



ProfileUnity™ with FlexApp™ Technology

Base Image Creation Basic Guidance & Best Practices

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This guide has been authored by experts at Liquidware in order to provide information and guidance concerning ProfileUnity™ with FlexApp™.

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General Base Image Creation Guidance

Creating an optimized base image is the foundation that most end user computing (EUC) projects are built upon.

Most enterprises have developed processes or workflows to accomplish this task. There are number of critical pieces of collateral to help optimize these processes to achieve better results across physical and virtual environments.

The following tools and articles might be useful as you work to establish a baseline:

VMware OS Optimization Tool

This is a unique, robust GUI interface that allows the administrator to make optimization changes to a wide range of Windows Operating Systems as part of the base image creation process. The power of this tool is unprecedented but can also be daunting when faced with all of the options. Consider small steps and robust testing when leveraging this tool.

Citrix TargetOSOptimizer Tool

This tool applies a set of optimizations specifically recommended for Pooled and Dedicated machines as part of the VDA installation process.

Install any and all Runtimes

With respect to ProfileUnity and FlexApp, this is definitely considered a best practice.

No matter which path or tool you select, optimizing the Windows operating system as part of the base image creation process is a critical step for every enterprise.

Getting Started

The following represents a basic workflow when creating an enterprise base image. Many organizations have existing processes that they follow. This is not meant to replace existing processes but rather augment or serve as a refresher of sorts.

1. Consider leveraging Stratusphere FIT to conduct desktop and application assessments.
 - Identify the list of applications that will be part of the base image.
 - Identify the list of applications that can be provisioned to through other solutions.
2. Establish a baseline.
3. Of the options listed above, one of them should be a sufficient starting point.
4. Broker Optimizations.
5. Install all C++/C#/.NET Runtimes.

Note: With respect to ProfileUnity and FlexApp, this is definitely considered a best practice.

6. Create anti-virus exclusions per our knowledge base article: [Exclusion list for Antivirus of ProfileUnity Program Files and directories](#).

Note: This is mentioned on the base-image creation section because some A/V solutions require a reboot for all changes relating to exclusions to be realized, so it's best to ensure these policies are applied to the image and not just pooled machines.

Base Image Creation

The following represents the steps needed to create an enterprise base image.

1. Determine which operating system versions are required (64-bit only).
2. Maintain a minimum of one (1) VM with snapshots per OS version.
3. Establish hardware settings within the corresponding VMs that match or resemble production target application requirements.
4. Identify application dependencies.
5. Install VMware tools.
6. Install Citrix VDA or Horizon Agent.
7. Optimize the image using the following, or similar steps:
 - a. Open Explorer and navigate to C:\Windows\System32. Right-click CompatTelRunner.exe and click Properties.
 - i. Under the Security tab, click Advanced, followed by Change Owner.
 - ii. Type in Administrators and click OK on of all 3 windows.
 - iii. Right-click CompatTelRunner.exe and click Properties again, Security tab. Highlight Administrators and click Edit.
 - iv. Put a check by Full Control and click OK. Say Yes to the Security Warning dialog and click OK to close the Security and Properties windows.
 - v. Shift+Delete CompatTelRunner.exe, click Continue and Yes if prompted.
 - b. In similar manner, take ownership of “C:\Windows\SysWOW64\OneDriveSetup.exe” (Manage OneDrive separately, in a controlled manner instead.)
 - i. Right-click, Properties, Security, Edit again.
 - ii. Remove all existing ACL’s and add in only one for Everyone with DENY for Full Control.
 - iii. OK out of all Windows, clicking Yes to any prompts.
 - c. Launch gpedit.msc.

- i. Computer Configuration, Policies, Administrative Templates, Windows Components, Windows Update and Disable “Configure Automatic Updates”
 - d. Launch Regedit.exe, delete the following Key:

HKLM\SYSTEM\CurrentControlSet\Services\DiagTrack
- 8. Run an optimization tool, such as VMware Optimizer or Citrix Optimizer.

Getting Help

If you have questions or run into issues while using our software, Liquidware is here to help. Our goal is to provide you with the knowledge, tools, and support you need.

Using Online Resources

Liquidware maintains various kinds of helpful resources on our [Customer Support Portal](#). If you have questions about your product, use these online resources. The Support Portal includes product forums and a searchable knowledge base, as well as the ability to submit a case to the Liquidware Support system on the [Liquidware Customer Support Portal](#). For product documentation, refer to our [Liquidware Document Repository](#).

Troubleshooting with the Software

ProfileUnity and FlexApp provide full logging capabilities to track activities. In addition, Liquidware provides several avenues for self-service, which includes the [Liquidware Customer Support Portal](#), [Knowledgebase](#), and [Online Training](#) site. You may find answers to many of your questions, along with Liquidware Self Service options.

Contacting Support

If you need to contact our Support staff for technical assistance, log a request on the [Liquidware Customer Support Portal](#). Prior to logging a case you should review these helpful tips:

- Check the [Product Documentation](#) included with your Liquidware Product.
- Try to see if the problem is reproducible.
- Check to see if the problem is isolated to one machine or more.
- Note any recent changes to your system and environment.
- Note the version of your Liquidware product and environment details such as operating system, virtualization platform version, etc.