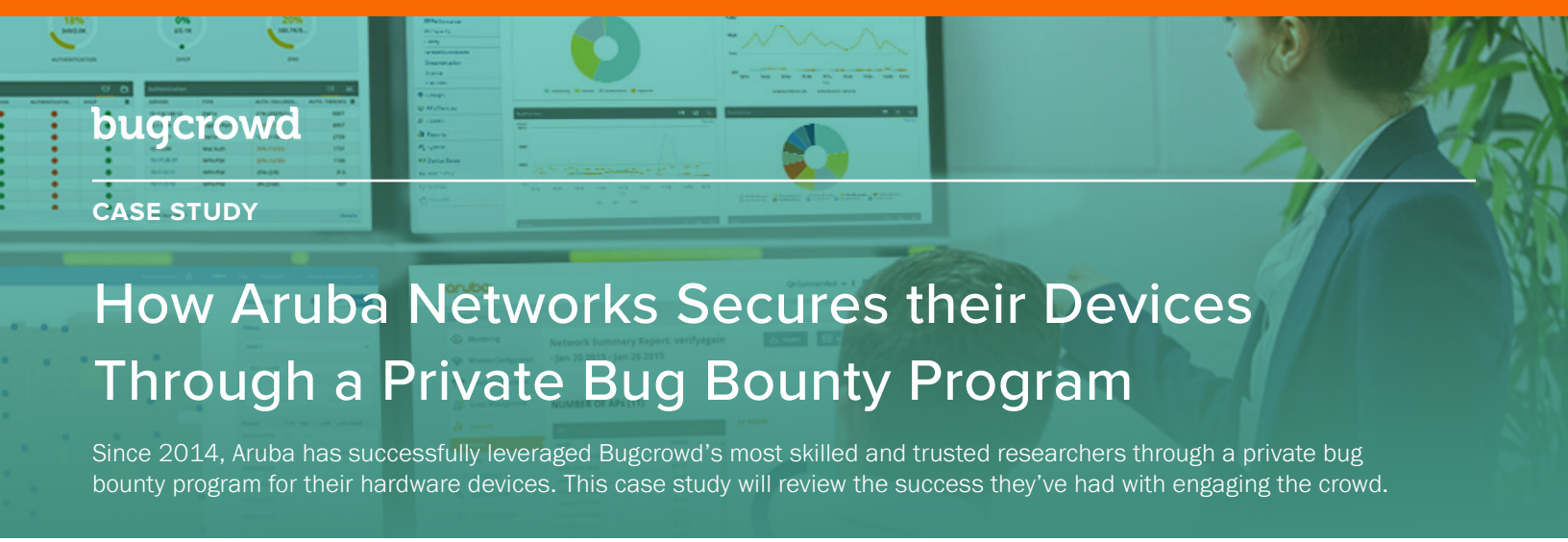


bugcrowd

CASE STUDY

# How Aruba Networks Secures their Devices Through a Private Bug Bounty Program

Since 2014, Aruba has successfully leveraged Bugcrowd's most skilled and trusted researchers through a private bug bounty program for their hardware devices. This case study will review the success they've had with engaging the crowd.

## Utilizing the Bug Bounty Model

In an environment in which product security is becoming more difficult, and top security talent is more challenging to hire for, Aruba has recognized the need to take their product security to the next level.

**Jon Green,** Sr. Director of Security Architecture, Aruba

"We have products that cover a wide variety of applications that utilize various technologies, so we need security testing that can cover all those areas. A bug bounty program seems like the best way to get that coverage. Of course, this entire line of thinking starts with the premise that we think product security is important – we want to find the problems before someone else does so that we can help keep our customers secure."

Bugcrowd worked closely with Aruba's security team to define the testing requirements and scope of their needs. After evaluating their current testing capabilities and organizational goals, Aruba decided to harness the power of the bug bounty model through a more focused private bug bounty program.

aruba
a Hewlett Packard Enterprise company

**About the Aruba Program**

**Launched:** October 14, 2014

**Type:** Private

**Scope:** ClearPass Policy Manager, AirWave, Aruba Instant, Access Points, ArubaOS running on devices and Aruba Virtual Intranet Access Client

**Rewards:** Up to $1,500 per bug

**Total submissions:** 500+

**Submitting Researchers:** 67

## Private Program Highlights

With a private program, Aruba was able to tailor their testing pool based on specific skill sets, have more direct communication with a smaller group of testers, and harness the power of a public bug bounty program while retaining more control. After over two years of utilizing the crowd to test their products and applications, Aruba has seen tremendous results, have positioned themselves as thought leaders in application security, and continue to gain traction in their program.

### Positive Feedback

Aruba, one of the first organizations to utilize a private bug bounty program to test hardware, has been recognized by the security research community for their commitment and innovation.

### Long-Term Traction

Because of its consistency, the Aruba program has retained astounding traction over two years and has received over 500 submissions from researchers around the world.

### High-Value Results

Through their positive relationship with the researcher community, Aruba has received astounding high-value results, with an average priority of 2.35 across submissions.

ARUBA CASE STUDY

# Timeline of Aruba's Bug Bounty Program

To provide Aruba Networks with increased privacy and control, Bugcrowd segmented and invited 100 of the top vetted and trusted researchers to participate in their private bug bounty program in early 2014. Since then, they've received fantastic results and have evolved their program.

### Launches private bounty program

In order to provide an isolated and controlled setting, a test demo environment was set up by Bugcrowd and Aruba for 100 top trusted security researchers.

### Receives first 100 submissions

The Aruba private program garnered high traction within the first month from many top researchers such as Duarte Silva–featured in this report.

### Adds additional 100 researchers

To boost engagement and broaden the testing pool, Aruba added additional researchers to the program, including Luke Young–featured in this report.

### Receives first P1 submission

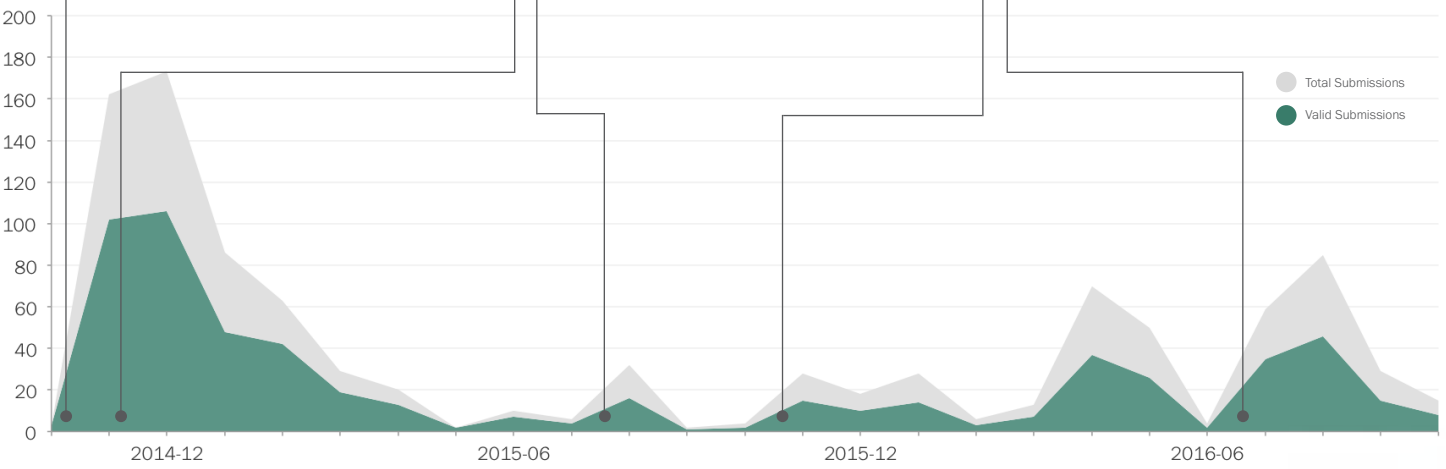
With the high level of skilled researchers participating in the Aruba program, it's no surprise that the first P1 submission came within the first 24-hours.

### Runs On-Demand Program

After success with their ongoing program, Aruba launched an On-Demand program, to focus testing on Aruba Instant for two weeks on their devices.

### Receives 500th submission

Because of their consistency and transparency, Aruba has received consistent attention from the researcher community in the last two years .




# The Value of a Private Program

Private programs are ideal for testing targets that are not already publicly accessible such as systems on staging environments, applications that require credentialed access, and even physical devices. **To gain access to private programs, researchers are vetted and trusted through participation in public programs:**

- **Vetted:** Only the top researchers who have demonstrated above average accuracy, and quality can receive invitations.
- **Trusted:** Researchers must abide by disclosure policies and program rules, as well as communicate professionally and respectfully with all parties.

"We decided to run a bug bounty program in order to get access to a wide variety of security testers. Hiring security researchers is very difficult in today's market, and even if you can find one, chances are good that person will be a specialist in only one or two areas."

**Jon Green, Sr. Director of Security Architecture at Aruba**

## On-Demand Programs

On-demand programs utilize an invitation-only crowd of researchers for a pre-determined amount of time–usually two weeks. They are the perfect solution for testing new products, major releases, new features, or anything in need of a quick test for up to two weeks.

Learn more about On-Demand Programs >

bugcrowd

ARUBA CASE STUDY

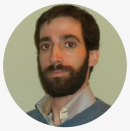
# Working Closely with the Researcher Community

Working with the security researcher community is one of the greatest value-adds of a bug bounty program for the Aruba team. They have exhibited immense dedication to the community with a fast response time, consistent communication, and a documented coordinated disclosure policy.

**Luke Young**
United States
**Acceptance Rate:** 100%
**Priority:** 2.34

"Bug bounty programs depend on an incredible amount of trust between all parties involved and Aruba has done a fantastic job of building that trust and at the same time a professional relationship with their researchers. Because of that open communication and the relationship I've been able to build over time, Aruba Networks is my above and beyond my favorite program to work with."

**Duarte Silva**
Portugal
**Acceptance Rate:** 100%
**Priority:** 2.95



"In the case of Aruba's program, what really got me hooked is the fact that I feel my input is appreciated and really valued by them. I felt they were treating me not as a threat, but as a member of the team. In my opinion, they have the right posture in relation to researchers, and many other companies should strive to follow their example."

**These factors have helped the Aruba team gain valuable testing efforts from some of the top bug hunters in the world.**

Duarte Silva, profiled at left, was one of the first researchers to submit to the Aruba and has published some of his findings as well.

Luke Young, also profiled at far left has submitted several bugs throughout the lifetime of the Aruba program, especially within devices.

Learn more about the bug hunting community in our recent report, Inside the Mind of a Hacker.

# Getting Started

We empower organizations looking to harness the power of the crowd, to make the right decisions to meet business objectives—we help you make the right decisions to ensure the success of your program.

1

## What do you want to test?

**Ready to utilize the crowd to improve your product security? We offer guidance to all of our customers on meeting their testing goals.**

Bugcrowd researchers are well versed in many skills, from web and mobile apps to hardware and connected devices.

Learn more about how it works >

2

## How do you want to test it?

**Public or private, ongoing or time-boxed, our bug bounty solutions offer flexible and robust options to support the testing you need.**

Run private programs to test applictions that are harder to access, or public programs to test anything publicly accessible.

Learn more about Bugcrowd's solutions >

3

## Who do you want to test it?

**Based on your program needs, we direct the right talent to your program at the right time.**

Safely connect with our crowd of independent security researchers through our powerful platform. Access the whole crowd or narrow your testing pool based on skill and area of expertise.

Learn more about the crowd >

Bugcrowd's years of experience and expert staff are ready to help you utilize the right bug bounty solution for your needs. Learn more about getting started at **bugcrowd.com/demo**.