitoring,
- database handling,
- configuration,
- XML driven management interface code generation,
- SNMP management,
- web interface generation,
- command line interface.
- REST API

Code quality is ensured by using state of the art tooling, such as static code analyzers.

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

### Available Versions

#### 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. A license free binary version is available for evaluation.

More information on the [Network Software Stack - AimOS](#).

### Why AimValley?

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.

- 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 StrataConnect and StrataXGS.

Re-use of IP and proven developed switch experience improves your development cycle and reduces costs considerably.

### Ask for a demo!

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.

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

For further information contact [sales@aimvalley.com](mailto:sales@aimvalley.com).