

## Arbitration Forums Leverages Non-Persistent VDI to Drive New Levels of Efficiency And Security

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*- Eric Tuley, IT Operations Manager  
Arbitration Forums, Inc.*

**Organization:**  
Arbitration Forums, Inc.

**Virtual Desktop Users:**  
4,700 and growing

**Product:**  
ProfileUnity™

### Overview

Based in Tampa, Florida, Arbitration Forums, (AF) Inc. is the largest U.S. provider of arbitration and subrogation services. Through the years, this not-for-profit organization has established a membership of over 4,700 insurers and self-insured organizations who utilize the services of highly trained arbitrators to support their recovery and resolution needs. Arbitration is an established alternative to litigation used by insurance carriers to resolve disputes arising from claims. By reducing the amount of litigation and related costs, and settling coverage disputes among themselves, insurance companies improve their intercompany working relationships and are able to pass savings on to policyholders.

Annually, AF members file more than 510,000 arbitration disputes and 770,000 subrogation demands collectively worth over \$5.5 billion in claims. Regional field arbitration managers (FAMs) log in to a central AF "hub" to record detailed accounts of demands and responses in electronic document sharing that not only facilitates review and the subrogation process, but keeps the information confidential and secure.

The job of maintaining AF's back-end information systems used by FAMs, member organizations and AF internal staff belongs to AF's IT Operations group, headed by manager Eric Tuley. Aably assisting Tuley with responsibility across all desktop-refresh projects is IT systems engineer Victor Franklin. As far back as 2012, Tuley and Franklin began exploring the potential for virtualization to manage desktops more efficiently and reduce time spent on patching, maintenance, upgrading and troubleshooting their desktop environment.

## The Challenge

“Very early on we knew we wanted to leverage non-persistent linked clones,” said Tuley. “Our goal from day one was to get to the point where we did not have any kind of persistent disks whatsoever because we didn’t want to end up troubleshooting individual virtual machines for our user community.”

Tuley explains that the concept was to design pools of “disposable desktops” that were composed from about four or five base images tailored to the various functional areas in the organization. AF adopted the VMware View platform, which is running on Cisco™ UCS servers and supported by NetApp® and EMC storage. User profiles are managed by Liquidware Labs ProfileUnity.

“Knowing that we planned to leverage non-persistent linked clones, it was critical that we got the right user-profile management software,” said Tuley. “We looked at a number of solutions to manage user profiles, but most fell short of our requirements. It was only when we looked at Liquidware Labs ProfileUnity that it all fell into place for us.”


Unlike other solutions they evaluated, ProfileUnity addressed some very specific requirements in terms of handling Microsoft application data, Internet favorites and other user customizations as well as a need to lock down and control the desktops from a central control panel standpoint. AF systems were also using plugins for Microsoft® Outlook® including RightFax, Symantec™ Enterprise Vault™ document software and Connector for

Microsoft Dynamics CRM. In addition, Tuley and Franklin needed to address challenges with such applications as Cisco Unified Personal Communicator and Cisco Jabber which, to establish a phone connection, required a state-full client file to be loaded each time a person logged on.

“We experimented with VMware® ThinApp® to stream some of these bigger, thicker applications to keep them out of the base images, but the plugins we used made that impossible,” said Tuley. “We elected to put those applications in the base images and to ThinApp the smaller one-off applications, such as Google Earth™ or Acrobat® Reader®, via Active Directory User Groups. When you get into the different types of application linking that we had, other solutions did not compare to ProfileUnity in working for our type of deployment.”

The initial project was to virtualize AF’s member-facing call center, but since then Franklin and the technical support staff have rolled out virtual desktops to AF’s accounting department and executive team. In addition, internal VMware Horizon View™ pools support the development efforts of the configuration management team, which acts as liaison between the IT Operations staff and the application-development team.

Franklin explains that the combination of ProfileUnity to manage user profiles and data with non-persistent Horizon View desktops has transformed his desktop maintenance activities.



Now Franklin is heading a project to roll out Horizon View virtual desktops for its remote staff of roughly 60 FAMs. The FAMs had corporate laptops that provided a VPN connection to AF back-end systems, with full administrative access. While this is a fairly typical arrangement for remote users, it opened up the potential for unauthorized data downloads. The situation also imposed a heavy overhead of troubleshooting and maintenance from IT staff.

“We recognized that maintenance was very disjointed at best when it came to applying Windows® service packs, security fixes on Microsoft office products, or even upgrading VPN clients for our remote team,” Tuley noted. “In addition, laptops needed to be connected to the internal network long enough to be scanned by our antivirus software. With virtual desktops, we could address the maintenance issue for FAM desktops just as we did with internal staff.”

Phase one of the project is to cycle out of all physical laptops in the field that have VPN access. Franklin and the technical services crew are handling this at the rate of five FAMs per week. When the FAMs turn in their laptop, ProfileUnity harvests user profiles and settings from the physical machines and migrates them to a network share where they can be accessed by the virtual desktop infrastructure. Then new Lenovo thin client laptops with only the Horizon View client installed are sent back to the FAMs along with a Cisco phone set. The team calls the FAMs to guide them through the first logon and installation. After that, the FAMs are good to go.

## The Results

“We have had excellent success with this process,” said Franklin. “While there is always a learning curve for new technologies, reports from the field indicate that their experience is ‘excellent.’” A fortunate by-product of the new, faster virtual desktops is that the FAMs no longer run the risk of losing lengthy written briefs or detailed accounts of decisions when a VPN session times out or a wireless connection is dropped.

“All of their work is saved on the server,” said Tuley. “Once they log back in, all of their work is still there for them to access, which is extremely important for them.”

The next phase of the rollout will be to lock down desktops even further by turning on IP filtering to prevent access to AF’s data cloud from a home or personal device even when the VMware Horizon View client is installed. Endpoints will then be as secure as the data center.

The security initiative also benefits from the move to virtual desktops because it provides enhanced fail-over protection from the main data center in Tampa, FL, to a secondary mirrored site in Charlotte, NC.

“To know that with ProfileUnity, I have all my user profiles on a virtual file server that is SRM protected, and to know that those profiles are portable and available in a disaster recovery scenario due to the way we can configure them with this solution is just invaluable,” said Tuley. As IT Operations group manager, Tuley not only spearheaded the DR plan, he thoroughly tested it to ensure that AF desktop systems could be

recovered within a four-hour time frame. "We can fail over to the Charlotte location in case of a disaster and reconnect those profiles to the desktops provisioned in the DR center. That assurance is extremely important for us from the business-interruption standpoint."

Tuley adds that meeting membership security demands is also critical to the organization's future. AF is arbitrating automobile claims currently, but its ability to act as a highly secure conduit for all insurance carriers to transmit data to one another is prompting new opportunities. Members would like to see AF open up back-end systems to support other lines of business, including personal injury protection, medical payments, property casualty and workers' compensation claims.

At the end of the day, Tuley and Franklin give Liquidware Labs ProfileUnity high marks for enabling their desktop virtualization investment to pay back the organization on so many levels.

"I will definitively state that ProfileUnity allowed our View deployment to be easier and a lot faster," said Tuley, who adds, "that is a huge consideration for me when I have a team of highly compensated staff who have a lot of other demanding work they must do. We really feared that we would be putting months and months into View deployment, but once we got the profiles figured out with ProfileUnity, it all worked smoothly from there."

Another real – but almost unrecognized – advantage of ProfileUnity, according to Tuley and Franklin, is the control the solution gave them when moving users from their physical desktops to the virtual environment.

"This is quite a balancing act," said Tuley. "We had a heartfelt mandate to ensure a positive user experience to promote the greatest sense of adoption. To that end, we knew we had a responsibility to enable what we call the 'high-touch' user customizations, such as shortcuts, passwords, favorites and so on, and carry them over. Yet at the same time, there were things we absolutely knew we could not port over from the legacy desktops, and it was critical to weed these out."

According to Tuley, one of the most valuable yet "unsung" benefits of the solution is that ProfileUnity migrates many of the users' customizations while leaving behind unauthorized software, files or other unapproved relics, based on a schema Tuley and Franklin designed.

"It was awesome to know that there is a product out there where we could selectively hand-pick all of the key components that we wanted and knew were valuable, yet at the same time weed out the 'bad' stuff that accumulates on physical desktops over time," said Tuley. "ProfileUnity truly eliminates the growing pains of going to a virtual environment by allowing you to choose migration items. No other product out there that does that."

