



# Developing a Comprehensive Windows Application Strategy

with Liquidware Essentials

WHITEPAPER

# CONTENTS

<b>Introduction</b> .....	3
• The Challenge: Base Image Sprawl from Application Deployment.....	3
• The Goal: A Single Base Image.....	3
<b>Assess</b> .....	5
<b>Prepare</b> .....	6
<b>Deploy</b> .....	6
<b>Details About the Liquidware Solutions Mentioned in this Whitepaper</b> .....	7
• Stratusphere UX.....	7
• ProfileUnity.....	8
• FlexApp.....	8
<b>Summary</b> .....	9
<b>Contact Information</b> .....	9

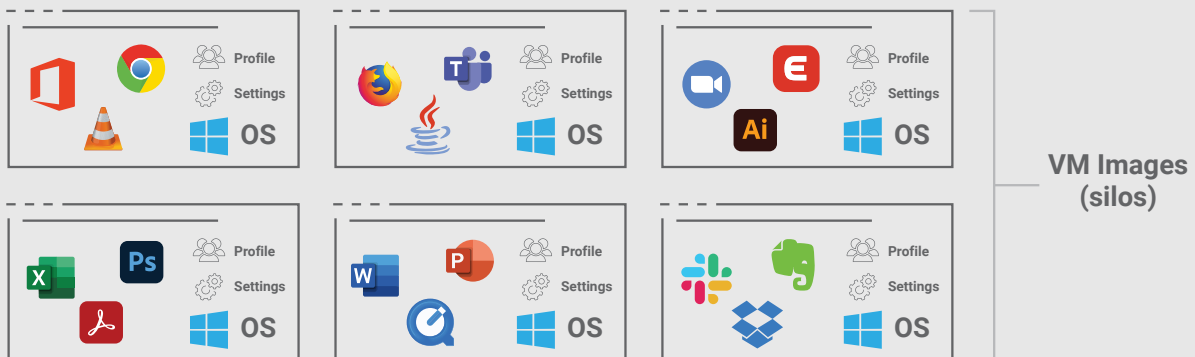
# INTRODUCTION

Organizations running today’s modern Windows desktop/workspace environments, face challenges in dynamically delivering applications while minimizing base image management. Liquidware, with its solutions and expertise, offers a comprehensive approach to help companies navigate each integral phase of a Windows Application Strategy. This whitepaper discusses the challenges of delivering applications in physical or cloud-based Windows workspaces and explores an “Assess, Prepare, Deploy” application strategy methodology.

## The Challenge: Base Image Sprawl from Application Deployment

Windows base image sprawl has become a common challenge for organizations managing Windows desktop/workspace environments. The traditional approach of maintaining multiple base images for different user groups, departments, or device types often leads to a complex and cumbersome management process. Each base image requires individual updates, patches, and configurations, resulting in increased administrative overhead and potential inconsistencies across the environment.

Furthermore, as new applications and updates are introduced, the proliferation of base images multiplies, making it challenging to ensure standardization and efficiency in application delivery. With each new base image, organizations face the burden of additional storage requirements, longer deployment times, and heightened complexity in maintaining compatibility with existing applications. This base image sprawl not only impacts IT resources but also affects end-user experiences and productivity.

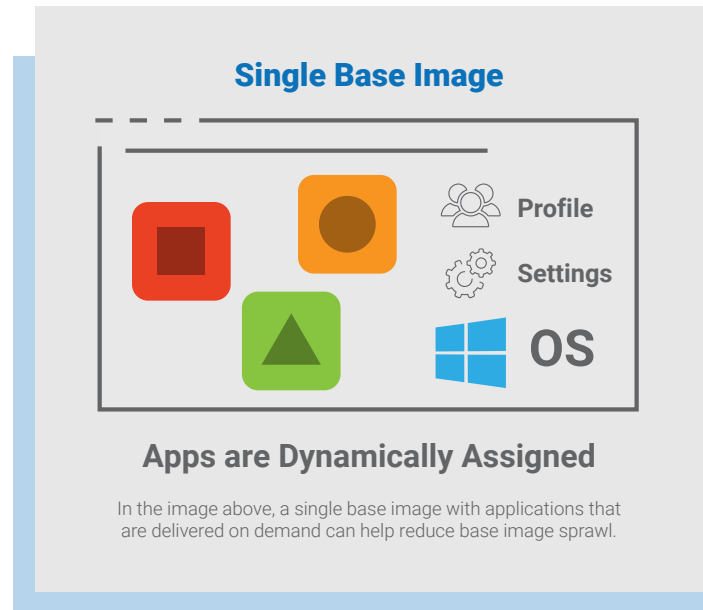


In the image above, base images applications are locked into base images, creating “silos” and sprawl through workspace infrastructure.

## The Goal: A Single Base Image

To address the challenges posed by Windows base image sprawl, organizations need a modern approach that minimizes the number of base images while ensuring efficient application delivery. By adopting a comprehensive Windows Application Strategy, organizations can streamline the management of applications, reduce base image complexity, and improve overall system performance. Through proper assessment, categorization, and deployment of applications, organizations can optimize resource utilization, simplify application delivery processes, and provide a consistent and reliable user experience across the Windows desktop/workspace environment.

The goal for application administrators should be to strive for a single base image in Windows desktop/workspace environments, although it may not always be feasible for every organization. However, the focus should be on significantly reducing the number of base images to the minimum necessary. By consolidating and minimizing the number of base images, administrators can simplify application management, reduce administrative overhead, and ensure a more streamlined application delivery process. This approach **minimizes** compatibility issues, **simplifies** updates, patches, and configurations, and **reduces** the overall complexity of maintaining and deploying applications. Acknowledging the challenges, administrators can still achieve improved efficiency, cost savings, and increased productivity by striving for drastically fewer base images, ultimately providing a more seamless user experience and optimizing resource utilization.



Now that we understand the importance of addressing Windows base image sprawl and striving for a streamlined application management approach, let's delve into the three key phases: Assess, Prepare, and Deploy. These phases outline a comprehensive methodology for efficiently managing and delivering applications in Windows desktop/workspace environments while minimizing base image management.

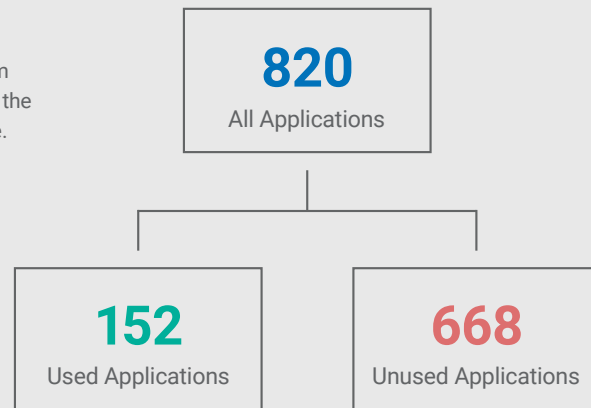
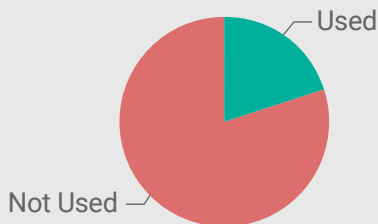


# ASSESS

1 Knowing the applications in use is crucial, as it provides a clear understanding of the existing application landscape. This knowledge enables organizations to make informed decisions regarding application management and delivery. Liquidware Stratusphere™ UX, with its comprehensive monitoring capabilities, helps inventory all applications while prioritizing them, providing valuable insights for efficient application management.

## Installed vs Used Applications

Applications installed, but not used can be removed from workspaces and base images. We recommend reviewing the application list carefully to confirm if it is safe to remove.



2 Understanding the complexity of applications is crucial for efficient packaging, compatibility testing, and ongoing maintenance. Accurately assessing app complexity ensures that appropriate resources and strategies are allocated to each application. Stratusphere UX offers a powerful solution in this regard. With its comprehensive monitoring and reporting capabilities, Stratusphere UX provides valuable insights and turn-key purpose-built reports to determine the effort required for packaging, compatibility testing, and ongoing maintenance. This enables organizations to make informed decisions and streamline the application management process effectively.

3 Categorizing apps into different delivery types, namely base image, application layering/ attachment, and isolation, is essential for optimizing resource usage and ensuring efficient delivery and management. By classifying applications, organizations can determine the most suitable delivery method for each application, thereby streamlining the application management process. With its high compatibility rate, Liquidware FlexApp™ enables containerization of the majority (potentially 90 percent or more) of your applications, keeping them separate from the base image. The remaining apps can be included in the base image(s) and hidden from specific users using Liquidware ProfileUnity™. In rare cases where application isolation is necessary, Microsoft MSIX or App-V can be utilized for select apps.

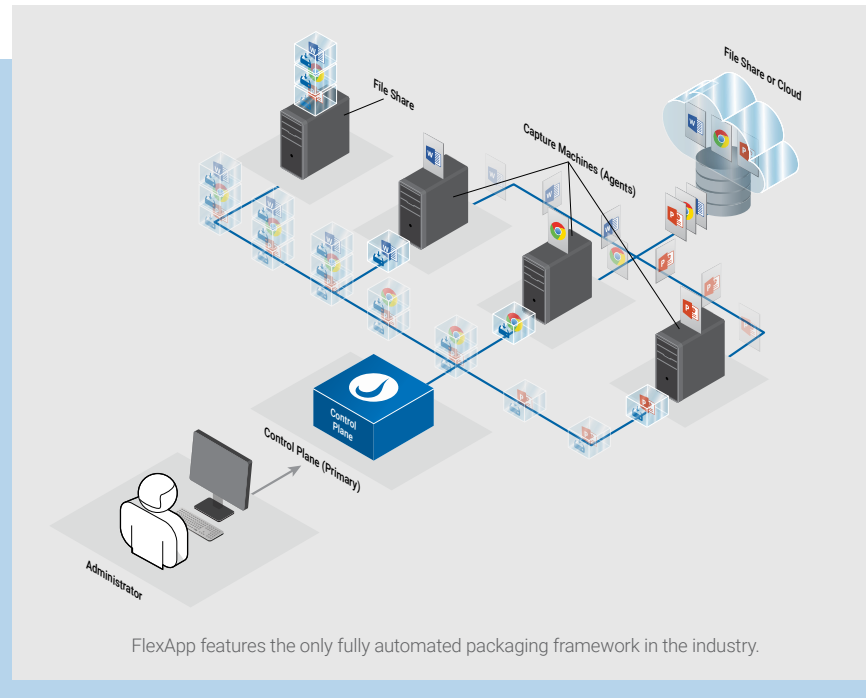
Using Stratusphere UX’s application complexity report and testing a few applications for compatibility with FlexApp’s packaging, you can evaluate and rank the likelihood of your applications fitting into three categories:

1. **Highly Compatible App Characteristics** – These apps require no extra effort to package and deploy. They make up approximately 80 percent of all apps. Well written and designed apps that adhere to industry standard best practices for application development and installation workflows are examples.
2. **Compatible Apps with a Few Additional Packaging Steps** – These apps require some manual effort to package but are likely still compatible with FlexApp. Examples include moderately complex apps written and designed apps that adhere to some industry standard best practices for application development and installation workflows, these apps may also invoke complicated license enforcement.
3. **Complex Apps** – These apps may need significant steps to package for FlexApp compatibility. They represent less than 5 percent of all apps. Examples include apps that do not adhere to industry best practices for application development and installation workflows, complex admin required switches during installation, applications with numerous drivers and services dependences, applications with very complex licensing, applications that require very frequent security updates (such as bi-weekly).

It’s important to note that certain applications and use cases may require alternative delivery methods. For example, installing an application into the base image and utilizing ProfileUnity’s application cloaking capability to make it available on select users’ desktops may be necessary. Additionally, a few applications might require full isolation technologies like MSIX or App-V to achieve a management strategy closer to single base image management.

## PREPARE

- 1 Packaging and automating the application deployment process enhance efficiency and reduce manual effort. Liquidware’s solutions offer capabilities to automate application packaging and deployment tasks, simplifying the overall process. By leveraging these solutions, organizations can save time and resources while ensuring consistent and reliable application delivery.

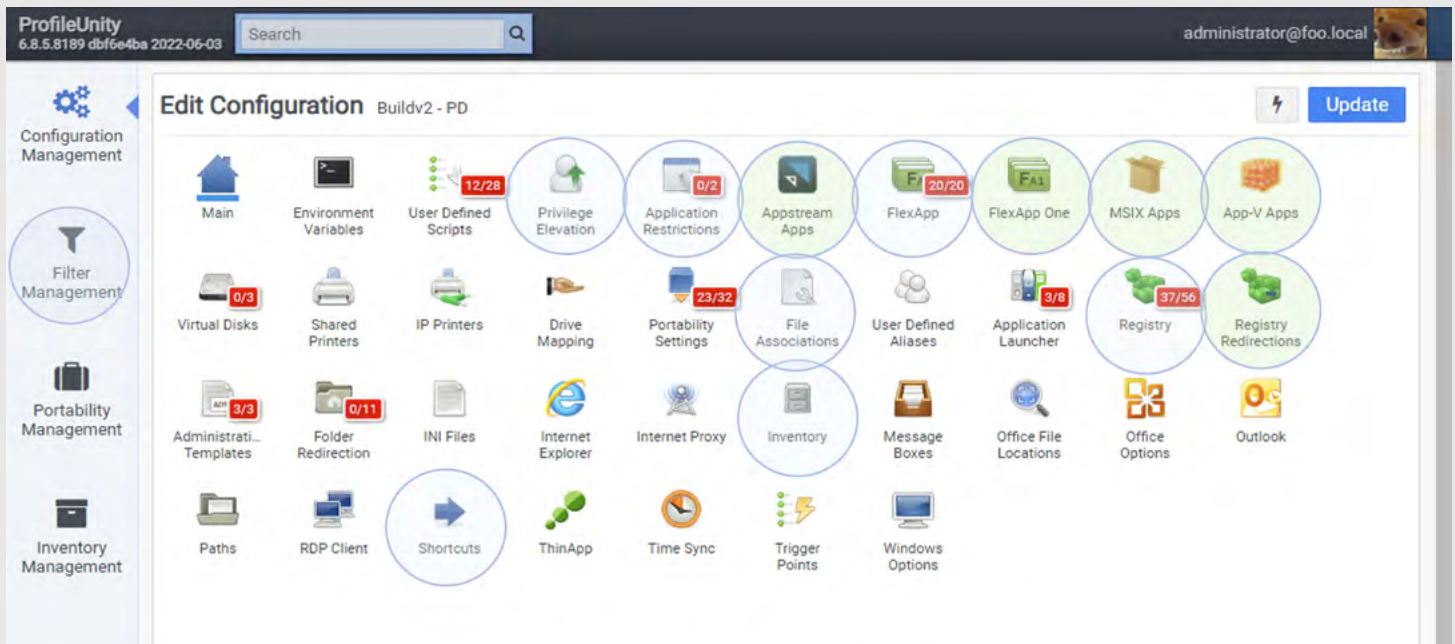


2 User Acceptance Testing (UAT) is essential to validate application functionality and compatibility within the target environment. By thoroughly testing applications before deployment, organizations can identify and resolve any issues, ensuring a smooth rollout and optimal user experience.

## DEPLOY

1 Microsoft Intune and Unified Endpoint Management solutions, combined with Liquidware's offerings, provide robust capabilities for managing endpoints and application deployment and configuration. This integrated approach streamlines deployment processes and ensures seamless application delivery across the organization.

2 Liquidware's ProfileUnity™, equipped with Application Management features, offers advanced capabilities for application deployment and management. ProfileUnity seamlessly integrates with Application Management/Software Deployment solutions, including its own Application Management features. It enables centralized management, software deployment, and ongoing updates, delivering personalized and context-driven application experiences. By leveraging ProfileUnity, organizations can simplify application management, enhance user experiences, and ensure efficient application delivery.



ProfileUnity's Application Management features lead the industry.

## Details About the Liquidware Solutions Mentioned in this Whitepaper

Liquidware's solutions – Stratusphere UX, ProfileUnity, and FlexApp – form the core of an effective Windows application strategy, and they offer broader capabilities. Stratusphere UX provides comprehensive Digital Experience Monitoring and troubleshooting, allowing organizations to optimize user experiences. ProfileUnity delivers full-fledged User Environment Management, ensuring consistent and personalized user environments across various platforms. FlexApp enhances application delivery and layering, streamlining application management and increasing IT infrastructure agility. Together, these three solutions combined comprise the Liquidware Essentials™ suite that empowers organizations to go beyond application strategy, enabling efficient digital workspace management, troubleshooting, and user environment optimization.



### STRATUSPHERE UX

Liquidware's Stratusphere UX is a comprehensive monitoring and diagnostics solution that goes beyond application strategy. While it plays a crucial role in assessing application landscape and complexity, it offers much more. Stratusphere UX provides robust Digital Experience Monitoring (DEM) capabilities, enabling organizations to gain deep visibility into user behavior, performance metrics, and system health. It allows proactive troubleshooting by identifying and resolving issues that impact user experience. With Stratusphere UX, organizations can optimize their digital workspaces, improve user productivity, and ensure a seamless end-user experience.



### PROFILEUNITY

Liquidware's ProfileUnity is a powerful User Environment Management (UEM) solution that offers advanced capabilities for managing user profiles, policies, and user-authored data. While it is instrumental in application deployment and management, ProfileUnity extends beyond the scope of application strategy. It enables IT administrators to centrally manage user environments, providing personalized and consistent user experiences across multiple platforms, including physical, virtual, and cloud-based workspaces. ProfileUnity simplifies user profile migration, supports dynamic policy management, and ensures seamless user transitions between devices, resulting in enhanced productivity and reduced management complexity.



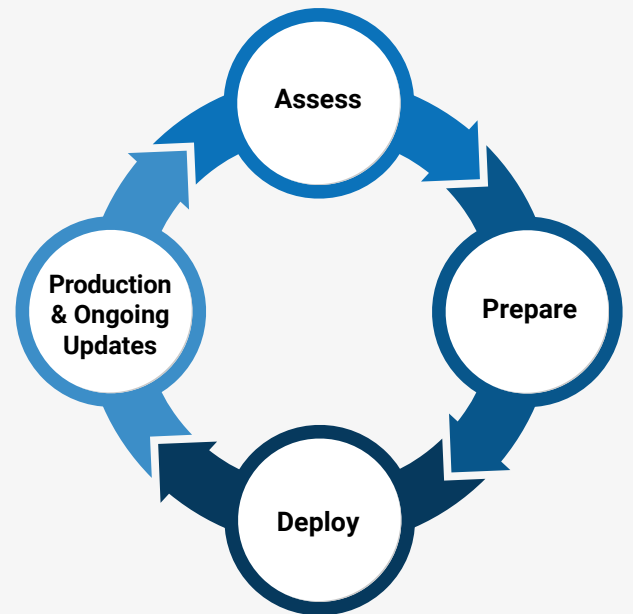
### FLEXAPP

Liquidware's FlexApp is a flexible application delivery and layering solution that optimizes application management in Windows desktop/workspace environments. While it plays a key role in the application strategy methodology, FlexApp offers additional benefits. It enables organizations to decouple applications from the underlying operating system, providing a streamlined approach to application delivery and updates. With FlexApp, organizations can eliminate the need for multiple base images by delivering applications dynamically as needed. This reduces storage requirements, simplifies application management, and enhances the agility of the IT infrastructure.



## SUMMARY

Liquidware is the ideal partner for your application strategy journey due to our unique combination of solutions and expertise. With years of experience and a deep understanding of Windows desktop/workspace environments, we've developed a comprehensive suite of solutions that address the complexities of application management and delivery. Stratusphere UX solution goes beyond application assessment, offering robust Digital Experience Monitoring and troubleshooting capabilities, ensuring optimal user experiences. ProfileUnity provides full User Environment Management, simplifying user profile management and delivering personalized environments across platforms. FlexApp enables flexible application delivery and layering, reducing base image complexity. No other provider offers such a comprehensive and integrated approach. Additionally, our expertise in these areas, backed by a dedicated support team, ensures enterprises receive unparalleled guidance and assistance throughout their application strategy journey. From assessment to deployment and beyond, our solutions and expertise provide a level of support that sets Liquidware apart, making them the go-to choice for enterprises seeking successful application strategy implementation.



Application Strategy Methodology, powered with Liquidware Essentials.

## Next Steps and Contact Information

Liquidware offers an Application Strategy Assessment at no charge for qualifying customers. Get started and contact us today at [info@Liquidware.com](mailto:info@Liquidware.com) or visit [www.liquidware.com](http://www.liquidware.com).





Liquidware is a leader in digital workspace management solutions for Windows desktops. The company's products encompass all facets of management to ensure the ultimate user experience across all workspaces — physical, virtual, DaaS or in the cloud. Enterprises across the globe utilize Liquidware solutions to dramatically decrease time spent managing desktops, while delivering increased security, flexibility and scalability. Supported platforms include Microsoft physical, Azure Virtual Desktop (AVD), and RDS desktops, Citrix Desktops, VMware Horizon, Amazon WorkSpaces, and Frame. Liquidware products are available through a global network of partners.

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