

ProfileUnity[™] and ProfileUnity FlexApp[™] Change Log/Release Notes

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ProfileUnity[™] and ProfileUnity FlexApp[™] Change Log/Release Notes

v 6.8.3.7311, Released January 8TH, 2020

Note: If you are using ProfileDisk or FlexApp, please apply this KB for software upgrades and new installations.

Major Updates

Client

- Client security has been enhanced when it comes to elevated processes in the user space.
 - These enhancements come to us from a security researcher named Kevin Temming.
- ProfileDisk VHDs now unmount after the user session is closed, which improves profile stability.
- ProfileDisk is now in filter driver mode by default for better out-of-the-box compatibility with applications that need to access the profile path located in the VHD.
- The client filter driver now runs in mini filter mode and has a Microsoft assigned Altitude
 (136300), for Windows 10 and Windows Server 2016 & 2019. For older operating systems, the
 driver will stay in legacy mode. This change resolves hung logoffs and other filter driver
 compatibility issues on Windows 10 and Windows Server 2016 & 2019.

FlexApp

- Playback performance of block caching for both SMB and Cloud has been greatly enhanced along with performance of the OS when block caching is enabled.
- To resolve a security vulnerability and compatibility issues, top level directory ACLs are inherited into the FlexApp directories and files. However, this will break any custom ACLs that were done by mounting the VHD directly. To solve this, you will need to create a post playback script that will apply these custom ACLs again. See this KB: https://liquidwarelabs.zendesk.com/hc/en-us/articles/360038930612-How-to-override-the-ACL-for-a-path-contained-within-a-FlexApp-package

Minor Updates

ProfileUnity Management Console

- Templates Added 2016 and 2019 to the Amazon AppStream template.
- Templates Added in active setup port SOFTWARE\WOW6432Node\Microsoft\Active Setup. This removes the popup seen in the upper left of the screen during login.
- Templates All bowser portability is now processing during login. When they were processes
 post login, the user could open the bowser before portability was done restoring and the user
 would be missing settings.
- Inventory Management FlexApp DIA Added new columns Assigned Configuration Count,
 Package Type and Disk Path.



- FlexDisk Disk When mirroring, a package name should be displayed in the title of the pop up.
- License History To control database growth, licenses and records are purged every 120 days. You can go down to 31 days as the lowest setting. You can't go lower than 31 days since named user licenses are released every 30 days if no license is requested.
- Administration The console supports proxy settings so the console can communicate to the internet for object storage, notify the admin of updates and download these updates.
- Licensed Users The license management screen now shows only 1 row per user license request. You can also purge a user's license by removing just this one record.
- Shortcut module Now supports pinning Quick Access folders to Windows Explorer.
- Amazon Metered billing Metered billing requires an IAM role and internet access. If this role is
 not applied or if the console does not have internet access, the web console will show an error
 message and links to resolve the issue.
- Configuration Management Updated logging option text within the Main module to make things clearer.
- Application Launcher module Supports Executing without Elevation.
- Portability defaults and templates Have an added enhanced Chrome rule.
- Administration menu now has a link to Liquidware Support site documentation.
- Administration menu now has a link to the Liquidware Support site to request help.
- Administration menu now has a link to the Liquidware Community to make feature requests and ask questions to other users and Liquidware experts.
- The MAPI module is hidden by default since it only supports legacy Outlook and legacy Exchange.
- Modules Now have Export ALL option within that module, so you don't have to click the check box to select all for each page of rules.

Client

- Security Unquoted Service(s) Path vulnerability has been solved.
- Added support for Windows 10 ERS (Enterprise for Remote Services) with Terminal Services or Windows 10 Enterprise multi-session.
- ProfileDisk flushing pending NTFS writes is now smarter.
- Diagnostic Tool Now collects logs from ProfileUnity-as-a-Service account profile temp path.
- Client.net Startup.exe installer sets the secondary logon service as enabled if using ProfileDisk.
- Client.net Startup.exe adds the following reg key when ProfileDisk and ProfileUnity-as-a-Service are used together. "SmartCardLogonNotify"=dword:00000001, This allows the correct hand off from 3rd party notifiers to our ProfileDisk notifier.
- Pinned Item support for Quick Access had been added.
- User file associations we now use our own code to backup and restore user file associations preferences and no longer rely on DISM.exe.
- Refresh.exe now has logging for trouble shooting.
- The command service is now in charge of unmounting ProfileDisks post logoff.



- Diagnostic Tool Instead of hashing ProfileUnity files, it just checks their signer certificate details. If the file is corrupt, it will invalidate the certificate.
- Diagnostic Tool Has a new task to gather network details.
- Diagnostic Tool Now collects FIPS reg key to All Registry section of diag report.
- Diagnostic Tool Now sets "Passed" result always True for LwLCredMgr key for ProfileDisk.
- Diagnostic Tool Will now Timeout if an operation takes too long.
- Diagnostic Tool RDSH role status is now collected and added to the Operating System section.

FlexApp

- When Packaging on an AppStream Fleet and starting and stopping applications they will now show in the AppStream application list.
- When creating a package, including an installer is more clearly marked as optional. You can start the installer by hand once you start the capture process.

Issues Resolved

Management Console

- Fixed an issue where logging in large enterprise AD environments a login could take almost a minute.
- Fixed an issue where Inventory Management UI did not display correct timestamp format in ProfileUnity Management Console.
- Fixed an issue where Flexdisk Service and CSmonitor were not being stamped with the latest build number.
- o Fixed an issue where FlexDisk attach app now was not working.
- Fixed an issue where Virtual Disk module did not allow sizes over 100GB to be specified.
- Fixed an issue with the Guided Configuration Wizard on the 'Confirm Your Settings' step to change/remove the confirmation message after downloading or deploying either the Client tools or the configuration and then click on the finish button.
- Fixed an issue with administrative templates where rules requiring a value name and value data were not included in the INI.
- Fixed an issue in FlexDisk Management with UDD/connections where tooltips were not hiding after moving the cursor from the button in IE browser (v11.0).
- Fixed an issue in Configuration Management where configuration and log filters were not shown in the PDF or TXT exports.
- Fixed an issue in the Shortcuts Module where toggling between create and delete for pinned items did not re-enable the 'Start In' field.
- Fixed an issue where the UI halted admin and other pages.
- Fixed an issue with RabbitMQ where after a rename of the console machine, RabbitMQ stopped working and continuously crashed.
- Fixed an issue when regional settings were set to Italian, 6.8.1 to 6.8.2 upgrades failed.
- Fixed an issue where the console was inaccessible after upgrading with FIPS enabled.
- Fixed an issue with the Shortcuts module where 'Shortcut Name', 'Shortcut Location', and 'Start In' were enable when 'Pinned Item' was selected.



- Fixed an issue where the sort operation used more than the maximum 33554432 bytes of RAM; added an index or specified a smaller limit.
- o Fixed an issue where the ADMX import did not work for some ADMX files.
- o Fixed an issue in the Virtual Disk module where 'Size in GB' accepted "0" as a value.
- Fixed an issue where license expiration date was interpreted differently in Europe.
- o Fixed an issue where deleting licensed users did not always work.
- Fixed an issue in Licensing Management where search for "mode" and partial search for all the columns were not working for licensed users.
- o Fixed an issue with object reference errors when going to connections in FlexDisk.
- Fixed an issue in Administration where the credentials file was corrupt when deployed from the console directly to Azure Blob.
- o Fixed an issue in FlexDisk Management where the FlexDisk DIA list had paging issue.
- Fixed an issue in Administration where the license reporting section had same icon as FlexDisk.
- Fixed an issue in Administration where the help manual needed an update for "license reporting".
- Fixed an issue in the console where services were automatically stopped after some time.
- Fixed an issue with multiple modules where ordered rule lists allowing multiselect/export+delete had pagination issues.

Client

- o Fixed an issue where uninstall left behind folders.
- o Fixed an issue where @homeshr was not mapping as expected.
- o Fixed an issue where install failed if the cloud path was not reachable.
- Fixed an issue with portability postflight where errors were written to file if v2 archives detected during post-flight portability.
- Fixed an issue where overwrite existing shortcut was not working for pinned item shortcuts.
- Fixed an issue where lwl_tray.exe was not digitally signed.
- Fixed an issue where the Client would not install on older Windows systems when s3 configuration was used.
- o Fixed an issue where logoffs were greater than one minute.
- Fixed an issue where the Client was creating and using c:\temp by default.
- Fixed an issue where the profile service did not clean up the user profile if the logoff was triggered from Citrix Studio.
- Fixed an issue where Azure GovCloud ps1 failed to update config files.
- Fixed an issue with uninstall where machines using ProfileDisk may not have fully uninstalled all client files.
- o Fixed an issue where weblink failed to create folder when it did not exist.
- Fixed an issue with MAPI where OST and PST files were not created when custom location was used.
- Fixed an issue where folder redirection deleted items on the network when running 'Reset to Default' first.



- Fixed an issue with client.net where there was a security issue executing PowerShell when using the -NoProfile option.
- Fixed an issue with the MAPI module where it did not work after upgrade from 6.7.7 to 6.8.2.
- Fixed an issue where WinVerifyTrust failed verification of the notification.exe if never connected to the internet to get root certificates.
- o Fixed an issue with hide previous location after folder redirection.
- Fixed an issue with inventory where 'Use Reporting Server' option was not working on 32-bit machines.
- Fixed an issue where an Access Denied error hard stopped folder redirection 'Copy to New Location'.
- Fixed an issue folder redirection where an error message was displayed for the shell folders Application Data and Local Application Data with 'Move to New Location' option.
- Fixed an issue where logoff.exe threw a NullReferenceException on logout when using Windows 7 or Windows Server 2008 R2.
- Fixed an issue with folder redirection where an error message was displaying for the all the shell folders when configured for 'Move to New Location'.
- Fixed an issue with folder redirection where 'Sync to New Location' & 'Sync Only Don't Redirect" were not working in all the environments.
- Fixed an issue with diagnostic tool where it crashed when run on Azure-hosted WVD/ERS.
- Fixed an issue with shortcuts where Start Menu tiles were not created on Windows 10 1703 and 1809.
- Fixed an issue with shortcuts where custom icons were not set for Start Menu, Taskbar, and Quick Access pinned items.
- o Fixed an issue with a license service crash occurrence.
- Fixed an issue with a diagnostic tool NullReferenceException crash.

FlexApp

- Fixed an issue where bad timing allowed editing of a package that was assigned and even in-use by a user.
- Fixed an issue with playback on 2019 RDS and ERS 1903 where FlexApp timed out mounting the second app's child-VHD.
- o Fixed an issue where cloned FlexApp packages could not be used with Click-to-Layer.
- Fixed an issue where vhd.exe logs were not being created unless the log path was manually specified.
- Fixed an issue where users were unable to login to the FlexApp Packaging Console using a role-based account.
- Fixed an issue where manually created reg values did not properly save in Packaging Console edit mode.
- Fixed an issue where attempting to overwrite an existing file in a package resulted in a duplicate entry.
- Fixed an issue where a single vhd.exe log was being created in Windows\Temp instead
 of Windows\Temp\ProfileUnity for ProfileDisk VHD creation.
- o Fixed an issue with a FlexApp container service crash occurrence.



- Fixed an issue with FlexApp DIA where apps with the 'Cache Blocks Locally' option were not playing back after logoff and login on 2016 & 2019.
- Fixed an issue with FlexApp where enabling Click-to-Layer and cache mode for a package broke Click-to-Layer forcing a normal playback.
- Fixed an issue where FlexApp DIA with block cache only worked for the first session on a RDSH host.
- Fixed an issue where Cloud package VLC was not playing back & displaying command prompt in first login on 2016 RDSH machines.
- Fixed an issue with a single VHD FlexApp DIA where disk is inaccessible caused first app in multi-app rule to be non-functional.
- Fixed an issue where Cloud package FileZilla was not playing back after logoff and login on Windows Server 2016.
- o Fixed an issue where Azure Cloud apps did not playback when using two accounts.
- Fixed an issue with FlexApp DIA where system apps (enable Cache Blocks Locally) were showing an error message after logging off and logging in to the RDSH machine.
- Fixed an issue with FlexApp DIA where user apps were not showing in the Control Panel on 2016 RDSH machines.
- Fixed an issue where Windows as a whole/explorer was slow when the container service was in-use.



COMPONENT VERSIONS

Component	6.8.3
Console UI	6.8.3.7311
FlexDisk Service	6.8.3.7311
Client	6.8.3.1348
Client.NET	6.8.3.7311
VirtFS	6.8.3.7283
LWL UserApp Player	6.8.3.44311
LWL UserApp Service	6.8.3.44311
LWL Elevation Service	6.8.3.44310
FPC	6.8.3.7283
FPC Player	6.8.3.44311
FPC VirtFS	6.8.3.7283
CSMonitor	6.8.3.7311



Known Issues and Limitations

- End-of-Life for ProfileUnity version 6.5.x: Liquidware will be discontinuing all sales and technical support of these ProfileUnity versions effective 12/31/2019. We encourage all customers who may still be utilizing these versions to upgrade to a more recent version to take advantage of the numerous technologies & feature enhancements as well as resolved support issues. For a Full list of End-of-Life date see this URL: https://liquidwarelabs.zendesk.com/hc/en-us/sections/202062243-Updates
- Support has ended for Windows XP, Vista, Server 2003 and Server 2008 non-R2. You will need to use version 6.7.7 to support these older operating systems.
- Cloud Templates point to an RC PowerShell script for install but do install the correct GA client tools.
- Trigger Points are not fully executing.
- Startup. Update Startup is deleting AlsoInit reg value on second reboot.
- Shortcuts- Delete option is not working for Pinned Items for Start Menu.
- Diagnostic Tool If the DiagnosticTempPath folder exists, then the diagnostic tool crashes.
- Legacy client logon.kix bitwise operators disable feature is broken.
- Message Box with timeout option "0" closed automatically in Client machine when configured along with Application Launcher that has run asynchronously enabled.
- Diagnostic Tool Failed admin rights check; should get marked as Passed=False.
- Portability Module Add/Edit Rule forces "Only apply to local shell folders" on when toggling Restore action.
- Administration Proxy Domain/user/pass options left available when going back to auto-detect proxy mode.
- Shortcuts Folder names ending with a space result in no shortcuts being created in the folder.
- ProfileUnity logins do not register as session in VMware View Admin Console with RDS View.
- AlsoInit reg value containing spaces causes error during login.
- Shortcut Some Modern apps are not pinned on Windows 10.
- File Association is not working on Windows 10 when setting with Modern apps.
- Shortcut Modern apps are not pinned on German environment (Windows 10 V1703).
- Audit Management Changing No Filter To Filter shows internal filter ID, not friendly name.
- Office 2013 and Office 2016 are not supported when layering FlexApp packages to Windows Server 2008 R2, 2012 R2; Windows Server 2016 is supported.
- Windows 10 LTSB 2015 is not supported.
- Windows 10 1511, 1607 and 1703 are not supported.
- Windows 10 1709 support will end on April 14, 2020.
- Office 2016 as a FlexApp package won't license on Windows 10 LTSB.
 - Workaround: Use Windows 10 Enterprise 1607
- When using 3rd party layering products, you must fully disable FlexApp.
- Migrating to ProfileDisk where Portability Compression is set to "Faster Archives" would cause any rulesets set to UserProfile to restore outside ProfileDisk.
 - Workaround: From the Main Configuration Module, change Portability Compression to use "No Compression" or "Smaller Archives" before migrating.
- When using license path and INI path at the same time, you cannot exceed a total combined character count of 238 characters; 22 are taken by the product.
- Windows 7/8 32-bit are no longer supported by the ProfileUnity Management Console.



- The use of * in Privilege Elevation is no longer supported. To resolve this for FlexApp UIA, you would put in the Path Contains '\\server\share\%username%' and '%userprofile%'. This will auto approve anything trying to be installed from the user home share and profile path, for example Downloads, My Documents, Desktop.
- Files that have more than 260 characters are not processed by the portability engine.
- Applications packaged on Windows 7 and played back on Windows 8.1/10 is best effort. With all the changes made to Windows 8.1/10, application vendors have had to make many change to their applications to make them compatible with Windows 8.1/10, and we cannot ensure applications will run correctly. The same would apply in reverse; applications packaged on Windows 8.1/10 are best effort support when played back on Windows 7/10.
- Startup.exe will not run on 2008 R2 if .NET 3.5.1 is not enabled in features. LwL.ProfileUnity.Client.Startup.exe needs 3.5.1 to run.
 - Notes: On Windows 2008 R2 .NET 3.5.1 is NOT enabled out of the box. To enable it before running startup.exe, run this command from an elevated command prompt 'serverManagerCmd.exe -install Net-Framework', reboot, run Windows Updates, reboot then re-run startup.exe.
- If the customer has automatic root certificate updates disabled, ProfileUnity install may fail with data1.cab certificate error
 - Notes: FED and some commercial accounts following federal STIG guidelines could have automatic root certificate updates disabled causing them to not have the latest root cert our installer code was complied with the latest root certificates.
 - KB Article: <u>ProfileUnity Install May Fail If Automatic Root Certificate Updates Disabled</u> Data1.Cab Certificate Error
- Using folder redirection on all of Appdata Local can cause the Windows 10 Start Menu to not work correctly.
- Using Portability on all of Appdata Local can cause long logins for Windows 10.
- Windows 7 pinned Start Menu items don't migration to Windows 10 when using Portability.
- Windows 7 desktop background does not migrate to Windows 10 when using Portability.
- Installing ProfileUnity 6.5+ and Flex-IO on the same server is not supported.
- Windows 10 Edge history and cookies are not accepted by Windows.
 - Workaround: Use ProfileDisk VHD or VMDK.
- Migrating a Windows 7 ProfileDisk to Windows 10 will cause the Windows 10 Start Menu to lock up.
- Packaging application on Windows 10 with FlexApp requires all C++ runtimes are installed in the base OS of the FlexApp packaging console and the target desktop. On Windows 10 64-bit, you must install both x86 and x64 versions.
 - 2005 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=5638
 - 2005 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=18471
 - 2008 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=5582
 - 2008 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=2092
 - 2010 SP1 Redistributable Package (x86)



- i. https://www.microsoft.com/en-us/download/details.aspx?id=8328
- 2010 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=13523



ProfileUnity[™] and ProfileUnity FlexApp[™] Change Log/Release Notes

v 6.8.2.7074, Released May 17th, 2019

Major Updates

ProfileUnity Management Console

In place upgrades for clusters are now supported when going from 6.8.x to 6.8.x.

FlexApp

- Playback times of registry has been greatly sped up in some cases 10x.
- FlexApp now uses less memory.
- Once FlexApp layers are played back, FlexApp uses less CPU.
- Support for FSLogix has been added.

Minor Updates

ProfileUnity Management Console

• Deploy buttons renamed to Download and Deploy.

Issues Resolved

• Management Console

- Fixed an issue where Template Windows 7, 10, 2016 or 2019 as a Desktop and 2016 &
 2019 RDS Full Desktop ProfileDisk Has Duplicate Active Setup UID.
- Fixed an issue where Template AWS AppStream utilizing S3 Storage Has Duplicate UID For Active Setup.

Client

- Fixed an issue where ProfileDisk creates user.domain or user.domain.001 with in the ProfileDisk.
- Fixed an issue where client Upgrades fail when going from 6.8.0 to 6.8.1/2
- o Fixed an issue where Diag tool fails to run when FIPS enabled.
- Fixed an issue where ProU As A Service Password Is Exposed in Container Service Log when DIA Cache Mode Is Enabled.
- o Fixed an issue where Windows Options Wallpaper File took two logins to apply.
- Fixed an issue where some post flight files where written in C:\temp they are now written to C:\programdata\ProfileUnity\postflight.



FlexApp

- o Fixed an issue where FlexApp DIAs with Cached Mode Enable Do Not Playback on Boot.
- o Fixed an issue where FlexApp Caching doesn't work when FIPS enabled.
- Fixed an issue where FlexApp service would leak memory when running for long periods of time
- Fixed an issue where FlexApp would use consistent CPU usage when some applications delete sub registry keys that are under FlexApp managed.



COMPONENT VERSIONS

Component	6.8.2
Console UI	6.8.2.7074
FlexDisk Service	6.8.2.7074
Client	6.8.2.1141
Client.NET	6.8.2.7073
VirtFS	6.8.2.7074
LWL UserApp Player	6.8.2.1072
LWL UserApp Service	6.8.2.1072
LWL Elevation Service	6.8.2.1072
FPC	6.8.2.7074
FPC Player	6.8.2.1072
FPC VirtFS	6.8.2.7074
CSMonitor	6.8.2.7074



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- Windows 10 LTSB 2015 is not supported.
- Windows 10 1511 is not supported.
- Office 2016 as a FlexApp package won't license on Windows 10 LTSB.
 - Workaround: Use Windows 10 Enterprise 1607
- When using 3rd party layering products, you must fully disable FlexApp.
- Migrating to ProfileDisk where Portability Compression is set to "Faster Archives" would cause any rulesets set to userprofile to restore outside ProfileDisk.
 - Workaround: From the Main Configuration Module, change Portability Compression to use "No Compression" or "Smaller Archives" before migrating.
- When using license path and INI path at the same time, you cannot exceed a total combined character count of 238 characters; 22 are taken by the product.
- Windows 7/8 32-bit are no longer supported by the ProfileUnity Management Console.
- The use of * in Privilege Elevation is no longer supported. To resolve this for FlexApp UIA, you would put in the Path Contains '\\server\share\%username%' and '%userprofile%'. This will auto approve anything trying to be installed from the user home share and profile path, for example Downloads, My Documents, Desktop.
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 the changes made to Windows 8.1/10, application vendors have had to make many change to
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 - 2010 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=8328
 - 2010 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=13523



ProfileUnity[™] and ProfileUnity FlexApp[™] Change Log/Release Notes

v 6.8.1.7044, Released April 17th, 2019

Major Updates

ProfileUnity Management Console

- Upgrading a ProfileUnity Management Console that is installed on any drive other than C: is supported in this release.
- ProfileUnity Cluster upgrades are supported in this release, Follow this KB
 https://liquidwarelabs.zendesk.com/hc/en-us/articles/360022248492-How-to-upgrade-a-ProfileUnity-cluster-to-6-8-x
- Management Console logins no longer use Microsoft Active Directory but instead use the local token of the user to check groups. This works around high-security servers and speeds up the login to the console.
- Windows Server 2019 is now a supported OS install for the ProfileUnity Management Console.
- Templates have been updated for Windows 10 1809 and 1903.
- Templates have been updated for Windows Server 2019 as a desktop and RDS.
- An Amazon AppStream template has been added.
- An Amazon AppStream filter has been added.
- A VMware Blast filter has been added.
- A Nutanix Xi Frame filter has been added.
- A Windows Server 2019 filter has been added.
- When downloading the Client Tools from the ProfileUnity Tools section of the Administration area, you will first click the "Deploy Client Tools" option. Then you can pick to deploy the files to the domain or download with the web browser.
- Cloud storage-based templates now use the GPO option for the license connection string instead of client settings file.

Client

- Windows 10 1809 is now a supported client OS.
- Group check filters could have taken longer in some environments.
- Faster logins In prior versions, all our executables in .NET would try and do Certificate
 Revocation List back to Microsoft. This has now been disabled in all our .NET executables. Even if
 the OS could have gotten back to Microsoft to do a CRL, this still takes some time. In some
 environments, this can cause large login delays and keep ProfileUnity services from starting in a
 timely fashion.
- The Client diagnostic tool runs faster and collects more diagnostic data for better trouble shooting.



FlexApp

- The FlexApp Packaging Console and the FlexApp service no longer perform a Certificate Revocation List back to Microsoft. This should speed up opening the FlexApp Packaging Console and the service should not timeout on startup if there isn't any internet connection.
- In prior versions, FlexApp captures were disrupted by a Windows Update. A file system exclusion was put in to solve this capture problem.
- FlexApp has an updated process exclusion list to be more compatible with 3rd party software that is not in layers.
- FlexApp Icons are now in a supported format for Microsoft Windows Virtual Desktops when publishing a FlexApp as a published application.

Minor Updates

Client

- Cloud installs of the Client now use a local-to-you edge server to speed up the download.
- The VHD module now executes before the FlexApp DIA module. This should help reduce contention when using both modules.
- The 7zip software has been updated to version 18.05 for security reasons.
- Mapped Drive module refresh has been moved to post login to help speed up logins.
- WMI rebuild happens on boot to help speed up logins, this can be disabled now.
- The connection string can be read from a registry value now and overrides the Client Settings file. This helps if you need to update the string without needing to recompose.
- When startup.exe runs on boot, startup will ensure nothing has corrupt our services XML files. If these files are corrupt, they will be repaired.
- Startup.exe can be run from C:\Program Files\ProfileUnity\Client.net. This helps when you don't have a UNC path but still need startup.exe to change settings on the desktop.
- A login with ProfileDisk will no longer hang if the VHD is not accessible.
- On logoff with ProfileDisk, the associated HKLM profile list registry key is removed.
- If a user's ProfileDisk fails to mount on login, the OS is cleaned up and the user will login normally.
- All post-login printer functions can now be disabled.
- The command service will now watch for Userinit changes and correct them post domain join boot.
- The Client will now install ProfileUnity as a Service when NOT domain joined then correct itself post domain join.

Issues Resolved

Management Console



- o Fixed an issue with multi-site clustering connection string problems.
- Fixed an issue with Administration > Client Settings where the same Client Settings file
 was deployed/downloaded when a user tried to deploy the client settings by picking a
 different "Communication Type to Broker Messages".
- Fixed an issue in the Administration where Miscellaneous, Client Settings, and
 Webservices edited details were not saving properly.
- o Fixed an issue where a cluster could not be created.
- Fixed an issue in Administration where changing "Communication Type to Broker Messages" for ProfileDisk caused the UI to redirect back to login page when clicking the "Update" button.
- Fixed an issue with the Administration where the creds file was corrupt when downloaded instead of deployed.
- Fixed an issue where services were stopped automatically after checking "Enable High Availability Mode".
- Fixed an issue with the "Confirm your Settings" step of the Guided Configuration Wizard where the download action was not working in the "Deploy Client Tools" pop-up.
- Fixed an issue with Licensing where licenses were not processed if the Rabbit software was not fully operational when the console started.
- Fixed an issue in the About section where service start times could have been older than server start times.
- Fixed an issue in Administration > ProfileUnity Tools where the download action was not working in the "Deploy Client Tools" pop-up.
- Fixed an issue in Administration where the "Deploy Service Configuration" button did not prompt like the other deploy buttons and failed for cloud paths.
- Fixed an issue in the Guided Configuration Wizard where an invalid error message was displayed in "Add Cloud Console Credentials" for invalid details.
- o Fixed an issue where Connection Type label for FlexApp was labeled incorrectly.
- Fixed an issue with the Legacy License Reader. If a LIC file check from NETLOGON resulted in access denied, the object reference was not set.
- Fixed an issue with ProfileUnity.Host.Update.ServiceUpdateManager where there was a failure reading legacy license files after an upgrade.
- Fixed an issue with Administration where editing the connection string value wasn't saved.
- Fixed an issue with Configuration Management where clicking the "Deploy" button on a ProfileDisk config was redeploying the wrong ClientSettings.xml file.
- Fixed an issue where ProfileUnity and MongoDB Services failed to start after reboot on slower storage.
- o Fixed an issue where the upgrade of a server in a cluster on version 6.8.0 failed.
- Fixed an issue with version 6.8.0 where upgrades failed when ProfileUnity was installed on any drive other than C:\.
- Fixed an issue in FlexDisk Management where the FlexApp DIA tab was disabled for the
 "ProfileUnity+FlexApp" license user only.



Client

- Fixed an issue with Azure AD account with Citrix Single Sign On where ProfileDisks were created and attached, but they could not detach.
- o Fixed an issue with slow initialization on Windows 7 32-bit.
- o Fixed an issue where lwl tray.exe was blocked by AppLocker.
- Fixed an issue where post-flight procedures did not run consistently when ProfileDisk was enabled.
- Fixed an issue where "Pin to taskbar" for shortcuts was not working after logoff and login on Windows 10, and Windows Server 2016 & 2019 environments.
- o Fixed an issue where Folder Redirection with sync broke permissions to user files.
- Fixed an issue where Message Boxes were not working when the schedule was set for a specific date.
- Fixed an issue with Application Launcher where the string format was not recognized as a valid Date/Time.
- Fixed an issue with Startup where the filter driver was not fully removed during uninstall.
- Fixed an issue with Startup where ProfileUnity as a Service apps were not playing back (VMDK).
- Fixed an issue with Startup where the cbfltfs4 service on the computer could not be stopped.
- Fixed an issue with Folder Redirection where existing files were deleted when access was denied.
- Fixed an issue with Inventory where system details were displaying the wrong operation system name when logging into to Windows Server 2019.
- Fixed an issue where a slash at the end of the debug log path caused the Client to fail.
- Fixed an issue where the Client did not run for a persistent ProfileUnity user if the Client was uninstalled and re-installed.
- Fixed an issue with a ProfileUnity error message that was displaying at the time of restart of the client machine after joining to the domain.
- Fixed an issue with Startup where a fatal exception occurred when the credentials file contained an unresolvable username.
- Fixed an issue with Startup where it was unable to find ClientSettings.xml in S3 when startup.exe is run as a user (not SYSTEM).
- Fixed an issue with Startup where the Client Service password was displayed in startup output when the credential file was in use.
- Fixed an issue where user added printers were not consistently restored when
 ProfileDisk was used and the drivers were not installed in the base image.
- Fixed an issue where the Portability Settings Module was not working in all environments.
- o Fixed an issue the Client left behind some registry keys and values upon uninstall.



FlexApp

- Fixed an issue with FlexApp where fonts were captured but did not get re-added on playback.
- Fixed an issue with FlexApp DIA where BlackIce ColorPlus printer drivers were not captured or played back correctly.
- Fixed an issue with FlexApp DIA where Nuance PDF printer drivers were missing, causing the Windows installer to run on an application open.
- Fixed an issue with packages that captured registry changes for user (HKCU, HKU/.default, HKU/SID) but would not reflect those changes on playback.
- Fixed an issue where editing a package that contained MS Office would invalidate its
- Fixed an issue with FlexApp DIA where cloning the Liquidware FlexApps to Azure Blob failed 1 out of 5 times.
- Fixed an issue with FlexApp where Office 2010 did not work on Windows 10 (1709, 1809).

FlexDisk

- o Fixed an issue where FlexDisk mirroring did not work with VSAN 6.x datastores.
- Fixed an issue where the FlexDisk service timed out attempting to perform CRL check on startup.



COMPONENT VERSIONS

Component	6.8.1
Console UI	6.8.1.7044
FlexDisk Service	6.8.1.7044
Client	6.8.1.1126
Client.NET	6.8.1.7040
VirtFS	6.8.1.7044
LWL UserApp Player	6.8.1.40313
LWL UserApp Service	6.8.1.40313
LWL Elevation Service	6.8.1.40313
FPC	6.8.1.7044
FPC Player	6.8.1.40313
FPC VirtFS	6.8.1.7044
CSMonitor	6.8.1.7044



Known Issues and Limitations

- End-of-Life for ProfileUnity versions 4.x and 5.x: Liquidware will be discontinuing all sales and technical support of ProfileUnity versions 4.x and 5.x effective 12/31/2017. We encourage all customers who may still be utilizing these versions to upgrade to a more recent version to take advantage of the numerous technology & feature enhancements as well as resolved support issues.
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- Support has ended for Windows XP, Vista, Server 2003 and Server 2008 non-R2. You will need to use version 6.7.7 to support these older operating systems.
- Shortcut Some Modern apps are not pinned on Windows 10.
- File Association is not working on Windows 10 when setting with Modern apps.
- Shortcut Modern apps are not pinned on German environment (Windows 10 V1703).
- Audit Management Changing No Filter To Filter shows internal filter ID, not friendly name.
- Office 2013 and Office 2016 are not supported when layering FlexApp packages to Windows Server 2008 R2, 2012 R2; Windows Server 2016 is supported.
- Windows 10 LTSB 2015 is not supported.
- Windows 10 1511 is not supported.
- Office 2016 as a FlexApp package won't license on Windows 10 LTSB.
 - Workaround: Use Windows 10 Enterprise 1607
- When using 3rd party layering products, you must fully disable FlexApp.
- Migrating to ProfileDisk where Portability Compression is set to "Faster Archives" would cause any rulesets set to userprofile to restore outside ProfileDisk.
 - Workaround: From the Main Configuration Module, change Portability Compression to use "No Compression" or "Smaller Archives" before migrating.
- When using license path and INI path at the same time, you cannot exceed a total combined character count of 238 characters; 22 are taken by the product.
- Windows 7/8 32-bit are no longer supported by the ProfileUnity Management Console.
- The use of * in Privilege Elevation is no longer supported. To resolve this for FlexApp UIA, you would put in the Path Contains '\\server\share\%username%' and '%userprofile%'. This will auto approve anything trying to be installed from the user home share and profile path, for example Downloads, My Documents, Desktop.
- Files that have more than 260 characters are not processed by the portability engine.
- Applications packaged on Windows 7 and played back on Windows 8.1/10 is best effort. With all
 the changes made to Windows 8.1/10, application vendors have had to make many change to
 their applications to make them compatible with Windows 8.1/10, and we cannot ensure
 applications will run correctly. The same would apply in reverse; applications packaged on
 Windows 8.1/10 are best effort support when played back on Windows 7/10.
- Startup.exe will not run on 2008 R2 if .NET 3.5.1 is not enabled in features. LwL.ProfileUnity.Client.Startup.exe needs 3.5.1 to run.
 - Notes: On Windows 2008 R2 .NET 3.5.1 is NOT enabled out of the box. To enable it before running startup.exe, run this command from an elevated command prompt



'serverManagerCmd.exe -install Net-Framework', reboot, run Windows Updates, reboot then re-run startup.exe.

- If the customer has automatic root certificate updates disabled, ProfileUnity install may fail with data1.cab certificate error
 - Notes: FED and some commercial accounts following federal STIG guidelines could have automatic root certificate updates disabled causing them to not have the latest root cert our installer code was complied with the latest root certificates.
 - KB Article: <u>ProfileUnity Install May Fail If Automatic Root Certificate Updates Disabled</u> Data1.Cab Certificate Error
- Using folder redirection on all of Appdata Local can cause the Windows 10 Start Menu to not work correctly.
- Using Portability on all of Appdata Local can cause long logins for Windows 10.
- Windows 7 pinned Start Menu items don't migration to Windows 10 when using Portability.
- Windows 7 desktop background does not migrate to Windows 10 when using Portability.
- Installing ProfileUnity 6.5+ and Flex-IO on the same server is not supported.
- Windows 10 Edge history and cookies are not accepted by Windows.
 - Workaround: Use ProfileDisk VHD or VMDK.
- Migrating a Windows 7 ProfileDisk to Windows 10 will cause the Windows 10 Start Menu to lock up.
- Packaging application on Windows 10 with FlexApp requires all C++ runtimes are installed in the base OS of the FlexApp packaging console and the target desktop. On Windows 10 64-bit, you must install both x86 and x64 versions.
 - 2005 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=5638
 - 2005 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=18471
 - 2008 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=5582
 - 2008 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=2092
 - 2010 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=8328
 - 2010 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=13523



ProfileUnity[™] and ProfileUnity FlexApp[™] Change Log/Release Notes

v 6.8.0.6886, Released November 28TH, 2018

Major Updates

ProfileUnity Management Console

- Upgrading a ProfileUnity Management Console that is installed on any drive other than C: is <u>NOT</u> supported in this release. You will need to wait until version 6.8.1 or build a new 6.8.0 host and restore a database backup of your older version.
- ProfileUnity Cluster upgrades are <u>NOT</u> supported in this release. You will need to wait for 6.8.1 or build a new cluster and restore a database backup of your older version.
- The ProfileUnity Management Console now uses MongoDB version 4.0.0.
- The ProfileUnity Management Console now uses RabbitMQ version 3.7.4.
- ProfileUnity Licensing is now server-side based. Administrators can now see in real time how
 many licenses have been consumed and how many are remaining. The ProfileUnity Client
 communicates to the ProfileUnity License Server on TCP port 5672. Without this port open, end
 users will receive license error messages on the desktop. On upgrade, all customers will be given
 30 days grace period to obtain a new license. Please email licensing@liquidware.com to request
 a new license. See the following FAQ.
- ProfileUnity Licensing now supports Concurrent User Licensing.
- The ProfileUnity Management Console will automatically translate into German, French or Japanese based on your browser language settings.

Client

- Security vulnerability mitigated In a certain circumstance with prior versions, a normal user could use PowerShell to elevate a process to include administrator rights with ProfileUnity installed. This security issue has been fixed.
- ProfileUnity Client no longer uses nodes.xml the new file is called clientsettings.xml. If nodes.xml is present on upgrade, the Client will use it. If both nodes.xml and clientsettings.xml are present on upgrade, the Client will use any disk mode settings from nodes.xml and use the connection string from the clientsettings.xml.
- ProfileUnity self-elevation uses a code signing certificate instead of SHA-2. This reduces IOPS and CPU usage on the desktop. This code signing certificate expires on 9/26/2021. If you do not upgrade to a later version before 9/26/2021, you will have to put back in the SHA-2 self-elevation check. Some government environments don't update their root certificates. When this occurs, the workaround will be to put back in the SHA-2 self-elevation check or update the desktops' root certificates.



- Faster ProfileUnity execution: ProfileUnity no longer extracts large amounts of files into the user temp space. This makes the ProfileUnity Client execute faster and be less prone to slow downs caused by security and antivirus software.
- Faster ProfileUnity execution: The ProfileUnity Client no longer reads ProfileUnity.lic and no longer halts the login to count users in an Active Directory group for licensing. The license check is done in parallel to the login process and no longer leverages Active Directory groups.
- Faster ProfileUnity execution: Starting with 6.7.5, ProfileUnity no longer uses Active Directory to compare to certain filters. With 6.8.0, the local Windows token is leveraged for group membership. The process of checking the token no longer uses a PowerShell script and is faster.
- The Folder Redirection module now has logging and executes faster.
- The ThinApp module now has logging.
- The Inventory module now has logging.

FlexApp

- FlexApp packages now support streaming from cloud storage: Amazon S3, Google Cloud Storage and Microsoft Azure Blob.
- FlexApps on SMB now support cached mode, where a consistent network connection isn't required. The blocks for the VHD are cached down and read from the SMB share when needed.
- Pre-packaged Liquidware Cloud FlexApps are available for quicker prototyping with Proof of Concepts during the evaluation process.
- A single, bad FlexApp package won't stop other FlexApps from playing back into the OS.
- Block-level failover for FlexApps from cloud storage and SMB cached mode has been added. FlexApp supports a primary path and secondary path. FlexApp will use whichever path is the fastest as the primary path, and the slower path will be used as a failover.
- The FlexApp Packaging Console will automatically translate into German, French or Japanese based on your OS language settings.

Minor Updates

ProfileUnity Management Console

- Secure Banner Text can now be enabled without requiring CAC Secure Mode.
- Hiding external links can now be enabled without requiring CAC Secure Mode.
- Support for changing the icon for a weblink in the Shortcut module was added.
- The following filter options now have a 3-letter search instead of a scrolling, drop-down list.
 - o User Group Membership, User Primary Group, OU User, OU Computer
- Deployment paths in ADMINISTRATION > SETTINGS sections now support cloud paths like AWS,
 Google and Azure.

Client

 The File Association module can now correctly set HTM and HTML to another browser on Windows 10 1703+.



- The Profile Cleanup service is not deployed by default; you will have to edit LwL.ProfileUnity.Client.Startup.Update.exe.config.
- The Windows 8.1 legacy Start Menu is not deployed by default and is hidden.

FlexApp

- Click-to-Layer supports nonstandard characters like '®'.
- A flag was added to jicut.exe.confg that makes opening the app after playback optional; default is on.
- Better support for persistent desktops was added.

Issues Resolved

Management Console

- Fixed an issue where the Amazon S3 credential validation failed when tested, but the credentials were correct.
- Fixed an issue where after an import of DIA, packages showed as zero and the UI was hung.
- Fixed an issue where FlexApp DIA VMDK error message was displaying when Assign/Mount Weight/Mirror after upgrading from 6.5.x to 6.7.6.
- Fixed and issue where AWS credential validation failed when tested on buckets outside US-East.
- Fixed an issue with filters sorting alphanumerically.
- Fixed an issue with FlexDisk Management FlexApp DIA Mirror where reload grid was not working in the current disk mirror.
- Fixed an issue with FlexDisk Management-Connections where error message was showing after providing vCenter credentials.
- Fixed an issue with FlexDisk Management where error message was displaying in the 'Event Monitor' tab.
- Fixed an issue with FlexDisk Management FlexApp DIA where the sort option was not working for size column.
- Fixed an issue with FlexDisk Management-Event Monitor where the Last Day filter was not working.
- Fixed an issue where if the console pulled down 20,000+ groups, it would cause high
 CPU and lock up the web session.
- o Fixed an issue with filter dropdowns in module popups being case-sensitive.

Client

- Fixed an issue where ProfileDisk could cause users to logoff immediately with Citrix
 7.16+.
- o Fixed an issue with the error "Unable to Perform Registry Cleanup".
- Fixed an issue where after deploying ADMX, any changes made to the configuration were not applied or saved.
- o Fixed an issue where Portability skipped all file rules if first entry didn't exist on disk.



- Fixed an issue where MAPI profile creation failed when 'Create Only if No Profile Exist' was used.
- Fixed an issue where "Unable To Launch AlsoInit Process" error was thrown when logging into VMware View Published App farms or pools.
- o Fixed an issue where DIA Shortcut Cleanup crashed on Amazon WorkSpaces.
- Fixed an issue where File Associations could cause shortcuts to not work correctly.
- o Fixed an issue where shortcut icon was not set when using multi-image ICO.
- Fixed an issue with the Diagnostic Tool where HTML output from the report ended with a bunch of code.
- Fixed an issue with ADMX where hexadecimal values were not processed correctly.
- Fixed an issue where ProfileUnity as a Service did not run when enabled post ProfileUnity Client install.
- Fixed an issue with Portability where manifest file checksums matched but Portability files were still restored.
- Fixed an issue with Trigger Points where ICA Connect/Disconnect did not work on XenApp.
- Fixed an issue with MAPI where create profile functions did not work with Office 2010 and 2013.
- Fixed an issue with File Associations where the browser was not set as default after webpages had been associated.
- Fixed an issue with Administrative Templates where modules did not follow defined filters.
- Fixed an issue where Application Restrictions did not work when nomenclature existed like notepad++.exe.
- Fixed an issue where Elevation did not work when nomenclature existed like notepad++.exe.
- Fixed an issue where temp space issued with Windows 2016 RDS when naming for user/VHD has nomenclature like test-paba support.
- Fixed an issue where Printer module tried to add printers redirected within other user sessions (RDSH/XenApp).
- Fixed an issue where the File Associations module did not work correctly at least for certain file types.
- Fixed an issue with Portability Settings where Exclude failed when using Custom,
 SystemDrive or UserProfile.
- Fixed an issue with Startup.exe where removing Client from Add/Remove did not uninstall when Client was installed via MSI.
- Fixed an issue with ProfileDisk where variables in VHD Creation Path were case sensitive.
- Fixed an issue with ProfileDisk where profiles did not recover on persistent machines when disk was deleted.
- o Fixed an issue where ProfileDisk caused increased login time with Citrix 7.15+.
- Fixed an issue with Startup where Userinit values were sometimes not modified correctly for XenDesktop.



FlexApp

- Fixed an issue where the FlexApp Packaging Console was unable to access the Management Console on port 443.
- Fixed an issue where FlexApp post-playback with no applications open could be taking unneeded CPU in the range of 30% of each core.
- Fixed an issue where FlexApps containing NTFS supported symbols did not playback.
- Fixed an issue where a Click-to-Layer FlexApp package that had an XML file with issues caused all other FlexApp packages not to replay.
- Fixed an issue where a missing FlexApp XML file caused other Click-to-Layer FlexApps to be mounted at login.
- Fixed an issue where a FlexApp DIA package with VHD issues caused all packages to fail to replay.
- Fixed an issue where DIA PDF printer did not show up on the desktop PDF Xchange PRO 7.
- Fixed an issue where PATH environment variable additions failed to add when multiple FlexApp packages were mounted.
- Fixed an issue where Import Cloning Package did not update metadata or generate an ICO file.
- Fixed an issue where Click-to-Layer shortcut was still displaying on the Client machine even when shortcut was deleted from "All user desktop" in the FlexApp Packaging Console
- Fixed an issue with the FlexApp Packaging Console where the Inventory name did not display correctly when using NTFS-supported symbols.
- Fixed an issue where FlexApps containing NTFS-supported symbols did not mount (playback, edit).
- Fixed an issue with editing where the package XML was not updated when a shortcut was modified.
- Fixed an issue with FlexApp DIA Click-to-Layer where the package icon was not showing properly in the Start menu.
- Fixed an issue with the package editor where deleting a shortcut left a phantom blank shortcut.
- o Fixed an issue where capture of Advanced IP Scanner and Advanced Port Scanner failed.
- Fixed an issue with the FlexApp Packaging Console where admins were unable to edit the 6.5.x packages after upgrading to 6.7.6.
- Fixed an issue with the Cap Editor where imported registry REG_BINARY values could not be modified.
- Fixed an issue with the Cap Editor where import of unknown value types failed.



COMPONENT VERSIONS

Component	6.8
Console UI	6.8.0.6886
FlexDisk Service	6.8.0.6886
Client	6.8.0.1061
Client.NET	6.8.0.6884
VirtFS	6.8.0.6884
LWL UserApp Player	6.8.0.1575
LWL UserApp Service	6.8.0.1575
LWL Elevation Service	6.8.0.1575
FPC	6.8.0.6885
FPC Player	6.8.0.1575
FPC VirtFS	6.8.0.6884
CSMonitor	6.8.0.6886



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- Instant Clones may have problems running startup scripts which can result with an incorrect Userinit registry value. Please see this <u>KB</u> for some workarounds.
- Support has ended for Windows XP, Vista, Server 2003 and Server 2008 non-R2. You will need to use version 6.7.7 to support these older operating systems.
- Unable to change to temp directory error during login in certain use cases, contact support for a hotfix.
- JPG File Association does not work in Win10 1703+.
- Diagnostic Tool does not show correct number of CPUs.
- ProfileUnity and MongoDB Services Fail to Start After Reboot On Slower Storage. See this <u>KB</u> as a workaround.
- Administrative Templates Importing settings from some ADMX's do not get applied.
- FlexApp Manually adding Fonts Are Captured but Do Not Get Re-Added On Playback.
- Shortcut Some Modern apps are not pinned on Windows 10.
- File Association is not working on Windows 10 when setting with Modern apps.
- Shortcut Modern apps are not pinned on German environment (Windows 10 V1703).
- Audit Management Changing No Filter To Filter shows internal filter ID, not friendly name.
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- Windows 10 LTSB 2015 is not supported.
- Windows 10 1511 is not supported.
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 - Workaround: From the Main Configuration Module, change Portability Compression to use "No Compression" or "Smaller Archives" before migrating.
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- The use of * in Privilege Elevation is no longer supported. To resolve this for FlexApp UIA, you would put in the Path Contains '\\server\share\%username%' and '%userprofile%'. This will auto



- approve anything trying to be installed from the user home share and profile path, for example Downloads, My Documents, Desktop.
- Files that have more than 260 characters are not processed by the portability engine.
- Applications packaged on Windows 7 and played back on Windows 8.1/10 is best effort. With all the changes made to Windows 8.1/10, application vendors have had to make many change to their applications to make them compatible with Windows 8.1/10, and we cannot ensure applications will run correctly. The same would apply in reverse; applications packaged on Windows 8.1/10 are best effort support when played back on Windows 7/10.
- Startup.exe will not run on 2008 R2 if .NET 3.5.1 is not enabled in features.
 LwL.ProfileUnity.Client.Startup.exe needs 3.5.1 to run.
 - Notes: On Windows 2008 R2 .NET 3.5.1 is NOT enabled out of the box. To enable it before running startup.exe, run this command from an elevated command prompt 'serverManagerCmd.exe -install Net-Framework', reboot, run Windows Updates, reboot then re-run startup.exe.
- If the customer has automatic root certificate updates disabled, ProfileUnity install may fail with data1.cab certificate error
 - Notes: FED and some commercial accounts following federal STIG guidelines could have automatic root certificate updates disabled causing them to not have the latest root cert our installer code was complied with the latest root certificates.
 - KB Article: <u>ProfileUnity Install May Fail If Automatic Root Certificate Updates Disabled</u> Data1.Cab Certificate Error
- Using folder redirection on all of Appdata Local can cause the Windows 10 Start Menu to not work correctly.
- Using Portability on all of Appdata Local can cause long logins for Windows 10.
- Windows 7 pinned Start Menu items don't migration to Windows 10 when using Portability.
- Windows 7 desktop background does not migrate to Windows 10 when using Portability.
- Installing ProfileUnity 6.5+ and Flex-IO on the same server is not supported.
- Windows 10 Edge history and cookies are not accepted by Windows.
 - Workaround: Use ProfileDisk VHD or VMDK.
- Migrating a Windows 7 ProfileDisk to Windows 10 will cause the Windows 10 Start Menu to lock up.
- Packaging application on Windows 10 with FlexApp requires all C++ runtimes are installed in the base OS of the FlexApp packaging console and the target desktop. On Windows 10 64-bit, you must install both x86 and x64 versions.
 - 2005 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=5638
 - 2005 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=18471
 - 2008 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=5582
 - 2008 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=2092
 - 2010 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=8328
 - 2010 SP1 Redistributable Package (x64)



i. https://www.microsoft.com/en-us/download/details.aspx?id=13523



ProfileUnity[™] and ProfileUnity FlexApp[™] Change Log/Release Notes

v 6.7.7.6701, Released May 8th, 2018

Issues Resolved

• Management Console

- Fixed an issue where the Amazon S3 credential validation failed when tested, but the credentials and permissions were correct.
- o Fixed an issue where the configuration file could not be published to Amazon S3.



COMPONENT VERSIONS

Component	6.7.7
Console UI	6.7.7.6701
FlexDisk Service	6.7.6.6701
Client	6.7.6.904
Client.NET	6.7.6.6684
VirtFS	6.7.6.6683
LWL UserApp Player	6.7.6.1540
LWL UserApp Service	6.7.6.1540
LWL Elevation Service	6.7.6.1540
FPC	6.7.6.6683
FPC Player	6.7.6.1540
FPC VirtFS	6.7.6.6683
CSMonitor	6.7.6.6701

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v 6.7.6.6684, Released April 23RD, 2018

Major Updates

ProfileUnity Management Console

- ProfileUnity now supports saving to Google Cloud Storage (GCS) for configuration files, license
 file and portability. This removes the need for file shares and is mainly designed for desktops or
 RDS servers running on Google Cloud Platform.
- ProfileUnity now supports saving to Azure Blob Storage for configuration files, license file and portability. This removes the need for file shares and is mainly designed for desktops or RDS servers running on Azure Cloud.

Issues Resolved

• Management Console

- Fixed an issue where the Amazon S3 credential validation failed when tested, but the credentials were correct.
- Fixed an issue where after an import of DIA, packages showed as zero and the UI was hung.
- Fixed an issue where FlexApp DIA VMDK- Error message is displaying when Assign/Mount Weight/Mirror after upgraded from 6.5.x to 6.7.6

Client

- Fixed an issue where ProfileDisk could cause users to logoff immediately with Citrix
 7.16+
- o Fixed an issue with the error "Unable to Perform Registry Cleanup".

FlexApp

- Fixed an issue where the ProfileUnity Management Console was running on port 443.
 The FlexApp Packaging Console is unable to access the Management Console on port 443.
- Fixed an issue where FlexApp post playback with no applications open could be taking unneeded CPU in the range of 30% of each core.



COMPONENT VERSIONS

Component	6.7.6
Console UI	6.7.6.6684
FlexDisk Service	6.7.6.6684
Client	6.7.6.904
Client.NET	6.7.6.6684
VirtFS	6.7.6.6683
LWL UserApp Player	6.7.6.1540
LWL UserApp Service	6.7.6.1540
LWL Elevation Service	6.7.6.1540
FPC	6.7.6.6683
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v 6.7.5.6663, Released April 4TH, 2018

Major Updates

ProfileUnity Management Console

 ProfileUnity now supports saving to Amazon S3 storage for configuration files, license file, portability and the client install. This removes the need for file shares and is mainly designed for Amazon Workspaces or RDS Servers running on Amazon EC2.

Client

- Faster Logins
 - In slower Active directory environments where querying group membership during login
 has been slow, logins are now faster. We now use the Windows local token for what
 groups the user is part of. This applies to group check filters and ProfileDisk VHD group
 checks.
 - In environments where WMI is corrupt or slow, this can slow down the login.
 ProfileUnity repairs WMI on boot and starts the WMI service. As a result, WMI its running before the user login occurs. ProfileUnity also pre-loads WMI computer-based filters into RAM before the user logs in.
- Faster Logoffs
 - o Microsoft Edge rule was optimized.
 - VHD unmounts are faster than 6.7.0. This applies to ProfileDisk and FlexApp.
- The File Associations module now supports default browser, PDF and other Windows defaults on Windows 10. The File Associations module also now supports RDSH where two users who are on the same OS at the same time can have different file associations.
- Pinning modern apps to Windows 10 tiles and the taskbar is now supported.
- Deleting modern apps from Windows 10 tiles and the taskbar is now supported.

FlexApp

- Faster FlexApp
 - o In some cases, FlexApp DIA playback can playback faster.
 - o In some cases, FlexApp DIA Click-To-Layer shortcuts can be created faster.
- FlexApp DIA shortcuts that users copy to their personal Start Menu, desktop, Windows 10 tiles and taskbar are removed at login if the FlexApp DIA assignment is removed from the user.
- FlexApp DIA Click-to-Layer shortcuts that users copy to their Start Menu, desktop, Windows 10 tiles and taskbar are removed at login if the FlexApp DIA Click-to-Layer assignment is removed from the user.



Minor Updates

ProfileUnity Management Console

- An ODBC portability rule is enabled by default in Templates.
- ProfileUnity Console Roles "Users" cannot deploy a configuration where they cannot edit any of the configuration's modules.
- ProfileUnity Console Roles When a "user" is part of a single role, the user is no longer able to create configurations.
- ProfileUnity Console Roles A "user" can no longer delete a configuration that they can edit.
- ProfileUnity Console Roles When a user account link to AD already exists and the same user is
 added to a Role, the system will now just link the user and not try to add them in as a user again.

Client

- The ProfileUnity Client now requires Microsoft .NET Framework 4.6.2.
- LwL.ProfileUnity.Client.Startup.exe is written in .NET 3.5.1 and checks for the existence of .NET.
 4.6.2. If .NET 4.6.2 is not installed, startup.exe will install it.
 LwL.ProfileUnity.Client.Startup.Update.exe is run once .NET 4.6.2 is detected.

FlexDisk

- ProfileUnity FlexDisk UI is faster to use.
- Mirroring can now take place while FlexDisks are in use.
- In the event of an outage, the FlexDisk database can get out of sync with what is active in vCenter. In the ProfileUnity FlexDisk UI, you can click reconcile to remove any out of sync entries from the database.
- FlexDisk Deletes and Disconnects now support multi-select.

Issues Resolved

• Management Console

- Disabled VSS for Application Data 3rd Party Apps in templates.
- Fixed an issue with Administrative Templates 'Same Key Exists' Error when trying to edit ADMX rule.
- o Fixed an issue with auto-deployment of nodes.xml without prompt for confirmation.
- Fixed an issue with FlexDisk Management where "Delete selected" button was enabled for unselected data after reloading the grid.
- Fixed an issue with Guided Configuration Confirm Your Settings Update Button had no response.
- Fixed an issue with FlexDisk Management connections "Disconnect selected" button was enabled for unselected data after reloading the grid.
- Fixed an issue with Administration "Portability save path" and "INI deployment path" sections were not available.
- Fixed an issue with Administration -Sort button was not working for Users and Roles (Account Type).



- Fixed an issue with Administration Sort button was not working for Templates (Created) and Users and Roles (Last Logon).
- Fixed an issue with Shortcuts "Delete All" option was saved for pinned items after reselecting from shell/web link type.
- Fixed an issue with FlexDisk Management Sort button did not work on DIA, UDD, or Provision tabs.
- o Fixed an issue where ProfileUnity users were able to deploy the configuration.
- Fixed an issue with Role Management AD users were not mandatory while creating Roles.
- Fixed an issue with Role Management ProfileUnity displayed the warning message as
 "Priority" instead of "Sequence" while clicking on save.
- Fixed an issue with Users When new password was blank, after clicking on save button it was showing "Confirm password cannot be blank".
- Login with format <Domain>\<User> failed after initial login.
- o Fixed issue with Users and Roles Role Priority setting was reversed.
- Drive letter (Default value: A:) information was still displaying in "View in PDF/TXT & INI"
- Drive letter (Default value: A:) was showing in the grid after selecting "Disconnect All" in Drive Mapping.
- o Drive letter was showing in the grid after selecting "Mount to path" in Mount location.
- Fixed an issue with Users and Roles After enabling, certain users displayed 'Service Account Credential Need To Be Updated'.
- Configuration was deployed to default deployment path instead of "Deployment Path Override" location.
- o Fixed an issue with Users and Roles Existing user could not be added to multiple roles.
- o Fixed an issue where ProfileUnity Console "Pause and enable" button reset page view.
- Security group name was not showing in the license file when deploying client tools from Administration page.
- Fixed an issue with Shortcuts Importing only populated EXE path and was missing arguments.
- Fixed an issue with FlexDisk Management Connection details were not listed in the Connections tab.
- Fixed an issue with FlexDisk Management UDD Sort, Refresh and Record Buttons did not take effect until page reload.
- Fixed an issue with Search- ProfileUnity threw 'Failed To Load js: OK" error when clicking on Administration related result links (for ProfileUnity user's login).
- Fixed an issue with Virtual Disks "Storage Type" was showing in the grid but not in the Create/Edit rule.
- Fixed an issue with Administration By clicking on white space of Database without expanding it, it was displaying "Manage Database Connection" popup.
- Fixed an issue with Main Portability Archive Retention More numbers of folders were created than per given input numbers.
- Fixed an issue with Shortcuts "Pinned Item Location" field was missing in the "View in PDF" and "View in Text".



- Fixed an issue with Shortcuts Pinned Item "Process Action After Login" option was showing enable in edit window even it was disabled.
- Fixed an issue with Shortcuts Pinned Items Target arguments were not showing in the grid for both Start Menu and Taskbar.
- Fixed problem generating/deploying configuration INI after modifying the configuration itself.
- Fixed an issue with Users and Roles After enabling service account, GPO deployment failed.

Client

- o Fixed an issue with Trigger Point Completely failed in all the environments.
- Fixed an issue with Portability Client was unable to alternate between .7z and .Lou archives.
- Portability only saved with smaller compression (7z).
- Elevation XML hashes were wiped when new elevation entry added through module.
- o Fixed an issue with Diagnostic Tool Side menu was missing from HTML report.
- Shortcuts failed to create when folder did not exist.
- Fixed an issue with Diagnostic Tool Bundled 6.7.0 Version did not run; threw exception instead.
- o Fixed an issue with Shortcuts Icons were not set when DLL index or .ICO was used.
- Fixed an issue with Startup.exe ProfileUnity As A Service password failed to update when upgrade ran in session.
- Fixed an issue with CAC ProfileDisk VHD unmount failed when user did not have read access.
- Fixed issue displaying warning message & command prompt window while ProfileUnity splash was running.
- Elevation continually opened lwl-chrome-monitor.exe when CID Chrome plugin was enabled.
- o ProfileDisk VHD was not working after Logoff & Login on Client machine.

FlexApp

- Apps with Click-to-Layer were playing back with multiple users.
- o After logoff and login, System DIA Apps with Click-to-Layer were not playing back.
- Normal Apps were not working on the client machine.
- Applications were not playing back when configured with single app.
- Fixed an issue with File Associations File Associations were not working when FlexApp DIA and File Association were configured together.
- VHD Apps were not playing back on second login.
- DIA App caused logoff/shutdown to take 5+ minutes to complete.
- Fixed an issue where configurations were unable to be deployed when Flexapp DIA was configured.
- Normal Apps were missing for second user when config contained a mix of Click-to-Layer.
- o Pinned apps did not display app icon (Win10/2016).



- o 3 DIA apps caused VirtFsService.exe to cause kernel error and freeze the VM.
- FlexApp DIA of applications that add to the %PATH% environment variable caused icon and system utility issues.
- o Error was thrown after several FlexApp DIA entries were created or edited.
- Adobe Standard DIA caused default printer to go offline.
- DIA Start Menu shortcuts were not always restored for subsequent users on RDSH 2016.
- System DIA applications were not played back in the client machine.
- Click-To-Run FlexApp DIAs caused other packages mounted at login to not appear to user.
- Click-to-Layer Published App was only accessible on first session, VHD leftover (Citrix XenApp).
- Fixed an issue with FlexApp Packaging Console View a Package Incorrect information was displaying in "Applications installed" when doing more than one reboot.
- Fixed an issue with FlexApp Packaging Console where you were unable to extend the package after reboot on Windows 10.
- Capture of Adobe XI Pro failed, hung at 'Launching the uninstallation process...'.
- "Applications installed" information was not showing in "View a Package" details.
- FlexApp Packaging Console capture of Workshare Compare failed reboot was not detected and FPC failed to complete the capture.
- FlexApp Packaging Console capture of RightFax failed to capture Printer Driver.
- FlexApp Packaging Console capture of Morningstar Direct failed with 'Internal Server' error.
- Cloning progress indicator duplicated when cloning.
- 'Creating and mounting Child VHD' step took ~5 minutes to complete when cloning.
- Fixed an issue with FlexApp Packaging Console App icon was not saving or restoring correctly for the apps which required reboot.
- Fixed an issue with FlexApp Packaging Console Extend functionality failed while cloning the package.
- Click-to-Layer Apps worked as a Normal App when both Normal & Click-to-Layer Apps were configured in the same INI.
- Click-to-Layer Apps did not open when mixed with regular Apps.
- o Sage 2016 did not run on playback; only the splash screen was seen.
- Sage 2016 install failed during capture on Windows 7 64-bit.
- FlexApp login performance was slower than 6.5.10.
- o Non-admin users could not login when SQL MGMT studio was layered as a service.



COMPONENT VERSIONS

Component	6.7.5
Console UI	6.7.5.6663
FlexDisk Service	6.7.5.6663
Client	6.7.5.893
Client.NET	6.7.5.6649
VirtFS	6.7.5.6628
LWL UserApp Player	6.7.5.1905
LWL UserApp Service	6.7.5.1905
LWL Elevation Service	6.7.5.1905
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FPC Player	6.7.5.1905
FPC VirtFS	6.7.5.6628
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 - i. https://www.microsoft.com/en-us/download/details.aspx?id=13523



v 6.7.0.6422, Released August 1st, 2017

Major Updates

ProfileUnity Management Console

- User Role Management Within the Administration section of the ProfileUnity Management Console, you can build user roles where only certain configurations or individual modules can be updated by certain administrators.
- Audit Log Within the Administration section of the management console, you can see what changes other administrators made; i.e., date and timestamp, user name, type of record (e.g., login, filter, configuration module), details of the change showing both old and new values.
- Full CAC Card Support for the ProfileUnity Management Console You can now enable full CAC support when logging into the ProfileUnity Management Console versus having to enter in an Active Directory user account and password.
- The ProfileUnity Template wizard has a Template built for Windows 7, 10 and 2016 as a Desktop or 2016 RDS host where you can have a single OS listed or coexistence between them all.
- The ProfileUnity Template wizard has a Template built for enabling Outlook indexing for VDI and Outlook indexing for RDS hosts.
- The ProfileUnity Template wizard has a ProfileDisk Template built for Windows 7, 10 and 2016 as a Desktop or 2016 RDS host.

Client

- ProfileDisk for RDSH ProfileDisk now works for Remote Desktop Session Host. A VHD, which stores the entire Profile, is attached for each user at login.
- Post-login Trigger A trigger can now be set for a configuration or module to run after login.
- The following modules have been re-written with logging Desktop Start Menu, INI Files, Internet Explorer, Internet Proxy Setting, MAPI Profiles, Message Boxes, Office File Locations, Office Options, Path, Outlook, RDP Client, Time Sync, and Windows Options.

FlexApp

- FlexApp DIA VHD Session-based Layering On a Multi-user system, FlexApp packages are
 viewed per user session, enabling users to have access to only their applications rather than all
 applications on the same RDS host.
- Click-to-Layer FlexApp VHD DIA Click-to-Layer delays mounting applications until they are
 requested by a user. Application shortcuts are deployed to users' desktops. When the shortcut
 is clicked to open the application, the layer then mounts and activates. This helps to reduce the
 amount of time it takes for all the application layers to activate in the system. This technology
 works for normal VDI desktops, RDS published desktops and published applications.
- FlexApp Package Dependencies The FlexApp Packaging Console now allows for packages to be declared as dependent on other packages, controlling the order in which applications playback.



For example, if you had two apps, A and B, and you wanted to make sure the user did not open app B before app A was played back, you could make them dependent on each other.

• FlexApp Packaging Console Reboot Handling – At any time during the packaging process, you or the application can just start a reboot. The FlexApp Packaging Console will detect this event, pause the packaging process, and resume the process after the reboot completes.

FlexDisk

- FlexDisk is now 64-bit the FlexDisk code base has been upgraded to 64-bit.
- FlexDisk User Data Disks are assigned as one VMDK per user instead of based on snap shots.
- vSphere 6.5 Support has been added to FlexDisk.
- Computer-Level Assignments FlexDisk can now assign FlexApp packages to the naming pattern of your Desktop pool.

Minor Updates

ProfileUnity Management Console

- FlexApp UIA persistent disk option was removed.
- "Process Action After Login" option was added to the Shortcuts module.
- When the message queue connection string is updated in the Administration section of the ProfileUnity Management Console, the FlexDisk message queue connection string is updated as well.
- The FlexApp UIA "Reverse Play" option was removed.
- The Drive Mapping module now executes before the Portability Settings module.
- Added Support for disabling TLS 1.0 on Windows.
- Added Support for disabling SHA-1 on Windows.
- ProfileUnity Management Console paging list now has 50 and 100 as options.
- The management console under Inventory Management > FlexApp DIA can now import FlexApp DIAs.
- The Printers module now runs before the Portability Settings module.
- ProfileUnity Console IP address and FQDN is stamped into the header of the INI file generated.
- Each configuration can have its own deployment path.
- ProfileUnity Console Administration section settings are now persistent to clustered consoles.

Client

- Module Updates
 - INI Files Added option for post-login processing
 - Internet Explorer -Added support for Microsoft Edge
 - Internet Proxy Setting Added support for Microsoft Edge
 - Message Boxes Added support for post-login
 - Office File Locations Updated for Office 2013/2016
 - o Office Options Updated for Office 2013/2016
 - Path support for system path
 - Outlook -Updated for Office 2013/2016



Shortcuts

- Added support for Windows 10 Start Menu pinned items
- Added post-login option
- Added support for user pinned items and administrator pinned items to Coexistence on the start menu and task bar.
- All post-login activity is done right when ProfileUnity finishes running and no longer uses RunOnce.
- LwL.ProfileUnity.Client.Logoff.exe.config has an option for restart desktop after logoff.
- Added support for disabling SHA-1 on Windows.
- ProfileUnity printer handling will no longer disturb Citrix client-connected printers.
- Louzip can now convert .lbr into .reg file.
- LwL.ProfileUnity.Client.Startup.exe will only install the VHD driver on Windows 7 or Server 2008
 R2.
- When using "ProfileDisk VHD CAC support" GPO feature, the ProfileUnity as a Service account will be used to dismount the VHD on logoff.
- By default, ProfileUnity approved processes for elevation are code signed by Liquidware Labs and the SHA-256 hash of ProfileUnity's main processes.
- Added support for Windows 10 pinned to title.

FlexApp

- On logoff of users don't reverse play ProfileUnity as a Service DIAs.
- Support for FIPS was added.
- Updated disk label of FlexApp DIA VHD to follow the same format as FlexApp DIA VMDK disk label.
- Added support for disabling SHA-1 on Windows.
- FlexApp Packaging Console has compression off by default.

FlexDisk

• Added support for disabling SHA-1 on Windows.

Issues Resolved

- Fixed an issue where a FlexApp of Adobe Pro would stop a user from connecting to network printers.
- European date format caused Application Launcher issue.
- False warning was given when filter was unassigned from all configurations.
- Administrative Template module was not generating proper INI settings.
- Fixed an issue with FlexDisk UI performance.
- Fixed an issue with long disk attach times when using FlexDisk.



COMPONENT VERSIONS

Component	6.7.0
Console UI	6.7.0.6422
FlexDisk Service	6.7.0.6422
Client	6.7.770
Client.NET	6.7.06411
VirtFS	6.7.0.6417
LWL UserApp Player	6.7.21127
LWL UserApp Service	6.7.21127
LWL Elevation Service	6.7.21127
FPC	6.7.0.6417
FPC Player	6.7.21127
FPC VirtFS	6.7.0.6417
CSMonitor	6.5.6240

Known Issues and Limitations

- End-of-Life for ProfileUnity versions 4.x and 5.x: Liquidware will be discontinuing all sales and technical support of ProfileUnity versions 4.x and 5.x effective 12/31/2017. We encourage all customers who may still be utilizing these versions to upgrade to a more recent version to take advantage of the numerous technology & feature enhancements as well as resolved support issues.
- Office 2013 and Office 2016 are not supported when layering FlexApp packages to Windows Server 2008 R2 and 2012 R2; Windows Server 2016 is supported.
- Windows 10 LTSB 2015 is not supported.
- Windows 10 Enterprise 1507 is not supported.
- Office 2016 as a FlexApp package won't license on Windows 10 LTSB.
 - Workaround: Use Windows 10 Enterprise 1607
- When using 3rd party layering products, you must fully disable FlexApp.
- Migrating to ProfileDisk where Portability Compression is set to "Faster Archives" would cause any rulesets set to userprofile to restore outside ProfileDisk.
 - Workaround: From the Main Configuration Module, change Portability Compression to use "No Compression" or "Smaller Archives" before migrating.



- When using license path and INI path at the same time, you cannot exceed a total combined character count of 238 characters; 22 are taken by the product.
- Windows 7/8 32-bit are no longer supported by the ProfileUnity Management Console.
- The use of * in Privilege Elevation is no longer supported. To resolve this for FlexApp UIA, you would put in the Path Contains '\\server\share\%username%' and '%userprofile%'. This will auto approve anything trying to be installed from the user home share and profile path, for example Downloads, My Documents, Desktop.
- Files that have more than 260 characters are not processed by the portability engine.
- Applications packaged on Windows 7 and played back on Windows 8.1/10 is best effort. With all the changes made to Windows 8.1/10, application vendors have had to make many change to their applications to make them compatible with Windows 8.1/10, and we cannot ensure applications will run correctly. The same would apply in reverse; applications packaged on Windows 8.1/10 are best effort support when played back on Windows 7/10.
- Startup.exe will not run on 2008 R2 if .NET 3.5.1 is not enabled in features. LwL.ProfileUnity.Client.Startup. needs 3.5.1 to run.
 - Notes: On Windows 2008 R2 .NET 3.5.1 is NOT enabled out of the box. To enable it before running startup.exe, run this command from an elevated command prompt 'serverManagerCmd.exe -install Net-Framework', reboot, run Windows Updates, reboot then re-run startup.exe.
- If the customer has automatic root certificate updates disabled, ProfileUnity install may fail with data1.cab certificate error
 - Notes: FED and some commercial accounts following federal STIG guidelines could have automatic root certificate updates disabled causing them to not have the latest root cert our installer code was complied with the latest root certificates.
 - KB Article: <u>ProfileUnity Install May Fail If Automatic Root Certificate Updates Disabled</u> Data1.Cab Certificate Error
- Using folder redirection on all of Appdata Local can cause the Windows 10 Start Menu to not work correctly.
- Using Portability on all of Appdata Local can cause long logins for Windows 10.
- Windows 7 pinned Start Menu items don't migration to Windows 10 when using Portability.
- Windows 7 desktop background does not migrate to Windows 10 when using Portability.
- Installing ProfileUnity 6.5+ and Flex-IO on the same server is not supported.
- Windows 10 Edge history and cookies are not accepted by Windows.
 - Workaround: Use ProfileDisk VHD or VMDK.
- Migrating a Windows 7 ProfileDisk to Windows 10 will cause the Windows 10 Start Menu to lock up.
- Packaging application on Windows 10 with FlexApp requires all C++ runtimes are installed in the base OS of the FlexApp packaging console and the target desktop. On Windows 10 64-bit, you must install both x86 and x64 versions.
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 - 2008 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=5582
 - 2008 SP1 Redistributable Package (x64)



- i. https://www.microsoft.com/en-us/download/details.aspx?id=2092
- 2010 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=8328
- 2010 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=13523



v 6.5.10.6310, Released April 12th, 2017

Critical Alert Issue Identified

Liquidware Labs has found a major change in how vSphere 6.5 handles encrypted communication for VMDK management.

Currently if you upgrade your vSphere environment to 6.5, you will not be able to create any new ProfileDisks or FlexApp packages that are based on VMDKs that FlexDisk leverages. At this time, there is NO workaround except for rolling back to an older version of vSphere. This problem is affecting all 3rd party ecosystem products that manage VMDKs including backup software. Liquidware Labs will support this new method of encrypted communication for VMDK management due out the end of Q2.

For any questions please feel free to contact our Support Team, via support@liquidwarelabs.com.

Issues Resolved

- FlexApp caused long logoff times.
- FlexDisk failed to attach ProfileDisk and FlexApps with VMware Instant Clones.
- FlexDisk failed to look up users in AD in some environments.
- Profile Cleanup did not work consistently.
- Cross domain VHD ProfileDisk did not attach after upgrade to 6.5.9.
- Logoff.exe hung when Windows could not contact an online certificate revocation list.
- Client upgrades failed when ProfileUnity Client files were locked.
- Startup.exe will now only preinstall VHD driver on Windows 2008 R2 or Windows 7.



COMPONENT VERSIONS

Component	6.5.10
Console UI	6.5.10.6310
FlexDisk Service	6.5.6297
Client	6.5.706
Client.NET	6.5.10.6292
VirtFS	2.1.6219
LWL UserApp Player	1.1.7310
LWL UserApp Service	1.1.7310
LWL Elevation Service	1.1.7310
FPC	6.5.10.6295
FPC Player	1.1.7310
FPC VirtFS	2.1.6219
CSMonitor	6.5.6295

Known Issues and Limitations

- vSphere 6.5 is not supported for FlexDisk. This will be supported in the next major release.
- Office 2013 and Office 2016 are not supported when layering to 2008 R2 and 2012 R2; Server 2016 is supported.
- Windows 10 LTSB 2015 is not supported.
- Windows 10 Enterprise 1507 is not supported.
- Office 2016 as a FlexApp won't license on Windows 10 LTSB.
 - Workaround: Use Windows 10 Enterprise.
- Using the ProfileUnity shortcut module won't pin items to the taskbar on Windows 10.
 - Workaround: None, this will be addressed in the next major release.
- Logoffs are extended if you have FlexApp DIA in more than one INI being processed by a client.
- When using 3rd party layering products, you must fully disable FlexApp.
- Migrating to ProfileDisk where Portability Compression is set to "Faster Archives" would cause any rulesets set to userprofile to restore outside ProfileDisk.
 - Workaround: From the Main Configuration Module, change Portability Compression to use "No Compression" or "Smaller Archives" before migrating.



- When using license path and INI path at the same time, you cannot exceed a total combined character count of 238 characters; 22 are taken by the product.
- Windows 7/8 32-bit are no longer supported by the ProfileUnity Management Console.
- Non-English APAC Windows 7 and Windows XP is not supported; you must use ProfileUnity 5.0 with double-byte character support.
- The use of * in Privilege Elevation is no longer supported. To resolve this for FlexApp UIA, you would put in the Path Contains '\\server\share\%username%' and '%userprofile%'. This will auto approve anything trying to be installed from the user home share and profile path, for example Downloads, My Documents, Desktop.
- Files that have more than 260 characters are not processed by the portability engine.
- Applications packaged on Windows 7 and played back on Windows 8.1/10 is best effort. With all
 the changes made to Windows 8.1/10, application vendors have had to make many change to
 their applications to make them compatible with Windows 8.1/10, and we cannot ensure
 applications will run correctly. The same would apply in reverse; applications packaged on
 Windows 8.1/10 are best effort support when played back on Windows 7/10.
- Dell vWorkSpace support has been removed, please contact Dell vWorkSpace Support for the correct version of vWorkSpace that supports ProfileUnity.
- Startup.exe will not run on 2008 R2 if .NET 3.5.1 is not enabled in features.
 LwL.ProfileUnity.Client.Startup. needs 3.5.1 to run.
 - Notes: On Windows 2008 R2 .NET 3.5.1 is NOT enabled out of the box. To enable it before running startup.exe, run this command from an elevated command prompt 'serverManagerCmd.exe -install Net-Framework', reboot, run Windows Updates, reboot then re-run startup.exe.
- If the customer has automatic root certificate updates disabled, ProfileUnity install may fail with data1.cab certificate error
 - Notes: FED and some commercial accounts following federal STIG guidelines could have automatic root certificate updates disabled causing them to not have the latest root cert our installer code was complied with the latest root certificates.
 - KB Article: <u>ProfileUnity Install May Fail If Automatic Root Certificate Updates Disabled</u> -Data1.Cab Certificate Error
- Using folder redirection on all of Appdata Local can cause the Windows 10 Start Menu to not work correctly.
- Using Portability on all of Appdata Local can cause long logins for Windows 10.
- The desktop background does not restore from one Windows 10 persistent desktop to another on Windows 10 persistent desktop.
- Windows 10 accent colors do not restore when using Portability.
- Windows 7 pinned Start Menu items don't migration to Windows 10 when using Portability.
- Windows 7 desktop background does not migrate to Windows 10 when using Portability.
- Installing ProfileUnity 6.5+ and Flex-IO on the same server is not supported.
- Windows 10 Edge history and cookies are not accepted by Windows.
 - Workaround: Use ProfileDisk VHD or VMDK.
- Migrating a Windows 7 ProfileDisk to Windows 10 will cause the Windows 10 Start Menu to lock up.
- Packaging application on Windows 10 with FlexApp requires all C++ runtimes are installed in the base OS of the FlexApp packaging console and the target desktop. On Windows 10 64-bit, you must install both x86 and x64 versions.
 - 2005 SP1 Redistributable Package (x86)



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- 2010 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=8328
- 2010 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=13523



v 6.5.9.6236, Released February 1st, 2017

Critical Alert Issue Identified

Liquidware Labs has found a major change in how vSphere 6.5 handles encrypted communication for VMDK management.

Currently if you upgrade your vSphere environment to 6.5, you will not be able to create any new ProfileDisks or FlexApp packages that are based on VMDKs that FlexDisk leverages. At this time, there is NO workaround except for rolling back to an older version of vSphere. This problem is affecting all 3rd party ecosystem products that manage VMDKs including backup software. Liquidware Labs will support this new method of encrypted communication for VMDK management due out in the first part of Q2.

For any questions please feel free to contact our Support Team, via support@liquidwarelabs.com.

What's New in ProfileUnity 6.5.9?

- Client CAC support for ProfileDisk VHD and ProfileDisk VMDK
 - When using ProfileDisk VHD (without CAC) we do NOT need machine level permissions on the file share like other vendors. The reason we don't need machine level permissions is because we impersonate the user logging in when connecting to a file share. However, we can NOT impersonate a CAC user for security reasons. So, instead of requiring machine level permissions on a file share for CAC support, we leverage ProfileUnity as a Service user name and password. When you deploy ProfileDisk VHD and set our registry key from group policy to enable impersonation of ProfileUnity as a Service user, we will impersonate the ProfileUnity as a Service user (using user name and password set on the service, not reading the creds file on the network share). This also means the minimum requirement for ProfileDisk VHD with CAC, will be to have the ProfileUnity as a Service account full control on the file share and ACL. When it comes to ProfileDisk VMDK and CAC nothing needs be done but run this version of ProfileUnity.

Issues Resolved

- Console Login failed when user had simple password.
- FlexDisk CSmonitor used excessive memory if unable to find corresponding sessions.
- Client Post login default printer was not being set correctly in Windows 10.
- Client Startup Upgrades failed on systems using system level DIA.
- Client Startup Userinit values were not modified correctly when KACE was in place.
- Client Windows 7 persistent computer startup "Please Wait" sat 90 seconds due to command service crash and errors.



• Client - Elevation logs in user profile path broke Profile Cleanup if elevation rules were configured.

COMPONENT VERSIONS

Component	6.5.9
Console UI	6.5.9.6236
FlexDisk Service	6.5.6236
Client	6.5.704
Client.NET	6.5.9.6225
VirtFS	2.1.6219
LWL UserApp Player	1.1.7310
LWL UserApp Service	1.1.7310
LWL Elevation Service	1.1.7310
FPC	6.5.9.6221
FPC Player	1.1.6912
FPC VirtFS	2.1.6093
CSMonitor	6.5.6192



Known Issues and Limitations

- vSphere 6.5 is not supported for FlexDisk. This will be supported in the next major release.
- Office 2013 and Office 2016 are not supported when layering to 2008 R2 and 2012 R2; Server 2016 is supported.
- When using 3rd party layering products, you must fully disable FlexApp.
- Migrating to ProfileDisk where Portability Compression is set to "Faster Archives" would cause any rulesets set to userprofile to restore outside ProfileDisk.
 - Workaround: From the Main Configuration Module, change Portability Compression to use "No Compression" or "Smaller Archives" before migrating.
- When using license path and INI path at the same time, you cannot exceed a total combined character count of 238 characters; 22 are taken by the product.
- Windows 7/8 32-bit are no longer supported by the ProfileUnity Management Console.
- Non-English APAC Windows 7 and Windows XP is not supported; you must use ProfileUnity 5.0 with double-byte character support.
- The use of * in Privilege Elevation is no longer supported. To resolve this for FlexApp UIA, you would put in the Path Contains '\\server\share\%username%' and '%userprofile%'. This will auto approve anything trying to be installed from the user home share and profile path, for example Downloads, My Documents, Desktop.
- Files that have more than 260 characters are not processed by the portability engine.
- Applications packaged on Windows 7 and played back on Windows 8.1/10 is best effort. With all the changes made to Windows 8.1/10, application vendors have had to make many change to their applications to make them compatible with Windows 8.1/10, and we cannot ensure applications will run correctly. The same would apply in reverse; applications packaged on Windows 8.1/10 are best effort support when played back on Windows 7/10.
- Dell vWorkSpace support has been removed, please contact Dell vWorkSpace Support for the correct version of vWorkSpace that supports ProfileUnity.
- Startup.exe will not run on 2008 R2 if .NET 3.5.1 is not enabled in features. LwL.ProfileUnity.Client.Startup. needs 3.5.1 to run.
 - Notes: On Windows 2008 R2 .NET 3.5.1 is NOT enabled out of the box. To enable it before running startup.exe, run this command from an elevated command prompt 'serverManagerCmd.exe -install Net-Framework', reboot, run Windows Updates, reboot then re-run startup.exe.
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- Windows 10 accent colors do not restore when using Portability.
- Windows 7 pinned Start Menu items don't migration to Windows 10 when using Portability.
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- Installing ProfileUnity 6.5+ and Flex-IO on the same server is not supported.
- Windows 10 Edge history and cookies are not accepted by Windows.
 - Workaround: Use ProfileDisk VHD or VMDK.
- Migrating a Windows 7 ProfileDisk to Windows 10 will cause the Windows 10 Start Menu to lock up.
- Packaging application on Windows 10 with FlexApp requires all C++ runtimes are installed in the base OS of the FlexApp packaging console and the target desktop. On Windows 10 64-bit, you must install both x86 and x64 versions.
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 - 2010 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=13523



v 6.5.8.6159, Released December 6th, 2016

What's New in ProfileUnity 6.5.8?

- Console and Client- Volume Shadow Copy is now an option for portability backup.
- Console Windows 10 Templates now include portability for Microsoft Edge Support.
- Console Windows 10 templates now use VSS to save portability the Windows 10 start menu.
- Console Install support for Server 2016.
- Console ProfileDisk Support for 2016 as a Desktop.
- Console and Client Server 2016 filter has been added.
- Client Support for 2016 as a Desktop and as RDS Server.
- FlexApp Support for 2016 Desktop and as RDS Server.

Issues Resolved

- FlexApp DIA FlexDisk Package Creation failed for FlexDisk package type in 2012 R2.
- FlexApp DIA FlexDisk Could not clone in use VMDK FlexApp.
- Console FlexDisk Task Manager Cancel Option was not working.
- Console Upgrades Drive Mapping Importing 5.x son displayed drive letter as numbers in 6.5.
- Console ADML & GPO details were missing in "View in PDF" & "View in Text".
- Console FlexDisk searching for a VM for VMDK connect and disconnect with Virtual Center MoRef, DNS name and Bios UUID were unreliable in some cases, display name is now used.



COMPONENT VERSIONS

Component	6.5.8
Console UI	6.5.8.6159
FlexDisk Service	6.5.6159
Client	6.5.697
Client.NET	6.5.8.6151
VirtFS	2.1.6093
LWL UserApp Player	1.1.6912
LWL UserApp Service	1.1.6912
LWL Elevation Service	1.1.6912
FPC	6.5.8.6159
FPC Player	1.1.6912
FPC VirtFS	2.1.6093
CSmonitor	6.5.6143



Known Issues and Limitations

- Office 2013 and Office 2016 are not supported when layering to 2008 R2 and 2012 R2; Server 2016 is supported.
- When using 3rd party layering products, you must fully disable FlexApp.
- Migrating to ProfileDisk where Portability Compression is set to "Faster Archives" would cause any rulesets set to userprofile to restore outside ProfileDisk.
 - Workaround: From the Main Configuration Module, change Portability Compression to use "No Compression" or "Smaller Archives" before migrating.
- When using license path and INI path at the same time, you cannot exceed a total combined character count of 238 characters; 22 are taken by the product.
- Windows 7/8 32-bit are no longer supported by the ProfileUnity Management Console.
- Non-English APAC Windows 7 and Windows XP is not supported; you must use ProfileUnity 5.0 with double-byte character support.
- The use of * in Privilege Elevation is no longer supported. To resolve this for FlexApp UIA, you would put in the Path Contains '\\server\share\%username%' and '%userprofile%'. This will auto approve anything trying to be installed from the user home share and profile path, for example Downloads, My Documents, Desktop.
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 - Notes: On Windows 2008 R2 .NET 3.5.1 is NOT enabled out of the box. To enable it before running startup.exe, run this command from an elevated command prompt 'serverManagerCmd.exe -install Net-Framework', reboot, run Windows Updates, reboot then re-run startup.exe.
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- Using folder redirection on all of Appdata Local can cause the Windows 10 Start Menu to not work correctly.
- Using Portability on all of Appdata Local can cause long logins for Windows 10.
- The desktop background does not restore from one Windows 10 persistent desktop to another on Windows 10 persistent desktop.
- Windows 10 accent colors do not restore when using Portability.
- Windows 7 pinned Start Menu items don't migration to Windows 10 when using Portability.
- Windows 7 desktop background does not migrate to Windows 10 when using Portability.
- Installing ProfileUnity 6.5+ and Flex-IO on the same server is not supported.



- Windows 10 Edge history and cookies are not accepted by Windows.
 - Workaround: Use ProfileDisk VHD or VMDK.
- Migrating a Windows 7 ProfileDisk to Windows 10 will cause the Windows 10 Start Menu to lock up.
- Packaging application on Windows 10 with FlexApp requires all C++ runtimes are installed in the base OS of the FlexApp packaging console and the target desktop. On Windows 10 64-bit, you must install both x86 and x64 versions.
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 - 2008 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=5582
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 - 2010 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=8328
 - 2010 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=13523



v 6.5.6116, Released October 12th, 2016

What's New in ProfileUnity 6.5.7?

- FlexApp of Office 365 2016 Support has been added. A new Knowledge base article has been created.
 - o KB Article: How To DIA Office 365 Professional Plus
- FlexApp of Office Products have been streamlined. Please see our new Knowledge base articles have for more information.
 - o **KB Article**: How do I create a DIA package with Office, Visio and Project (2013 or 2016) on Windows 10 in a single layer
 - KB Article: How do I create a DIA package with Office, Visio and Project 2010 on Windows 10 in a single layer.
 - o KB Article: How to FlexApp DIA Office 2013 and 2016 on Windows 10
 - o KB Article: How to FlexApp DIA Office 2010 on Windows 10
- Windows 10 Start Menu capture optimizations have been added to all Windows 10 templates.
- Windows AppLocker and ProfileUnity support has been added.
 - o KB Article: Configuring ProfileUnity With Windows 10 AppLocker

Issues Resolved

- Management Console Administration ProfileDisk: Nodes.xml was generated incorrectly when message broker was modified.
- Management Console Guided Setup Automatic GPO Integration: Generated GPO did not have classic Administrative template for system configuration.
- Management Console ProfileUnity Login Page: Login was showing incomplete message when creating password for default(admin) user.
- Management Console Inventory Redirection: Shell folders names were not displayed for (Download, Links, Libraries, Searches and Contacts). Alphanumeric codes were displayed instead.
- FlexDisk: User was unable to delete FlexDisk (UDD or DIA) when FlexDisk Host is inaccessible.
- FlexDisk- FlexDisk Management Event Monitor: Sort button did not work on any of the columns.
- Client ThinApp and Rsync did not follow custom extract path.
- Client All paths used for ProfileUnity Client no longer contain the term "TEMP" or "TMP".
- Startup Client Tools were not being fully deployed in some cases.
- FlexApp- Office 365 did not playback correctly.
- FlexApp FlexApp Packaging Console playback hung on 'Creating and mounting the child VHD' (Office 365).
- FlexApp FlexApp Packaging Console Installer: Silent installation process was not completed fully.
- FlexApp Order of processing on playback for applications with services was an issue which mainly affected Office.



COMPONENT VERSIONS

Component	6.5.7
Console UI	6.5.6116
FlexDisk Service	6.5.6116
Client	6.5.689
Client.NET	6.5.7.6099
VirtFS	2.1.6093
LWL UserApp Player	1.1.6912
LWL UserApp Service	1.1.6912
LWL Elevation Service	1.1.6912
FPC	6.5.6.6116
FPC Player	1.1.6912
FPC VirtFS	2.1.6093
CSMonitor	6.5.6081



Known Issues and Limitations

- When using 3rd party layering products, you must fully disable FlexApp.
- Migrating to ProfileDisk where Portability Compression is set to "Faster Archives" would cause any rulesets set to userprofile to restore outside ProfileDisk.
 - Workaround: From the Main Configuration Module, change Portability Compression to use "No Compression" or "Smaller Archives" before migrating.
- When using license path and INI path at the same time, you cannot exceed a total combined character count of 238 characters; 22 are taken by the product.
- Windows 7/8 32-bit are no longer supported by the ProfileUnity Management Console.
- Non-English APAC Windows 7 and Windows XP is not supported; you must use ProfileUnity 5.0 with double-byte character support.
- The use of * in Privilege Elevation is no longer supported. To resolve this for FlexApp UIA, you would put in the Path Contains '\\server\share\%username%' and '%userprofile%'. This will auto approve anything trying to be installed from the user home share and profile path, for example Downloads, My Documents, Desktop.
- Files that have more than 260 characters are not processed by the portability engine.
- Applications packaged on Windows 7 and played back on Windows 8.1/10 is best effort. With all the changes made to Windows 8.1/10, application vendors have had to make many change to their applications to make them compatible with Windows 8.1/10, and we cannot ensure applications will run correctly. The same would apply in reverse; applications packaged on Windows 8.1/10 are best effort support when played back on Windows 7/10.
- Dell vWorkSpace support has been removed, please contact Dell vWorkSpace Support for the correct version of vWorkSpace that supports ProfileUnity.
- Startup.exe will not run on 2008 R2 if .NET 3.5.1 is not enabled in features. LwL.ProfileUnity.Client.Startup. needs 3.5.1 to run.
 - Notes: On Windows 2008 R2 .NET 3.5.1 is NOT enabled out of the box. To enable it before running startup.exe, run this command from an elevated command prompt 'serverManagerCmd.exe -install Net-Framework', reboot, run Windows Updates, reboot then re-run startup.exe.
- If the customer has automatic root certificate updates disabled, ProfileUnity install may fail with data1.cab certificate error
 - Notes: FED and some commercial accounts following federal STIG guidelines could have automatic root certificate updates disabled causing them to not have the latest root cert our installer code was complied with the latest root certificates.
 - KB Article: <u>ProfileUnity Install May Fail If Automatic Root Certificate Updates Disabled</u> Data1.Cab Certificate Error
- Using folder redirection on all of Appdata Local can cause the Windows 10 Start Menu to not work correctly.
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- The desktop background does not restore from one Windows 10 persistent desktop to another on Windows 10 persistent desktop.
- Windows 10 accent colors do not restore when using Portability.
- Windows 7 pinned Start Menu items don't migration to Windows 10 when using Portability.
- Windows 7 desktop background does not migrate to Windows 10 when using Portability.
- Installing ProfileUnity 6.5+ and Flex-IO on the same server is not supported.
- Windows 10 Edge settings restored by Portability are not accepted by Windows.



- Workaround: Use ProfileDisk VHD or VMDK.
- Migrating a Windows 7 ProfileDisk to Windows 10 will cause the Windows 10 Start Menu to lock up.
- Packaging application on Windows 10 with FlexApp requires all C++ runtimes are installed in the base OS of the FlexApp packaging console and the target desktop. On Windows 10 64-bit, you must install both x86 and x64 versions.
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v 6.5.6086, Released August 31st, 2016

What's New in ProfileUnity 6.5.6?

- Console Debug Logging Enhancements
 - Destruction of session IDs.
 - o HTTP headers including User-Agent Referrer GET and POST.
 - Source IP addresses.
 - o Concurrent logons from different workstations occur.
- Client File extract path no longer contains the phrase tmp or temp.
- Client 7zip version was updated to remove a false positive when performing security scanning.
- Client FlexDisk now finds the VM by UUID even when VMware Tools is not ready.
- FlexDisk Resource reduction work was done.
- FlexDisk vSan support was added.
- FlexApp Office layering process has been refined; new KB articles are on the support site.

Issues Resolved

- Console Global Variables are not being populated in User Defined Scripts.
- Console Unable to download the template configuration in PDF format.
- Console After upgrading to 6.5.5, not able to download the configuration in PDF format.
- Console Upgrades Drive Mapping Importing 5.x JSON displays drive letter as numbers in 6.5.
- Client PendingFileRenameOperations Registry Key is created with client install.
- Client Startup Installer Install fails with 'FileNotFoundException'.
- Client Portability Replace deletes existing file/folders when archive does not previously exist.
- Client System DIA apps do not playback when UIA is configured.
- Client Filters ICA Client Address does not work with several options client.
- Client Windows 7 filter would sometimes return with RDSH enabled.
- Client Filters would run slow checking if RDSH was enabled.
- FlexDisk Attach and Detach issues have been addressed.
- FlexDisk When attempting to create a VMDK based application, the process fails with an object reference error.
- FlexApp Random Reg keys missing on playback.
 - No need to recapture apps for this issue.
- FlexApp When an installer asks to remove files, FlexApp on capture would remove too many files.
 - This has only been seen with Office 2010.
 - o If your layered app is having errors about missing files you would need to recapture.



COMPONENT VERSIONS

Component	6.5.6
Console UI	6.5.6086
FlexDisk Service	6.5.6086
Client	6.5.683
Client.NET	6.5.6.6085
VirtFS	2.1.6085
LWL UserApp Player	1.1.6829
LWL UserApp Service	1.1.6829
LWL Elevation Service	1.1.6829
FPC	6.5.6.6086
FPC Player	1.1.6829
FPC VirtFS	2.1.6085
CSMonitor	6.5.6081



Known Issues and Limitations

- When using 3rd party layering products, you must fully disable FlexApp.
- Migrating to ProfileDisk where Portability Compression is set to "Faster Archives" would cause any rulesets set to userprofile to restore outside ProfileDisk.
 - Workaround: From the Main Configuration Module, change Portability Compression to use "No Compression" or "Smaller Archives" before migrating.
- When using license path and INI path at the same time, you cannot exceed a total combined character count of 238 characters; 22 are taken by the product.
- Windows 7/8 32-bit are no longer supported by the ProfileUnity Management Console.
- Non-English APAC Windows 7 and Windows XP is not supported; you must use ProfileUnity 5.0 with double-byte character support.
- The use of * in Privilege Elevation is no longer supported. To resolve this for FlexApp UIA, you would put in the Path Contains '\\server\share\%username%' and '%userprofile%'. This will auto approve anything trying to be installed from the user home share and profile path, for example Downloads, My Documents, Desktop.
- Files that have more than 260 characters are not processed by the portability engine.
- Applications packaged on Windows 7 and played back on Windows 8.1/10 is best effort. With all the changes made to Windows 8.1/10, application vendors have had to make many change to their applications to make them compatible with Windows 8.1/10, and we cannot ensure applications will run correctly. The same would apply in reverse; applications packaged on Windows 8.1/10 are best effort support when played back on Windows 7/10.
- Dell vWorkSpace support has been removed, please contact Dell vWorkSpace Support for the correct version of vWorkSpace that supports ProfileUnity.
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- Windows 10 Edge settings restored by Portability are not accepted by Windows.



- Workaround: Use ProfileDisk VHD or VMDK.
- Migrating a Windows 7 ProfileDisk to Windows 10 will cause the Windows 10 Start Menu to lock up.
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ProfileUnity[™] and ProfileUnity FlexApp[™] Change Log/Release Notes

v 6.5.6037, Released July 20th, 2016

What's New in ProfileUnity 6.5.5?

- VDI Concurrent licenses are now handled by counting the number of computer accounts in an OU or many OUs. Customers that have bought concurrent licensing will need to upgrade and get a new license from Liquidware Labs.
- ProfileUnity now has a built in diagnostic tool to help diagnose environmental issues.
- A new Template has been added to support migration from Windows 7 to a network share then back local to Windows 10 again.
- A new Template has been added for migration of Windows 7 to Amazon Workspaces.
- VHD ProfileDisk temp files are stored outside the ProfileDisk to avoid unnecessary ProfileDisk growth.
- Export an entire configuration module
 - ProfileUnity today can export and import full configurations. However, with this release ProfileUnity can export an entire module of items and import them into an existing configuration.
- Export any configuration module item
 - ProfileUnity today can export and import full configurations. However, with this release ProfileUnity can export selected module items and import them into another existing module. This can be super helpful when you want to apply X number of updates to a configuration without replacing the entire configuration.
- ADMX import with GPO import directly from Active Directory
 - Since ProfileUnity is a full UEM tool and it processes user management changes faster than Group Policy, we have added the ability to move or augment GPO settings to ProfileUnity.
- Nodes.XML path for startup.exe is optionally read from Reg key from ADM(X).
 - This allows larger accounts to have one install path for the software and one path for how ProfileDisk is configured per OU.
- Startup.exe configuration can be update to not deploy certain ProfileUnity Services.
- Cred file for ProfileUnity as a Service reads from Reg key from ADM(X) set
 - This allows larger accounts to have one install path for the software and one path for how ProfileUnity as a Service is configured per OU.
- ProfileDisk VHD now support group assignments
 - You can now assign a group of users a VHD-based ProfileDisk. If the user is not part of that group, their login will not be held off.
- File Associations Module administrator controlled for Windows 7 & 10 and Windows Server 2008 R2
 - o This allows administrators to control what apps open for what file types.
- Portability updated to support capturing user authored file associations.
- Portability now support post login options to speed up login times.
- Portability replace/delete functions are now faster.
- Portability restore once tracker is now located in the root of the user's profile instead of next to the archive.



- FlexApp FlexDisk Mirroring
 - This allows VMDK-based FlexApp Layers to be replicated to many datastores across sites and across many Virtual Centers. This feature also includes bandwidth control.
- Updated FlexDisk Connection Server Monitor does not rely on View shared memory; now directly integrates into the ADSI database of View.
- FlexDisk/ProfileUnity to support any number of VMware vCenter Servers
 - o FlexDisk can now assign FlexApp Layers for any user in any Virtual Center (VC).
- ProfileDisk FlexDisk support for locking to a VMware pool
 - Today you can't lock ProfileDisk to a pool. The VMware broker doesn't know what desktop it gave you until later in the login process, which is useless. We have built technology to allow locking a ProfileDisk to a VMware pool.
- ProfileDisk changes that would be nested under a FlexApp DIA layer now persists to ProfileDisk.
- FlexApp HKCU values are written directly to the user's registry hive.
- FlexApp HKCU values are only written directly to the user's registry hive when the value does not exist.
- FlexApp playback of layers are 30-50% faster
- ProfileUnity client now supports counting the number of single user computers in an OU.
- System level Environment variables can be created using the Environment variable module.
- ProfileUnity UI exposes Direct to Host mode from FlexDisk.
 - Direct to Host mode reduces VC latency when attaching disks by spreading the load to each ESXi host.
- ProfileUnity database backup includes FlexDisk database.
- ProfileUnity.NET Guided Configuration Wizard: Added skip checkbox for Automatic AD GPO integration
 - This should make it easier for clients to see they can skip the Automatic configuration of ProfileUnity's GPOs.
- ProfileUnity.NET Guided Configuration Wizard: Added Deploy and Download Configuration buttons.
 - When pushing out configuration templates to be used by the ProfileUnity Client, AD admins can now have ProfileUnity deploy the Configuration by copying it to the Deployment Path by clicking on the Deploy button. Admins can click the Download Configuration button to download and manually copy the Configuration INI file to the location of the ProfileUnity Client. Or admins can click the Finish button without deploying the Configuration at all.
- Deploy Configuration INI file to deployment path with retention policy.
 - O It has been a long standing request to NOT have to download a Configuration INI and then manually copy it to the client deployment path. We have now added the option to just push Configuration INI live. Part of this feature is the ability to restore older versions of a Configuration in case you make a mistake. In the UI can you pick from the last 5 versions of automatic backups that were saved of your configuration.
- Global paths for Configuration, Filter, and Portability Rulesets to leverage.
 - Whenever you change servers in a data center it can impact other things like
 ProfileUnity settings. With Global Variables you can change a single path in one place it
 would change 100s of locations in various settings automatically within ProfileUnity.
- When inside a module and using the edit option after saving your changes, don't snap back to the top but stay in the current placement.



- When a line item inside a module is highlighted, clicking anywhere on the line defaults to edit mode.
- Portability support for C:\windows\system32 on 64-bit OS had been added, the administrator
 will be able to put in C:\windows\system32 or C:\Windows\SysWOW64 and have either
 honored.
- Portability Module and Registry Module Support for both 32- and 64-bit registry paths.
- Federated ProfileUnity with FlexDisk This would allow an active-active sites with many VCs be managed all from a single console. You would need to have a three node system at the main site and a min two node replica set at all the secondary sites. This would include us handing the replication of VMDK based FlexApp Layers to any site and any VC from a centralized location.

Issues Resolved

- Triggers don't follow LIC path set in GPO.
- Windows Server 2008 R2 filter only fires True when machine class is Terminal Server.
- Packages not playing back when IP used to configure VC.
- Filter Management Registry Key & Registry Value filters do not work using Contains, Does Not Contain, Begins With or Ends With match
- ProfileUnity was unable to install using a fabric password with " (space)" It cause FlexDisk Server to not start.
- FlexApp Packaging Console allowed delete of in use VMDK packages.
- CSMonitor requires users to manually change Connection String after uninstall/re-install.
- Persist FlexApp DIA HKCU Reg values was not working.
- Client continuously runs VHD with /FlexDisk when system DIA, Triggers are present.
- BSOD occurs when using APPV 5.1 with ProfileUnity.
- VM lockups due to virtual registry driver.
- Unsigned driver install support for FlexApp DIA, however Windows 7 still needs Microsoft Hotfix: KB2921916
- ICA session filter would not fire True for XenDesktop 7.5/7.6.
- Restoring registry fails when captured with Isolate sub keys/subdirectories.
- FlexApp Error 500 when trying to extend or configure a package.
- Registry module Browse Local/Server Importing Data is not imported when value is (Default).



COMPONENT VERSIONS

Component	6.5.5
Console UI	6.5.6037
FlexDisk Service	6.5.6037
Client	6.5.678
Client.NET	6.5.5.6031
VirtFS	2.1.6017
LWL UserApp Player	1.1.6624
LWL UserApp Service	1.1.6624
LWL Elevation Service	1.1.6624
FPC	6.5.5.6026
FPC Player	1.1.6624
FPC VirtFS	2.1.6017
CSMonitor	6.5.6002



Known Issues and Limitations

- FlexDisk does not support VMware vSan, support is pending the next release.
- When using 3rd party layering products you must fully disable FlexApp
- Migrating to ProfileDisk where portability is set too faster would cause any rulesets set to userprofile to restore outside ProfileDisk.
 - Workaround: Change portability to use no compression or smaller compression before migrating.
- When using license path and INI path at the same time, you cannot exceed a total combined character count of 238 characters; 22 are taken by the product.
- Windows 7/8 32-bit are no longer supported by the ProfileUnity Management Console.
- Non-English APAC Windows 7 and Windows XP is not supported; you must use ProfileUnity 5.0 with double-byte character support.
- The use of * in Privilege Elevation is no longer supported. To resolve this for FlexApp UIA, you would put in the Path Contains \\server\share\%username% and %userprofile%. This will auto approve anything trying to be installed from the user home share and profile path, for example Downloads, My Documents, Desktop.
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- Applications packaged on Windows 7 and played back on Windows 8.1/10 is best effort. With all the changes made to Windows 8.1/10, application vendors have had to make many change to their applications to make them compatible with Windows 8.1/10, and we cannot ensure applications will run correctly. The same would apply in reverse; applications packaged on Windows 8.1/10 are best effort support when played back on Windows 7/10.
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- If the customer has automatic root certificate updates disabled, ProfileUnity install may fail with data1.cab certificate error
 - Notes: FED and some commercial accounts following federal STIG guidelines could have automatic root certificate updates disabled causing them to not have the latest root cert our installer code was complied with the latest root certificates.
 - KB: https://liquidwarelabs.zendesk.com/entries/106422613-ProfileUnity-install-may-fail-if-automatic-root-certificate-updates-disabled-
- Using folder redirection on all of Appdata Local can cause the Windows 10 Start Menu to not work correctly.
- Using Portability on all of Appdata Local can cause long logins for Windows 10.
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- Windows 10 accent colors do not restore when using Portability.
- Windows 7 pinned Start Menu items don't migration to Windows 10 when using Portability.
- Windows 7 desktop background does not migrate to Windows 10 when using Portability.
- Installing ProfileUnity 6.5+ and Flex-IO on the same server is not supported.



- Windows 10 Edge settings restored by Portability are not accepted by Windows.
 - Workaround: Use ProfileDisk VHD or VMDK.
- Migrating a Windows 7 ProfileDisk to Windows 10 will cause the Windows 10 Start Menu to lock up.
- Packaging application on Windows 10 with FlexApp requires all C++ runtimes are installed in the base OS of the FlexApp packaging console and the target desktop. On Windows 10 64-bit you must install both x86 and x64 versions.
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 - i. https://www.microsoft.com/en-us/download/details.aspx?id=13523



ProfileUnity[™] and ProfileUnity FlexApp[™] Change Log/Release Notes

v 6.5.2.5896, Released March 2nd, 2016

What's New in ProfileUnity 6.5.2?

Issues Resolved

- Fabric does not work when the ProfileUnity password contains a ^ or two % signs.
- Importing 5.x/6.x configuration file (.json) of Configuration Management into ProfileUnity 6.5.1 both Filter and Portability Management create empty filter and ruleset.
- When a user clicks any one of the Portability Setting rules, it shows the next rule VHD ProfileDisk Windows 7 & 8, Template.
- ProfileUnity Web Service is missing after upgrade from 6.5 to 6.5.1.
- After upgrading from 6.0 to 6.5.1, ProfileUnity console login errors with "A referral was returned from the server".
- ProfileDisk/User Data Disks are removed from VMware View client VMs when View connection server Is rebooted.
- ProfileUnity 6.5.1 and 6.5 default filters (Windows 10, Windows 7 & 10 and Windows 7, 8.1, 10) of 6.5.1 settings are incorrectly displayed.
- Second ProfileDisk is created for user when alternate login format is username@Domain.
- ProfileDisk VHD is not created when path has a space.
- Startup Registry is not modified correctly for XenApp 7.5/7.6 (userinit).
- On a rare occasion when logging in with debug mode, you might get a printer error "Printers -InvalidOperationException...".
- Red X Drive issue resolved on Win7, 8, 10, 2008R2 and 2012 R2.
- XenApp 7.x ProfileUnity chain loader did not install correctly.
- Csmonitor fails to install when the password contains multiple \$ signs.
- Import of configurations from ProfileUnity 5.x fail to import.
- ProfileUnity Guided Configuration text incorrectly states nested groups are not supported for licensing. Text edited to note nested groups are supported.
- Windows 10 template service stopping order in user defined scripts order could cause logoffs to hang.
- Read only folders on the root of a VHD or VMDK are causing capture, playback and cloning issues for FlexApp DIA.
- Non-domain admin accounts cannot login to the ProfileUnity Console.
- When portability restore has a fatal error while logging is in fatal mode, the name of the
 portability archive with the error will be posted to the fatal log without needing to go into debug
 mode.
- When a blank path is given while enabling debug for all logs, the user logs will go to the users'
 %temp%\ProfileUnity and ProfileUnity system process logs will go to
 Windows\temp\ProfileUnity.



COMPONENT VERSIONS

Component	6.5.2
Console UI	6.5.5896
FlexDisk Service	6.5.5896
Client	6.5.641
Client.NET	6.5.2.5890
VirtFS	2.1.5829
LWL UserApp Player	1.1.6112
LWL UserApp Service	1.1.6112
LWL Elevation Service	1.1.6112
FPC	6.5.2.5878
FPC Player	1.1.6112
FPC VirtFS	2.1.5829
CSMonitor	6.5.5786



Known Issues and Limitations

- Migrating to ProfileDisk where portability is set to faster would cause any rule sets set to userprofile to restore outside ProfileDisk.
 - Workaround: Change portability to use no compression or smaller compression before migrating.
- Using ProfileDisk and FlexApp DIA where user registry settings overlap with FlexApp DIA registry settings, will cause user settings to never persist to the ProfileDisk.
 - Workaround: Turn on the portability rule called 3rd party that captures HKCU\Software, to persist these settings going forward until the next major product release.
- When using license path and INI path at the same time, you cannot exceed a total combined character count of 238 characters; 22 are taken by the product.
- Windows 7/8 32-bit are no longer supported by the ProfileUnity Management Console.
- Non-English APAC Windows 7 and Windows XP is not supported; you must use ProfileUnity 5.0 with double-byte character support.
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 the changes made to Windows 8.1/10, application vendors have had to make many change to
 their applications to make them compatible with Windows 8.1/10, and we cannot ensure
 applications will run correctly. The same would apply in reverse; applications packaged on
 Windows 8.1/10 are best effort support when played back on Windows 7/10.
- Dell vWorkSpace support has been removed, please contact Dell vWorkSpace Support for the correct version of vWorkSpace that supports ProfileUnity.
- Startup.exe will not run on 2008 R2 if .NET 3.5.1 is not enabled in features. LwL.ProfileUnity.Client.Startup. needs 3.5.1 to run.
 - Notes: On Windows 2008 R2 .NET 3.5.1 is NOT enabled out of the box. To enable it before running startup.exe, run this command from an elevated command prompt 'serverManagerCmd.exe -install Net-Framework', reboot, run Windows Updates, reboot then re-run startup.exe.
- If the customer has automatic root certificate updates disabled, ProfileUnity install may fail with data1.cab certificate error
 - Notes: FED and some commercial accounts following federal STIG guidelines could have automatic root certificate updates disabled causing them to not have the latest root cert our installer code was complied with the latest root certificates.
 - o **KB:**https://liquidwarelabs.zendesk.com/entries/106422613-ProfileUnity-install-may-fail-if-automatic-root-certificate-updates-disabled-
- Using folder redirection on all of Appdata Local can cause the Windows 10 Start Menu to not work correctly.
- Using Portability on all of Appdata Local can cause long logins for Windows 10.
- The desktop background does not restore from one Windows 10 persistent desktop to another on Windows 10 persistent desktop.
- Windows 10 accent colors do not restore when using Portability.
- User mapped drives show as a red X when using Portability to restore them on Windows 10. Contact support for a workaround.



- Windows 7 pinned Start Menu items don't migration to Windows 10 when using Portability.
- Windows 7 desktop background does not migrate to Windows 10 when using Portability.
- Installing ProfileUnity 6.5+ and Flex-IO on the same server is not supported.
- Windows 10 Edge settings restored by Portability are not accepted by Windows.
 - Workaround: Use ProfileDisk VHD or VMDK.
- Migrating a Windows 7 ProfileDisk to Windows 10 will cause the Windows 10 Start Menu to lock up.
- Packaging application on Windows 10 with FlexApp requires all C++ runtimes are installed in the base OS of the FlexApp packaging console and the target desktop. On Windows 10 64-bit you must install both x86 and x64 versions.
 - 2005 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=5638
 - 2005 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=18471
 - 2008 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=5582
 - 2008 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=2092
 - 2010 SP1 Redistributable Package (x86)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=8328
 - 2010 SP1 Redistributable Package (x64)
 - i. https://www.microsoft.com/en-us/download/details.aspx?id=13523