Headquartered in Amsterdam, ABN AMRO Bank N.V. is the third-largest bank in Netherlands. The company serves retail, private and corporate banking clients with a primary focus on the Netherlands and with selective operations internationally. Its private banking division serves 100,000+ high-net-worth clients in 10 markets worldwide.
The world of mobile banking has expanded beyond the olden days of simply checking your account online. Now, banks on the forefront of the mobile innovation are expected to offer everything from electronic deposits to financial advising, right from a customer’s mobile device.

ABN AMRO Bank N.V. (ABN AMRO), long a leader in mobile banking, created online and mobile banking portals for each of its ten private banking markets worldwide. Their high-net-worth private banking clients expect the highest level of convenient mobile access and security of their confidential, personal information, even during application test and release cycles.

Development proved a continual pain point for the team. Rather than a singular platform created to serve all markets collectively, the team had developed a unique application for each market.

Keen to roll out a new singular platform, the team went back to the drawing board and placed agility at its strategic core. However, roadblocks quickly arose related to mobile testing. The domestic team, located in Amsterdam, shared more than 40 mobile devices for testing purposes. As often happens when physically handing off devices for testing, the team struggled with units going missing, not being charged and failing to be updated to the latest operating systems or browser versions.

Meanwhile, ABN AMRO also needed to integrate a team of international developers stationed in India. With each team forced to use their own set of physical devices, this drove costs and constrained collaboration between the Dutch developers and their Indian counterparts. Even while staring down these challenges, ABN AMRO test manager Sander Stevens was confident the teams could find a route to efficiency and collaboration. Particularly, Stevens had an eye on a private device cloud that lived behind the corporate firewall.

“Mobile testing and device management can seem incredibly difficult to do,” said Stevens. “But most people are simply lacking a familiarity with the proper technologies that can make developer’s lives easier.”

**Challenge**

**Benefits in Brief**

- Domestic and international teams can now test and collaborate using deviceConnect’s shared bank of devices
- Mobile Labs Trust integration with HP UFT allows the team to automate regression testing, freeing up time for manual exploratory testing for even more quality releases
- Mobile Labs' private device cloud lives behind the ABN AMRO corporate firewall, allowing the bank to comply with rigorous data security restrictions
- Straightforward device management and tracking means the team can easily see which devices are available, updated and ready for use
**Solution**

While aiming to simplify the testing process, the bank also required security. As a leading Dutch bank serving a number of high-wealth investors, ABN AMRO must comply with rigorous data security restrictions. Prioritizing security, efficiency and collaboration, the team primed itself to adopt a device management solution.

Fortunately, Stevens had previous experience working with Mobile Labs. His prior involvement had been very positive, and Mobile Labs’ numerous advantages won over the ABN AMRO stakeholders.

First came ABN AMRO’s security litmus test, which Mobile Labs deviceConnect™ readily met head on. An on premise, cloud-based mobile device platform, deviceConnect provides total local and offshore device access. The solution also offers management of mobile app development and testing assets. With the ability to live behind the bank’s corporate firewall, deviceConnect meant team members could use existing test scripts and test applications with confidence in the system’s security.

At the request of Stevens, Mobile Labs conducted a proof of concept to demonstrate the solution’s functionality. As the ANB AMRO team relies on HP Unified Functional Testing (UFT) for test automation, this included implementation of Mobile Labs Trust™. Trust is a certified add-in HP’s QuickTest Professional®, designed and architected specifically for HP’s UFT. It has a single point of integration with UFT, allowing full, end-to-end testing from desktop and web to mobile and back.

As part of a complete testing infrastructure, ABN AMRO also introduced deviceBridge™ into its day-to-day processes. deviceBridge serves as a “virtual USB cable” connecting real devices to a local laptop or server.

As a result, the bank’s offshore testing and development teams were provided nearly instant access to all devices and automation tools, allowing the ability for continuous application delivery. Additionally, deviceBridge provides an ongoing strategic option to add and deploy many other popular agile development environments including, Selenium, Appium, Calabash and others.

As part of evaluating the solution, Sander noted opportunity for the future for deviceConnect to improve in a few areas; such as version updates, support for different mobile browsers and configuration of Apple environment. He noted that the need to be able to test with additional mobile browsers like Chrome and Safari is important in order to avoid any risks for error. He added that by including the latest version of additional tools, such as XCode, installation of new version of deviceConnect can be further simplified. Finally, he remarked that Apple’s strict environment can make the addition of Apple devices to the deviceConnect difficult and there may be an opportunity to build more automation into that process to make it more manageable.

“When we implemented Mobile Labs Trust, that’s when we realized the full benefit of the product,” said Stevens. “We quickly learned we could reuse the same tools and techniques in UFT, including the same scripting language, to test mobile applications on real devices located in deviceConnect.”

Results

While less than nine months into its partnership with Mobile Labs, ABN AMRO has already seen huge gains in efficiency and productivity. deviceConnect has taken the complexity out of managing and tracking the team’s mobile devices, as the team can easily see which devices are available, updated and ready for use.

Productivity and collaboration has also increased as the dispersed domestic and international teams can now test using a shared bank of devices, courtesy of deviceConnect. Mobile Labs has allowed ABN AMRO to dramatically increase the quantity and quality of tests before commercial release, to improve the quality of their mobile apps and responsive websites.

“Nine months in, our team is quite happy with Mobile Labs and its solutions. The gains in efficiency, simplicity and collaboration have already paid off in dividends. And when a problem arises, I know I’ll be talking to a Mobile Labs support specialist within an hour of filing a ticket. All this leads to greater confidence in the quality of our releases,” said Stevens.

Furthermore, the integration with HP UFT courtesy of Mobile Labs Trust allows the team to automate regression testing, freeing up time for manual exploratory testing for even more quality releases. While thrilled with the increase in quality, the team has also managed to shorten manual regression testing across test configurations from nearly five weeks to four days.

About Mobile Labs

Mobile Labs provides enterprise-grade mobile device clouds that improve efficiency and raise quality for agile-based, cross-platform mobile app and mobile web deployments. The company’s patented device cloud, deviceConnect™, is available in both public and on-premises configurations. deviceConnect provides affordable, highly-secure access to a large inventory of mobile devices across major mobile platforms to developers, test engineers, and customer support representatives, among others.

At the heart of enterprise mobile app deployment, deviceConnect enables automated continuous quality integration, DevOps processes, automated testing, and manual app/web/device testing on managed devices. deviceConnect supports all major integrated app development environments (IDEs), such as Xcode, as well as automated app and web testing on real mobile devices using a wide variety of mobile UI test automation tools. For more information, please visit www.mobilelabsinc.com.