Micro Focus Desktop Containers

Whether it’s extending the life of your legacy applications, making applications more accessible, or simplifying your application deployment and management, containerized applications can be a game changer. But not all application containerization technologies are created equal.
## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro Focus Desktop Containers</td>
<td>1</td>
</tr>
<tr>
<td>Extend the Life of Application Investments</td>
<td>2</td>
</tr>
<tr>
<td>Simplify Packaging and Deployment</td>
<td>2</td>
</tr>
<tr>
<td>Eliminate Downtime During Application Transitions</td>
<td>3</td>
</tr>
<tr>
<td>Streamline Web App Access</td>
<td>3</td>
</tr>
<tr>
<td>Deliver Fast, Anywhere Access to Applications</td>
<td>4</td>
</tr>
<tr>
<td>Leverage Thousands of Prebuilt Containerized Applications</td>
<td>4</td>
</tr>
<tr>
<td>Simplify Clean Application Creation</td>
<td>5</td>
</tr>
<tr>
<td>Keep Applications Always Up-to-Date</td>
<td>5</td>
</tr>
<tr>
<td>Safeguard Against Old Security Vulnerabilities</td>
<td>5</td>
</tr>
<tr>
<td>Control and Simplify Your Application Environment</td>
<td>6</td>
</tr>
</tbody>
</table>
Micro Focus Desktop Containers

Application conflicts, the ever-changing desktop and browser landscape, and demand for dynamic access to applications are just a few of the challenges that drive the need for containerized applications. Application containers give you a virtual machine image that incorporates all the preconfigured files, registry data, settings, components, runtimes, and other dependencies that you need to immediately run your applications. Since containerized applications run in an isolated, standalone environment they can eliminate application and OS incompatibility worries. And since they don’t contain the full operating system you eliminate the need for additional OS licenses just to run the application.

The application container technology in Micro Focus® Desktop Containers gives you a wide array of benefits and advantages over other containerization solutions. For example, instead of requiring an entire copy of the host operating system, Micro Focus Desktop Containers only emulates the features necessary to run an application. As a result, it uses less than a megabyte of storage and has almost zero performance overhead in its implementation of core operating system elements. Applications created with Desktop Containers can immediately run on end-user machines without requiring player software, an agent, or changes to your system infrastructure.

To give you insight into the benefits and competitive advantages that Micro Focus Desktop Containers delivers, this paper dives into some of its other key differentiators and benefits, including the following:

- Extend the life of application investments
- Simplify packaging and deployment
- Eliminate downtime during application transitions
- Streamline web application access
- Deliver fast, anywhere access to applications
- Leverage thousands of prebuilt containerized applications
- Simplify clean application creation
- Keep applications always up-to-date
- Safeguard against old security vulnerabilities
Extend the Life of Application Investments

When your core business applications have dependencies on older technologies it can jeopardize your operations when those technologies get phased out. You might want to migrate to a newer version of Windows, but the vendor of your key business application hasn’t updated their application to work with that version. Perhaps your own internally developed applications don’t work on current versions of Windows, but you don’t have the time or resources to bring them up-to-date. Maybe you have an application that requires an outdated browser, but your budget can’t handle the licensing costs for upgrading to a new version that runs with current browsers.

Desktop Containers lets you create self-contained virtual environments for your legacy applications, allowing them to run on the latest versions of Windows and without requiring you to hang on to other older technologies in your environment. As a result, you can facilitate Windows migration or simply preserve your application investments and extend the life of those older applications until you’re ready to upgrade to newer versions. By containerizing all your Windows applications, you can make sure your workforce stays productive no matter your applications’ dependencies on older technologies and no matter how Windows migration and other technologies evolve.

Simplify Packaging and Deployment

Preparing software for deployment typically requires a lot of time and labor-intensive testing. Since the containerized applications built with Desktop Containers run in an isolated environment, they significantly reduce that testing effort because you no longer have to worry about application and environmental conflicts. You build the application once and you can run it just about anywhere regardless of what you have installed locally. As a result, it eliminates the need to constantly test new applications against all the other applications in your environment.

Desktop Containers also simplify your deployment preparation efforts by giving you multiple application packaging options to choose from:

- Use a guided wizard to build popular applications from Micro Focus Desktop Containers Studio templates or TurboScripts.
- Snapshot applications by capturing their system state before and after application installation.
- Create clean applications by installing applications directly into empty auto-configurable containers.
- Manually configure applications for maximum control over application settings.

Whichever method you choose, you can perform additional configurations and customizations after the initial application container configuration has been built.
Once you’ve built your containerized applications, you also have multiple options to simplify their deployment. The applications can be streamed or downloaded from your company web portal. The executable can be copied to a flash drive, allowing users to run it from there. You can also use an automated software deployment tool, like Micro Focus ZENworks® Configuration Management to quickly deploy it to targeted users corporate-wide.

**Eliminate Downtime During Application Transitions**

One of the key advantages that Desktop Containers delivers is the ability to run multiple versions of the same application in the same environment without problems, even if they’re web apps that require different browser versions and different plug-ins. Since each containerized application is packaged independently in its own self-contained environment, you can even run these different application versions in parallel.

This can be a major benefit when you want to do a phased migration from an older business application to a newer version that normally can’t coexist with its predecessor. By simply containerizing the newer version you can deploy it side-by-side with the old version and let your users move back and forth between versions until they’re completely comfortable with the new version or until they’re certain that the new version will meet all their needs.

Similarly, Desktop Containers can be a business lifesaver to prevent update rollout catastrophes. For example, if an update to a retailer’s point-of-sale (POS) application goes wrong, it might take hours or days to roll it back to a working version, potentially causing significant losses in sales and business in the meantime. But if each version of those POS applications is containerized instead, rolling back to a previous version is as simple and fast as loading the older version’s executable instead of the newer one.

**Streamline Web App Access**

Some web apps simply work better on certain browsers or require those browsers in order to work at all. That’s fine as long as users can remember which browser they need to use with which web apps. Desktop Containers solves that problem with its browser redirection capability that automatically serves up the right virtual browser version and configuration settings for a given web app.

The way browser redirection in Desktop Containers works is that regardless of whether a user might be using Internet Explorer or Chrome, when that user visits a web address associated with a particular web app the system recognizes that you’ve specified that a specific version of a virtual browser should be used instead. When that happens, it automatically spawns the right virtual browser with all the correct plug-ins and settings, and then loads the web app within that specified virtual browser.
Deliver Fast, Anywhere Access to Applications

The Desktop Containers server lets you easily create a web portal to allow your users to access your containerized applications from anywhere. The server uses the solution’s unique predictive streaming technology to enable users to launch virtual applications five to twenty times faster than traditional downloadable applications. It achieves these high speed streaming rates using a sophisticated profiling algorithm that models actual user behavior and anticipates the necessary code requirements needed to remove latency and optimize streaming.

The streamed applications don’t require download, installation, rebooting, administrative privileges, or separate setup steps. Also, Desktop Containers’ high user-to-server streaming utilization allows you to enjoy ratios as high as 10,000 users per server. It also lets you choose if and how you will store streamed applications locally with multiple streaming mode options that include No Cache, Cache Prefetch, and Register Local. Additionally, Desktop Containers streaming supports common network protocols, including standard HTTP, SMB, and CIFS, as well as any protocol that can be mounted to a Windows UNC path.

If desired, you can grant individual users’ access to the applications for a limited time. This is ideal for universities that want to give students per-semester access or businesses that want to grant contractors temporary access.

The server also generates detailed application usage analytics through pre-configured reports and a full-featured dashboard that shows the top applications launched during a specific time period, volume of launches over a given period, usage details on the top applications, recent activity, and other key statistics. This gives you the insights you need to make intelligent decisions about the management and life of your applications.

Leverage Thousands of Prebuilt Containerized Applications

No matter how simple it is to create containerized applications, the process can become time-consuming and monotonous when you have several to create on a regular basis. To save you from this time and effort, the Turbo for Desktop Containers subscription add-on gives you access to a library of thousands of popular prebuilt containerized applications, frameworks, and plug-ins from Adobe, Google, Firefox, and other popular software vendors. The Turbo library eliminates the time it takes to snapshot and build all the different applications you need. You can use the prebuilt applications as is, or mix and match their different images and customize them to fit your specific requirements. Turbo also gives you access to all of the TurboScripts used to create the library’s apps, allowing you to use those scripts as models for automating your own application builds.
Simplify Clean Application Creation

The clean container technology offered as part of Turbo for Desktop Containers eliminates the need to snapshot an application on a clean machine. Using your regular production desktop or laptop, you simply start up a clean container within the Turbo command line tool. Then you simply install the app in the container, customizing and configuring it as if you were on a clean machine. The end result gives you a hassle-free clean version of your new virtual app.

Keep Applications Always Up-to-Date

When you create Desktop Container applications as part of your Turbo subscription, they can be built as "portable applications." While all Desktop Containers applications are portable in the sense that they can run as standalone executables without requiring installation or the existence of some kind of player, the term portable application in this sense means something more. When you create a portable application with Turbo for Desktop Containers it embeds additional functionality into that application executable. The first of these is an auto-update capability.

No matter where or on what laptop or desktop your users run a portable application, when it first begins to load it will check to see if an update for the portable application has been added to the Turbo Hub repository. If an update exists, Turbo will automatically update the application. So, when you need to make changes or updates to your containerized applications, you no longer have to worry whether your users are using the correct version.

When users run portable applications they can also register them to specific file extensions. So, whenever users double-click on an associated file type it will automatically load the file using the desired containerized portable application.

Additionally, with portable applications, when an end user makes changes you can choose to have those changes synchronized back to the hub so that those changes can follow them from machine to machine, improving the user’s productivity.

Safeguard Against Old Security Vulnerabilities

One of the main reasons that older versions of browsers or plug-ins get phased out or banned from use in an organization is because of their inherent vulnerabilities. So, what do you do when you have a core business application that relies on those vulnerable browsers or plug-ins? Containerizing them to be used only with that application does limit the vulnerabilities’ exposure, but there’s nothing to prevent a user from
The Turbo for Desktop Containers subscription gives you access to a library of thousands of popular prebuilt containerized applications, frameworks, and plug-ins from Adobe, Google, Firefox, and other popular software vendors.

Innocently browsing to destinations other than the web app’s location and inadvertently becoming victim to an exploit or attack. That is, unless you’re using IP blocking provided with your Turbo for Desktop Containers subscription.

With IP blocking you can specify that the web browser you containerize with a web application can only access certain IP addresses or DNS names. That prevents users from browsing the web to other sites where the browser’s vulnerabilities might be exploited. That gives you greater control over the security of your legacy apps in order to keep your environment and users safe.

You can further strengthen security of your containerized applications with Desktop Containers’ proxy support. This allows you to force all of an application’s network traffic through a proxy server on your network.

Control and Simplify Your Application Environment

Micro Focus Desktop Containers, along with the Turbo for Desktop Containers subscription, puts you in control over your application environment in a way that eliminates application conflicts, improves user productivity, reduces costs, strengthens your security, keeps your business running, and makes your job easier.

To learn more about how Micro Focus Desktop Containers makes it easy to create accessible, manageable and secure containerized applications, visit www.microfocus.com/products/desktop-containers/.

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