numecent   waterman

Case Study

Waterman Group

How Waterman Group Runs Resource-Intensive Engineering Applications Like Revit, Civil 3D, and AutoCAD on Azure Virtual Desktop in a Secure and Compliant Manner

TABLE OF CONTENTS

SUMMARY

Adopting Microsoft Azure Virtual Desktop (AVD) is critical to Waterman Group's modernization initiatives. To maximize application compatibility on AVD, they leveraged Cloudpaging to ensure end users could run even their most complex engineering applications as if natively installed. Cloudpager - the first and only application container management platform for Windows desktops - enabled them to streamline application provisioning and maximize application portability across their enterprise.

Cloudpaging enabled large engineering applications like Revit, Civil 3D, and AutoCAD to seamlessly run on Azure Virtual Desktop as if natively installed, providing end users with a high performing experience.
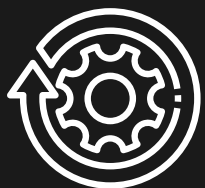
Cloudpager provided Waterman with a single solution to dynamically provision, update, and meter its entire application estate in a highly automated fashion.

Cloudpager's ability to meter all application usage ensures audit-ready operations across regions, including stringent J-SOX framework requirements.

CUSTOMER OVERVIEW

Waterman Group is a multidisciplinary consultancy providing sustainable solutions to meet the planning, engineering design, and project delivery needs of the property, infrastructure, environment, and energy markets.

Background

Headquartered in London, the company has approximately 1,600 employees in offices across the UK, Ireland, and Australia.

Stuart Worrow, Group IT Director of Waterman, has been leading the company's journey to cloud and mobile-first IT operations in tandem with Microsoft. A foundational part of this initiative is maximizing adoption of Azure Virtual Desktop across Waterman.

CHALLENGES

Prior to Azure Virtual Desktop, App-V was Waterman's primary application virtualization solution. Due to long installation times and extensive repackaging efforts to run applications in different desktop environments, as well as App-V's end of life looming (Microsoft has announced it will be April 14, 2026), they wanted to upgrade to a more modern application container solution as they made their foray onto Azure Virtual Desktop.

Unable to Virtualize Business-Critical Applications

Waterman utilizes around 300 distinct engineering software packages. Their priority was enabling Computer-Aided Design (CAD) technicians to have a native application experience on Microsoft Surface Pro and Surface Laptop devices running Azure Virtual Desktop, which wasn't achievable with App-V.

Issues Running Business-Critical Engineering Applications

It proved difficult to get resource-intensive engineering applications like Revit, Civil 3D, and AutoCAD to seamlessly run on Azure Virtual Desktop, due to the complex nature of the applications and their licensing requirements. For Waterman to successfully standardize on Azure Virtual Desktop, they needed to be able to package and deploy such applications to full-time and contract employees around the globe, regardless of where they are working from.

Meeting New Compliance Requirements

IT started by virtualizing all applications for the cloud and testing Cloudpaging and Cloudpager on their Azure Virtual Desktop estate. After establishing virtual desktop operations, IT will scale the workflows to physical desktops and laptops. In 2017, Waterman was acquired by the Japanese consultancy CTI Engineering Co., Ltd., introducing additional compliance requirements for the IT team to adhere to.

WHY WATERMAN CHOSE NUMECENT

There were two primary reasons Waterman chose Numecent to package and manage its Windows desktop application estate.

Maximizing Application Compatibility with Cloudpaging

Cloudpaging containers can package and deploy virtually any application to any physical or virtual Windows desktop environment. This is made possible by Cloudpaging's granular isolation and integration controls, which allow packagers to choose whether application components are integrated or isolated to the operating system, down to the file level. Leveraging Cloudpaging, Waterman was able to package 98 percent of its Windows desktop application estate for seamless deployment to Azure Virtual Desktop users without sacrificing functionality or performance.

Streamlining Application Management with Cloudpager

Cloudpager provides a single, cloud-native solution to manage all Windows desktop application deployments across their enterprise – regardless of whether end users are running physical or virtual desktops. To start, Waterman's IT team strictly focused on using Cloudpager to get their Azure Virtual Desktop to an enterprise-ready state, with plans to scale Cloudpager coverage to all physical and virtual Windows desktops.

TESTIMONIAL

"Numecent has been an invaluable partner for Waterman Group during its digital transformation. Waterman made the decision to transition away from App-V in 2020 and Numecent has provided first class help and support throughout that journey.

By integrating Cloudpaging with Cloudpager, Waterman boosted its software virtualization coverage to 98%, significantly enhancing the performance of substantial software suites like Autodesk, achieving remarkable speeds not previously attainable with software virtualization.

With Numecent's Cloudpaging and Cloudpager products, backed up by Numecent's amazing customer-first approach, Waterman Group has been able to realize its aspiration for pure cloud computing on Microsoft's Azure Virtual Desktop Ecosystem"

Stuart Worrow, Group IT Director, Waterman

Benefits of Cloud Application Virtualization & Container Management

Maximizing application mobility while reducing IT overhead

With App-V, IT administrators were constantly required to repackage applications so they could run on new devices and application environments. Moreover, manual application installations required IT to set aside an entire working day to provision new desktops or laptops to end users.

Cloudpaging technology enabled them to virtualize even the most complex applications in their estate, including Civil 3D, Revit, and AutoCAD. Moreover, Cloudpaging enabled IT to eliminate the need to repackage applications for different desktop environments.

With Cloudpager as their application container management solution, they were able to centralize all their applications in the cloud and streamline deployment workflows across their Azure Virtual Desktop and physical desktop environments.

98%
Application Virtualization Coverage with Cloudpaging

Accelerating application deployment and launch times

The IT department wants to establish a seamless, light touch application deployment workflow that does not require any actions from end users. Currently, Waterman's App-V setup requires users to go into a download and wait until the whole application is ready to run. This yields day-long installations for new desktops and slow application launch times for Azure Virtual Desktop users.

By streaming applications directly to end users from the cloud, Cloudpager enables IT to dynamically provision them in real time to virtual desktops. When end users log in, at whatever time of day/night, software is available as if natively installed on their devices running Azure Virtual Desktop.
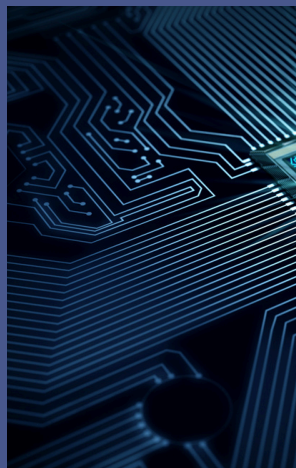
Enhancing security and compliance

In 2017, Waterman was acquired by CTI Engineering, which led to additional regulations they needed to adhere in addition to existing UK regulations. Part of this included introducing J-SOX framework requirements that were more stringent than what they had before. Additionally, all UK Government projects/tenders now require the UK Cyber Essentials accreditation that Waterman's team must achieve every year.

Part of these compliance requirements mandate up-to-date/supported software on all AVDs or Workstations with security updates applied within a maximum of 14 days. Cloudpager provided the optimal solution because applications are never fully installed on physical or virtual machines. All application activity is metered and reported on, and IT can execute software reclamations, rollbacks, reallocation, or updates in real time. Ultimately, Cloudpager is the primary mechanism to help ensure audit-ready operations across regions.

WHAT'S NEXT?

The long-term vision is to host all desktop IT operations on Microsoft Azure. All desktop resources would be hosted in Microsoft Azure, from back-end desktop infrastructure to the applications themselves. In doing so, end users will only need Microsoft Surface devices to run even the most complex applications – including Civil 3D, Revit, and AutoCAD.

Want to learn more about packaging large engineering applications?

To see how Cloudpaging can package large, resource-intensive applications, click the image to the right or the link below for a video demonstration of one of our Senior Deployment Engineers packaging a legacy version of ArcView GIS 3.0.

Watch the video here >>
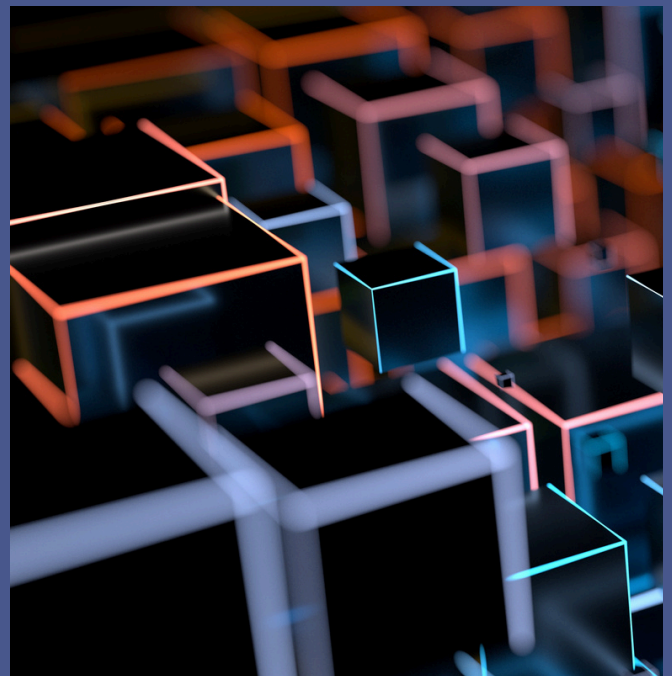
ABOUT NUMECENT

Numecent is an award-winning cloud technology provider headquartered in Irvine, California. The company's technology portfolio, built upon 64 patents (and counting), simplifies the mobilization and management of Windows applications across modern desktop and multi-cloud environments. Enterprises around the world – including the largest Fortune 500 companies, cloud service providers, and MSPs – leverage these technologies to package and deploy thousands of applications to millions of end-users in a friction-free manner every day.

Request a Demonstration

Witness the power of Cloudpaging application containers and Cloudpager, the first and only cloud-native application container management platform for Windows desktops, by requesting a live demo at www.numecent.com/demo.