

# OpenTAP Launch Announcement Blog



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## Test Automation is Now Open

This week [Keysight and Nokia jointly announced the release of OpenTAP™](#), an open source test automation project. OpenTAP – the Open Test Automation Project – represents Keysight’s first foray in stewarding open source software. It is the next logical step in a journey that began 80 years ago at 367 Addison Avenue in Palo Alto, giving birth to our original parent company, Hewlett-Packard, and indeed the whole Silicon Valley. Drawing on the spirit of Bill Hewlett and Dave Packard in their now-famous garage, and on the spirit of the Silicon Valley in the intervening years, OpenTAP seeks to set in motion a wave of contribution, collaboration and creation across the test automation ecosystem.

The launch of OpenTAP builds upon a number of trends within Keysight, across the test and measurement (T&M) industry, and of course in the broader universe of information technology.

## A Journey from Inner Source to Open Source

Like our peers in T&M, for most of its history Keysight has been building test and measurement solutions – hardware and software – using in-house and proprietary commercial software. Keysight test equipment traditionally embedded commercial real-time operating systems and executives, and today those same devices primarily interface to closed-source Windows workstations and servers and

Windows-hosted supporting tools and platforms. But the benefits of openness and community-based collaboration are difficult to ignore. Just as [Microsoft began its embrace of open source](#), Keysight began to evaluate and integrate open source software components, and more significantly, to adopt community development practices within our company – *inner source* – a term unknown to us when we started practicing it. Initially, primarily to increase software reuse, groups at Keysight began sharing code, collaboratively testing, putting into place the three central tenets of inner source:

- Open Collaboration
- Open Communication
- Quality Assurance (through separation of contribution and integration)

As is often the case, the embrace of *inner source* prepared Keysight for adoption of *open source*.

## Test & Measurement, an Industry Transforming

In parallel to Keysight's internal journey, the test and measurement industry was facing increasing pressure to offer open source components and to make available integrations involving open source. Most vendors showed continuing reluctance to open any aspect of their equipment, software and IP. In stark contrast, T&M end-users, especially consumer device manufacturers (OEMs) and network equipment providers (NEPs), had begun their open source journeys a decade earlier, integrating and deploying open source operating systems, tools, libraries, middleware, applications and other software components. Those companies were using proprietary test equipment and software to deliver high quality products built with software stacks comprised of 60-75% open source ([Synopsis](#)). As T&M customers began not just to consume open source, but also to collaborate in its creation, they sought new opportunities for openness in their development processes, including test and QA. Coinciding with Keysight's inner source adoption, multiple customers (led by Nokia) approached Keysight to release core components of our test automation solutions as open source, in particular to enable more sophisticated testing in-place, in deployed devices. This confluence of capabilities and requirements led to the launch of OpenTAP.

## An Invitation to Join

OpenTAP has the potential to reinvent test automation. Its core and plugin architecture offers Keysight, its peers, partners and customers a standards-based automation approach on which to innovate, with opportunities to introduce new tools, equipment interfaces and integrations with both new and legacy systems. It also provides test automation users an opportunity to migrate away from creaky and costly in-house and homegrown test systems to a shared, interoperable platform, without vendor lock-in.

We think that OpenTAP is the start of something big. Keysight is grateful and excited to be able to launch something interesting and valuable not just for ourselves, but for a wide and varied community of peers, partners and participants. To learn more, visit <https://www.opentap.io> and join in making test automation collaborative and open.

Team OpenTAP