






## Application Layering technology cheat sheet 3.0

Vendors:	Citrix App Disks 	VMware App Volumes 	Liquidwarelabs FlexApps 	Unidesk - Now part of Citrix 	Fslogix App Containers 
Write (mini) Filter Driver:	Yes.	Yes.	Yes.	Yes.	AD driver filter / image masking technology (patented).
Supported Hypervisors:	XenServer & ESXi.	ESXi, Hyper-V (in-guest*).	ESXi, Acropolis (in-guest*).	XenServer, ESXi & Hyper-V, Acropolis.	In-guest Windows*.
Persistent & non-persistent:	Both.	Both.	Both.	Both.	Both.
Support for VHD & VMDK's:	Both.	Both.	Both.	Both.	Both.
Personal (data / app) disk:	Yes / PVD.	Yes / Writeable Volumes*.	Yes / ProfileDisk (similar to Fslogix's Profile Containers) VHD & VMDK.	Yes / Personalization layers.	No, though Profile Containers could be used here as well.
User profile management:	Yes / CTX Profile Mgmt. and Workspace Environment Management.	Yes / User Environment Manager (former Immidio).	Yes / through the Profile Unity integration.	Perhaps / CTX Profile Mgmt. and Workspace Environment Management.	Yes / Profile Container.
Virtual & physical machines:	Virtual only.	Virtual & Physical (non-persistent).	Virtual & Physical.	Virtual & Physical (soon).	Virtual & Physical.
Assign to users & machines:	Machines only.	Machines & Users.	Machines & Users.	Machines & Users - Deliver layers at logon to individual Citrix XenApp or RDSH sessions (in-guest*).	Users only.
License types:	Part of all XA & XD edt. by default.	10 and 100-pack bundled offerings on a named and concurrent connection basis. Available in Standard, Advanced and Enterprise.	Concurrent / named user. Pricing is available on their website.	Part of all Citrix XenApp & XenDesktop versions/licenses. Cloud portability and Elastic layering will be Enterprise features only.	Concurrent / named user. The Office 365 Container is sold as a separate drop-in module from the Profile Container solution.
Agent install needed:	Receiver / VDA.	Yes.	Yes.	Yes.	Yes.
Alongside App-V & ThinApp:	Yes.	Yes.	Yes.	Yes.	Yes.
Separate mgmt. Console:	No. CTX Studio integration.	Yes. Unified Management Console (app & user Mgmt. + monitoring). Web based.	Yes. Web based.	Yes. Web based.	Yes. Application rule editor.
Lifecycle mgmt. Options:	Yes.	Yes.	Yes.	Yes.	No.
Product information / URL's:	<a href="#">App Disks e-docs</a>	<a href="#">App Volumes</a>	<a href="#">FlexApp &amp; ProfileUnity</a>	<a href="#">Application Delivery</a>	<a href="#">Fslogix Apps</a>
Various, misc.	Citrix AppDNA and Azure integration. App Disks as well as Pvd will be slowly phased out by Unidesk.	AppToggle a patent pending capability that enables per user entitlement and installation of applications within a single AppStack.	Nutanix integration. Micro isolation to resolve application file conflicts.	Nutanix integration. RES partnership. VMware is still supported as well (stand-alone product licenses will be available).	Office 365 containers. Enable cached Exchange modus plus improved Outlook real-time search on CTX XenApp & RDSH.
Platform support:	XenApp, XenDesktop & the Citrix Cloud.	XenApp & XenDesktop, View, Horizon & RDSH.	XenApp & XenDesktop, View, Horizon & RDSH, Azure & AWS.	XenApp & XenDesktop, View, Horizon, RDSH, Azure & AWS.	XenApp & XenDesktop, View, Horizon & RDSH.
Other tooling & services:	Yes. Citrix XenApp, XenDesktop, XenMobile, NetScaler etc.	Yes. vSphere, ESXi, vCenter, VMware View, Horizon, NSX, Virtual SAN etc.	Yes. Stratusphere FIT & UX (assessment, monitoring, diagnostics), FlexDisk & Flex-IO (storage acceleration for non-persistent VDI on VMware). Both are part of Profile Unity.	Yes. Next to App layering they also provide OS layering, Personalization layering, VM provisioning and lifecycle management capabilities.	Yes. Their focus is on AD based filters (image masking) to expose only what each user is allowed to see, which enforces licensing, ensuring compliance.