BUYER CASE STUDY

The Case for Mobile Experience Virtualization: Citrix HDX Mobile SDK Creates New Opportunities for Partners

Brett Waldman

IDC OPINION

This IDC Buyer Case Study is based on a conversation with Warren Simondson of Ctrl-Alt-Del IT Consultancy Pty Ltd., a systems integrator based in Australia. The conversation centered on how he implemented the Citrix HDX Mobile SDK to mobilize an SAP application for a mining company. Highlights include:

- Development time is shortened by the fact that the Citrix HDX Mobile SDK abstracts the mobile SDKs and is written in a format familiar to Windows developers.
- One solution was able to be deployed to iOS- and Android-based devices with no customization, minimizing deployment and ongoing support complexity.
- Benefits were near instantaneous — increasing worker productivity and reducing safety incidents.

IN THIS BUYER CASE STUDY

This IDC Buyer Case Study is based on a conversation with Warren Simondson of Ctrl-Alt-Del IT Consultancy Pty Ltd., a systems integrator based in Australia. The conversation centered on how he implemented the Citrix HDX Mobile SDK to mobilize an SAP application for a mining company.

This IDC Buyer Case Study provides a benchmark for how organizations can leverage client virtualization solutions to better deploy legacy applications to mobile devices.

SITUATION OVERVIEW

In Australia, mining is a large industry but one fraught with many technical challenges, especially when it comes to dealing with workers in very remote locations. The mining company that Ctrl-Alt-Del IT has been working with uses SAP as a back-end solution to track employees' time sheets and whereabouts. The typical scenario is that a miner would show up at the worksite and log in before heading down into the deep mine. And then when his/her work shift is over, typically 12-15 hours later, the miner would then log out. Occasionally, the mining company would have some issues with workers trying to increase their pay by logging in later or leaving the mine early and heading to the one and only nearby restaurant before going back to log out.
Because of regulations and operational efficiencies, the mining company needed instant updates from its workers, so having an offline solution was not a viable option. About 10 years ago, the company started by pushing its SAP solution through Citrix XenApp to thin-client devices at the remote locations. The problem with this solution was that the rugged conditions would damage the thin clients, and they would only last six months before having to be replaced.

However, within the past few years, the miners were quickly swapping out their BlackBerry devices for Android and iOS devices, giving the company a new opportunity – deliver the SAP application to these mobile devices.

Organization Overview

Ctrl-Alt-Del IT Consultancy started in 2002 primarily focused on thin-client deployments. The firm now focuses on all types of client virtualization and supports solutions from Citrix, VMware, and Microsoft. The firm works with companies of all sizes but typically midsize to large companies, with a few thousand users in verticals ranging from banking to telecom to mining.

Challenges and Solution

Challenges

The mining company wanted to deliver a mobile SAP solution to its employees' mobile devices; however, the company's employees were nearly equally split between Android and iOS devices. Therefore, choosing to develop an application for a single platform was not appealing and developing an application for both platforms seemed cost prohibitive and time consuming. While streaming the application directly to mobile devices is possible with Citrix Receiver, the user experience would be limited, at best.

Solution

Ctrl-Alt-Del IT had an idea for a better solution – create a mobile front end that would take advantage of the existing SAP back end but also leverage the capabilities of the employees' smartphones, such as cameras and GPS. As previously mentioned, trying to create multiple mobile applications was not attractive. However, since the company was already leveraging Citrix XenApp, the logical solution was to try to use the Citrix HDX Mobile SDK. The Citrix HDX Mobile SDK abstracts the mobile SDKs and is written in a format familiar to Windows developers.

Results

For the first version of the application, it took about two days to create the mobile front end and an hour to add a location field to the SAP application that could include the GPS information of where the employee was at the time of signing in. However, the workers would still try to outsmart the system by having a single employee sign in with 10 different phones – while the other employees were out and about. Therefore, for the next version Ctrl-Alt-Del IT added the capability to take a picture of the user standing in front of a company-designated sign, which could be used to extract EXIF data such as time, date, and mobile phone specifics from the photo and this would be automatically uploaded to the SAP system for a secondary verification. And this was all accomplished with only two clicks from the
user – one to accept the privacy notification that is required by law and one to take the picture that then automatically gets uploaded.

**Benefits**

Ctrl-Alt-Del IT was able to go from idea to beta in less than a week and from beta to production in about a month, all without having to hire any new developers or altering the back-end system, except for adding two new fields. Through this process, the mining company not only saved a lot of time and money, if it had chosen to go an alternate route but also saw, in a very short amount of time, increased worker productivity and decreased safety incidents.

**ESSENTIAL GUIDANCE**

In today’s environment of constant change, it is up to IT to find ways to balance short-term demand with long-term needs. Both cloud and mobility are creating new opportunities but also new challenges. While the consumerization of IT makes it fairly easy for employees to avoid internal IT applications and processes, it opens up the company to security and regulatory challenges. Any delay in updating your infrastructure and applications can potentially cost dearly.

**Actions to Consider**

**Advice for Buyers**

When dealing with legacy applications that organizations want to be able to deliver to any device, organizations have several options:

- Replace or re-architect the application for the Web.
- Replace or re-architect the application as a native mobile application.
- Stream the application using client virtualization solutions.

For companies that do not currently have a client virtualization solution in place, the option to stream the application using client virtualization solutions will obviously have more barriers to overcome. However, the first step all companies need to do is to figure out what applications their users actually use and need and what devices the users use them on. This initial assessment will also allow the company to rationalize many of these applications.

And while “mobile first” has become a catchphrase for bleeding-edge companies, for the majority of companies mobile device usage will continue to be significant but not standalone. The standard laptop that has become commonplace in almost every organization throughout the world will continue to dominate real world usage.

Solutions like the Citrix HDX Mobile SDK are relatively new but are maturing quickly. IDC refers to these solutions as mobile experience virtualization (MXV). MXV transforms legacy applications built for keyboard and mouse interfaces to touch-first interfaces with little effort. There are certainly cases where applications should be replaced or re-architected, but for some applications those are not an
option and MXV provides an alternative that can extend the life of the application and eliminate many of the switching costs.

**Related Research**

- *IDC QuickPoll: Client Virtualization in the Time of Mobility* (IDC #246586, February 2014)
- *VMware Acquires Leading Mobile Enterprise Management Vendor AirWatch for $1.54 Billion* (IDC #lcUS24645414, January 2014)
- *Citrix Acquires Framehawk to Bolster Mobile Experience Virtualization Solution* (IDC #lcUS24600414, January 2014)
- *Mobile Experience Virtualization: Bridging the Desktop to Mobile Application Gap* (IDC #245101, December 2013)
- *VMware Acquires Desktone to Accelerate Desktop as a Service* (IDC #lcUS24396113, October 2013)
- *VMware Reaffirms End-User Computing as Strategic Priority* (IDC #lcUS24331813, September 2013)