XenDesktop and XenApp Licensing: Frequently Asked Questions

This document is intended for use by Citrix partners and customers and answers frequently asked questions about Citrix XenDesktop and XenApp packaging, pricing, and licensing and has been updated to cover XenDesktop and XenApp 7.6 Feature Packs 1 & 2.

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LICENSING OVERVIEW

How is XenDesktop packaged?

XenDesktop is currently offered in VDI, Enterprise and Platinum Editions:

- **Citrix XenDesktop™ 7.6, Platinum Edition.** Comprehensive enterprise-class, cloud-ready desktop virtualization solution with HDX™ technology, FlexCast™ delivery technology, advanced management, monitoring and security.
- **Citrix XenDesktop™ 7.6, Enterprise Edition.** Enterprise-class desktop virtualization solution with HDX™ technology and FlexCast™ delivery technology that delivers a range of virtual app and desktop delivery models for any use case.
- **Citrix XenDesktop™ 7.6, VDI Edition.** High-performance VDI solution for delivering virtual desktops with Citrix HDX™ technology.

In addition, Citrix offers Citrix XenDesktop EVAL – a simple, free download for up to 99 users for 90 days that enables IT pros to get started easily.

How is XenApp packaged?

XenApp is currently offered in Advanced, Enterprise and Platinum Editions:

- **Citrix XenApp™ 7.6, Platinum Edition.** Comprehensive enterprise-class, cloud-ready app virtualization solution with HDX™ technology, advanced management, monitoring and security.
- **Citrix XenApp™ 7.6, Enterprise Edition.** Enterprise-class app virtualization solution with HDX™ technology that delivers a range of virtual app and remote access models for any device.
- **Citrix XenApp™ 7.6, Advanced Edition.** High-performance app virtualization solution with Citrix HDX™ technology.

In addition, Citrix offers Citrix XenApp EVAL – a simple, free download for up to 99 users for 90 days that enables IT pros to get started easily.

How is XenDesktop licensed?

Citrix XenDesktop product licensing offers a flexible user/device license model that aligns with enterprise-wide desktop usage and the underlying Microsoft desktop virtualization licensing, and concurrent licensing for customers with users needing only occasional access to their virtual desktops and apps.

User licensing gives users access to their virtual desktops and apps from an unlimited number of devices, and device licenses gives an unlimited number of users access to their virtual desktops and apps from a single device. This approach provides customers with maximum flexibility and also improves alignment with Microsoft desktop virtualization licensing.

How is XenApp licensed?

Citrix XenApp product utilizes a concurrent licensing model. With the XenApp concurrent model, users are anonymous and a license is consumed by each concurrent user to one or more apps and/or XenApp published desktops. A licensed concurrent user is an anonymous floating user only licensed for the period during which access to the Citrix environment is required. Once access is terminated by the anonymous
user, the license is immediately returned to the license pool and available for another anonymous user to consume.

**Is it possible to try XenDesktop or XenApp prior to purchasing licenses?**

Yes, customers can download XenDesktop or XenApp software and run it in trial mode. Trial mode gives customers the ability to use XenDesktop or XenApp for 30 days for 10 users without a license. At the end of the trial period, customers must either download a free EVAL license (99 users for 90 days) or purchase XenApp or XenDesktop licenses to continue using the product.

**How does Citrix define concurrency for XenDesktop and XenApp?**

With the XenDesktop or XenApp concurrent model, users are anonymous and a license is consumed by each concurrent user to one or more apps and/or virtual desktops. A licensed concurrent user is an anonymous floating user only licensed for the period during which access to the Citrix environment is required. Once access is terminated by the anonymous user, the license is immediately returned to the license pool and available for another anonymous user to consume.

**How does Citrix define a licensed user of XenDesktop?**

With XenDesktop a licensed user simply requires a unique user ID, typically an Active Directory entry, or the equivalent. There is no requirement to manage a separate or specific list of authorized users. If multiple users are sharing the same user ID, they will each require a XenDesktop user license. If a user connects to their desktop(s) and/or apps with multiple devices (e.g. desktop PC, laptop, netbook, smartphone and/or thin client) the user needs just one XenDesktop user license, even if all of the user’s devices are connected to one or more instances of XenDesktop simultaneously.

**How does Citrix define a licensed device for XenDesktop?**

With XenDesktop a licensed device simply requires a unique device ID. Under the device model, a device is any piece of equipment authorized by the customer to be used by any individual(s) to access instances of XenDesktop. For a shared device, like a classroom workstation, or a clinical workstation in a hospital, a single XenDesktop device license can support multiple users.

**How does concurrent licensing work differently from user/device licensing?**

Concurrent licensing is based on concurrent device connections. A concurrent license is only considered “in use” when a device has established an active connection. Once the connection ends, the concurrent license is returned to the license pool for immediate use by another user. This licensing model is best for occasional or anonymous usage. Whereas under the user/device model, the licenses remain assigned to a user or device and are not available for reassignment until 90 days of inactivity have passed.

**Can I convert my XenDesktop VDI Edition concurrent licenses to the user/device model?**

Yes, XenDesktop VDI Edition concurrent licenses can be converted to the user/device license model of either XenDesktop Enterprise or Platinum Edition. However, XenDesktop VDI Edition concurrent licenses cannot be converted to XenDesktop VDI Edition user/device licenses. Similarly, XenDesktop VDI Edition user/device licenses cannot be converted to XenDesktop VDI Edition concurrent licenses.
Can I convert my XenDesktop App Edition licenses to XenApp licenses?

Yes, XenDesktop App Edition customers with active SA will be have the option to either remain an App Edition customer or convert their existing licenses for a no cost upgrade to XenDesktop Enterprise or migration to XenApp Enterprise as specified in the table below:

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>License Conversion Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>XenDesktop VDI Edition</td>
<td>XenDesktop-Ent User/Device*</td>
<td>1:1</td>
</tr>
<tr>
<td>Enterprise licenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XenDesktop VDI Edition user</td>
<td>XenDesktop-Ent Concurrent*</td>
<td>1:1</td>
</tr>
<tr>
<td>device licenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XenDesktop-App Concurrent</td>
<td>XenApp-Ent Concurrent</td>
<td>1:1</td>
</tr>
</tbody>
</table>

*Higher Subscription Advantage (SA) costs will apply.

Under the user/device model, can licenses be assigned to both users and devices in the same enterprise?

Yes, both types can be present in the same enterprise. The license server will optimally assign licenses to users or devices based on usage.

How does a customer decide how many users/devices to license?

Customers should assess their use case requirements to determine the appropriate number of user or device licenses. User licensing enables unlimited access to unlimited virtual desktops and virtual apps from an unlimited number of devices. Device licensing enables unlimited access to unlimited virtual desktops and virtual apps from a single device that can be used by an unlimited number of users. Users who require unlimited access to their virtual desktops or need access from multiple devices are best served with a user license. Users who share a single device are best served by a device license. The following formula can be considered:

\[
\text{(Number of total users)} - \text{(number of users that only access via shared devices)} + \text{(number shared devices)} = \text{total number of licenses to buy.}
\]

For example, if there are 1000 total users at the hospital. If 700 of them only access XenDesktop from 300 shared devices in the hospital, then the number of licenses to purchase is: \(1000 - 700 + 300 = 600\) licenses.
Under the user/device model, what is the maximum number of devices a XenDesktop licensed user can use to connect to my environment?

Each licensed user is entitled to use an unlimited number of connected or offline devices.

Under the user/device model, what is the maximum number of users who can access a XenDesktop licensed device?

Each licensed device can service an unlimited number of users within an organization.

Under the user/device model, what is the maximum number of virtual desktops a XenDesktop licensed user can consume at any given time?

Each licensed user is entitled to connect to an unlimited number of virtual desktops.

What is the maximum number of virtual applications a XenDesktop licensed user can consume at any given time?

Each licensed user is entitled to connect to an unlimited number of virtual applications.

What happens if a licensed user of XenDesktop exits my organization?

If an existing licensed user leaves a customer’s organization, the customer has the right to release the departing user’s license without notifying Citrix. The release of the licenses is done using the “udadmin” utility. If the administrator does not use the utility to release the license, the license server will automatically release any license after 90 days of inactivity.

What happens if a licensed user of XenDesktop is absent for a protracted period of time?

Should an existing licensed user experience a protracted period of absence, the customer has the right to release the license without notifying Citrix so that it becomes available for reassignment. The administrator can use the “udadmin” utility to release the license.

What happens if a licensed device of XenDesktop is replaced in my organization?

If an existing licensed device is replaced in a customer’s organization, the customer has the right to release the license without notifying Citrix so that it becomes available for reassignment. The administrator can use the “udadmin” utility to release the license.

What happens if a XenDesktop licensed device is out of service for a period of time?

If an existing licensed device is out of service for a period of time, the customer has the right to release the license without notifying Citrix so that it becomes available for reassignment. The administrator can use the “udadmin” utility to release the licenses.

Can user licenses be switched to device licenses and vice-versa after they have been assigned to a device or user?

Yes, this happens automatically. The license server will assign licenses to either users or devices based on usage patterns. If usage patterns change, then the license server may switch the assignment based upon the
new usage. Licenses are always assigned in the most economical fashion for the customer. Additionally, licenses are monitored to identify “un-used” licenses after their 90-day assignment period. Licenses identified as unused after the 90-day assignment period are available to be re-assigned to other users or devices.

**LICENSE MANAGEMENT**

**How do I license XenDesktop environments in compliance with the XenDesktop EULA?**

To deploy XenDesktop under the user/device or the concurrent license model in compliance with the XenDesktop EULA, you need only apply the license file(s) to your license server. The license server will then control/monitor license compliance.

**How do I license XenApp environments in compliance with the XenApp EULA?**

To deploy XenApp under the concurrent license model in compliance with the XenApp EULA, you need only apply the license file(s) to your license server. The license server will then control/monitor license compliance.

**How can I get my license file?**

There are now two ways to generate license files using your License Access Code you received via email. In addition to using the “Manage Licenses” toolbox from your My Account page on Citrix.com, you can use Studio to fully allocate your purchase and the license file will automatically get installed on your license server. For more information see “Licensing Your Product” under the Technologies node in Citrix eDocs.

**What TCP ports are used for Citrix Licensing?**

The License Server utilizes port 27000 and the Vendor Daemon utilizes port 7279.

**What is the Citrix License Server?**

The Citrix License Server is a system that allows licenses to be shared across the network. For more information, see Architecture.

**Can I virtualize the Citrix License Server?**

Yes.

**What benefits are available to me if I virtualize the Citrix License Server?**

Customers who virtualize the Citrix License Server are provided with a redundant solution that allows for mobility between multiple physical servers without the need for down time.

**Are there any limitations that I should consider if I virtualize the Citrix License Server?**

No.
Will the Citrix License Server manage all the licenses that I need for my XenDesktop and XenApp deployment?

All licenses you receive for XenDesktop and XenApp are managed with the Citrix License Server, with the exception of licenses in the Platinum Edition used with NetScaler Gateway (fna, Access Gateway) and CloudBridge VPX (fna, Branch Repeater) in XenDesktop Platinum Edition only. Those licenses are managed on license servers built-in to the network appliances as required for those security-oriented network devices.

What is the Citrix License Administration Console?

The License Administration Console is an interface that enables customers to manage the licenses for Citrix infrastructure.

You can use Studio to manage and track licensing, provided the license server is in the same domain as Studio, or in a trusted domain. For information about other licensing tasks, see “Licensing Your Product” under the Technologies node in Citrix eDocs.

What is the license assignment period?

The license assignment period is the term that a XenApp or XenDesktop license will be assigned to a user or device. The default license assignment period is 90 days. Longer assignment periods are always permitted. Reassignment may occur in a shorter period under limited circumstances.

How do I reassign an authorized user/device license?

To release the assignment of an authorized user/device, the administrator should use the “udadmin” utility in accordance with the EULA terms. The license server will then reassign to the appropriate user/device.

How do I know how many licenses my organization has purchased?

All purchased licenses are available to review and access at any time (24x7) from your secure “Manage Licenses” toolbox found on your My Account page on www.citrix.com.

How do I know how many licenses are in use at any time?

The License Administration Console and Studio provide administrators details on real time license use.

What happens if I exceed my purchased user/device license count?

Under the user/device model, in scenarios where you exceed your purchased license count of XenDesktop, you can take advantage of the XenDesktop license overdraft feature exclusive to XenDesktop. The overdraft feature enables customers experiencing unexpected growth or usage spikes to continue to temporarily grant uninterrupted access and subsequently time to purchase the new licenses that are needed. Please note, should the usage spike exceed the overdraft amount, user access will be denied and a new license must be purchased and deployed to enable access for additional users. The overdraft feature is not available with the concurrent license model or any other Citrix products.
What happens if I exceed my purchased concurrent license count?

Under the concurrent license model, there is a 15-day grace period feature to prevent customers from experiencing denial of service to users exceeding the number of available licenses. After the 15-day grace period has expired, if the number of purchased/available licenses is exceeded all users over the limit will be denied access; it is recommended that customers purchase additional licenses or reduce the number of licenses in use.

**LICENSE OVERDRAFT**

What is the license overdraft feature?

The XenDesktop license overdraft feature is specific to user/device license model deployments **ONLY** and allows a limited number of additional user licenses to be provided to support temporary spikes in demand until such time as an additional purchase can be completed.

How do I get overdraft licenses?

XenDesktop customers will automatically receive 10% XenDesktop overdraft licenses when they allocate their XenDesktop licenses after purchase. Overdraft licenses are available for use when all licenses are allocated. Overdraft usage is reported within Studio.

How can I identify license overdraft?

The license overdraft count will be displayed in a separate column within the License Administration Console. Please note the installed column will display both the purchased license total plus the associated overdraft total. Overdraft usage is also visible in Studio.

What happens when a license is consumed from the overdraft feature?

A license is assigned from your installed licenses to enable access to your XenDesktop environment. This overdraft license provides the same level of access and functionality as your other edition specific licenses.

Can I get an alert when my overdraft licenses are consumed?

At this time, there are no specific alerts provided when overdraft licenses are consumed.

How long can an overdraft license be consumed?

Overdraft licenses have the same behavior as a retail user/device license; therefore, they are subject to the same 90-day assignment period.

**MIXED ENVIRONMENT LICENSING**

Can customers purchase XenDesktop licenses to increase the number of licensed users/devices in their existing XenDesktop environment?

Yes, customers can purchase XenDesktop licenses to increase the number of licensed users/devices in their existing XenDesktop environment.
Can XenDesktop concurrent licenses from a previous version and new XenDesktop user/device or concurrent licenses be deployed to a single license server?
Yes, customers can continue to utilize the same license server to support user/device or concurrent licensed deployments of XenDesktop.

Can XenApp concurrent licenses and XenDesktop user/device or concurrent licenses be deployed to a single license server?
Yes, customers can continue to utilize the same license server to support XenApp concurrent and XenDesktop user/device or concurrent licensed deployments.

Can I deploy multiple editions of XenDesktop and XenApp licenses on a common license server?
Yes, the License Server can manage licenses to enable XenDesktop EVAL, VDI, Enterprise and Platinum Editions and XenApp EVAL, Advanced, Enterprise and Platinum simultaneously. (Note: App Edition licenses can continue to be managed simultaneously.)

Can a single XenDesktop site utilize both XenApp and XenDesktop licenses?
No, a XenDesktop site cannot support multiple editions from a single deployment. A single XenDesktop site can only support one edition and one licensing model- user/device or concurrent. For example, if the license server has XenDesktop Enterprise and XenDesktop Platinum licenses, the customer would need to have one XenDesktop 7.6 environment for the Enterprise licenses and another XenDesktop 7.6 environment for Platinum licenses. If the license server has XenApp Enterprise and XenDesktop Enterprise licenses, there needs to be one XenApp 7.6 environment for XenApp Enterprise licenses and one XenDesktop 7.6 environment for the XenDesktop Enterprise license.

Can I select XenApp Concurrent as a product model if I have XenDesktop User/Device or XenDesktop Concurrent licenses installed on the license server?
If you receive XenApp as a component of the Enterprise or Platinum Edition of XenDesktop, your XenApp license model is the same as your Enterprise or Platinum Edition of XenDesktop. You can select XenApp as a product model only if you have XenApp Concurrent standalone licenses installed on the license server.
What product components are included with each XenDesktop 7.6 edition?

Full XenDesktop feature matrix by edition is available here:

See summary table below:

<table>
<thead>
<tr>
<th>Product Component</th>
<th>VDI</th>
<th>Enterprise</th>
<th>Platinum</th>
</tr>
</thead>
<tbody>
<tr>
<td>AppDNA</td>
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<td>✓</td>
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<tr>
<td>CloudBridge Plug-in</td>
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<td>CloudBridge VPX</td>
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<tr>
<td>Optimization Pack for MS Lync</td>
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<td>Remote PC Access</td>
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<tr>
<td>OpenGL Accelerator</td>
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<td>✓</td>
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<tr>
<td>License Management Console</td>
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<tr>
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<tr>
<td>Profile Management</td>
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<tr>
<td>Provisioning Services</td>
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<tr>
<td>SmartAccess</td>
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<td>Receiver</td>
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<td>Citrix Director</td>
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<tr>
<td>Citrix Studio</td>
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<td>Delivery Controller</td>
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<td>Virtual Delivery Agent</td>
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<td>XenServer Virtualization Platform</td>
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<tr>
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</tr>
<tr>
<td>XenApp 7.6 Enterprise</td>
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<tr>
<td>XenApp 7.6 Platinum</td>
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</tbody>
</table>

* Supports provisioning hosted virtual desktops and virtual servers on server systems that are part of the Citrix-provided XenDesktop deployment

** NetScaler Gateway platform licenses included in every NetScaler Gateway appliance provide secure remote access for VDI and Enterprise editions

What features of XenDesktop are licensed via the Citrix License Server?

The Citrix License Server manages the following features of XenDesktop: Delivery Controller, Provisioning Services, on-demand application delivery, EdgeSight performance monitoring, AppDNA, and HDX 3D graphics features.
What product components are included with each XenApp 7.6 edition?

Full XenApp feature matrix by edition is available here:


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<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

* Provisioning Services for XenApp Enterprise is only available for VMHosted applications instances.
** NetScaler Gateway platform licenses included in every NetScaler Gateway appliance provide secure remote access for VDI and Enterprise editions.

What features of XenApp are licensed via the Citrix License Server?

The Citrix License Server manages the following features of XenApp: Delivery Controller, Provisioning Services, on-demand application delivery, EdgeSight performance monitoring, AppDNA, and HDX 3D graphics features.

What features of XenDesktop and XenApp are licensed individually?

Secure access (NetScaler Gateway) and WAN optimization features (CloudBridge) are licensed individually because licenses can be deployed on an integrated license server on the appliance or on a shared license server in a data center.
Is AppDNA available as part of XenDesktop and XenApp Platinum Edition?

Yes. XenDesktop 7.6 and XenApp 7.6 Platinum Editions will include the full feature set of Citrix AppDNA™ application migration technology. Customers on any previous version of XenApp Platinum or XenDesktop Platinum who are also current on Subscription Advantage (SA) can access AppDNA 7.6 through the regular Citrix download process (My Account on Citrix.com). With the inclusion in Platinum editions, AppDNA standalone products will no longer be for sale; the AppDNA standalone product end of sale date is November 30th, 2014.

How is AppDNA licensed within XenDesktop and XenApp?

XenDesktop Platinum customers with active Subscription Advantage (SA) are entitled to the full feature set of AppDNA. AppDNA can be utilized to process any applications that are intended for use by users covered by XenDesktop or XenApp Platinum licenses. There is no limit on the number of applications that may be processed by AppDNA. Applications that are reported by AppDNA as not being suitable for virtualization may continue to be deployed on physical desktops with the expectation that the virtualization compatibility issues will be remediated and the application will be deployed in a XenDesktop or XenApp environment within 2 years.

How is the AppDNA licensed within an existing XenDesktop and XenApp environment?

A XenDesktop or XenApp Platinum license will need to be installed on the Citrix License server to enable AppDNA. AppDNA validates that a XenDesktop or XenApp Platinum license is present the first time the software is installed or anytime AppDNA is updated thereafter. The XenDesktop or XenApp environment does not need to be upgraded to XenDesktop or XenApp 7.6 to enable AppDNA, but only the AppDNA 7.5 and 7.6 software components included in the XenDesktop or XenApp Platinum Edition media kits will recognize the XenDesktop or XenApp Platinum license.

Is it possible to try AppDNA prior to purchasing XenDesktop or XenApp Platinum licenses?

Yes, the AppDNA software is available as part of the XenDesktop and XenApp trial. The AppDNA software includes a built-in trial license that provides customers the ability to analyze their complete application portfolio to determine the percentage of applications that are compatible with specific operating systems, as well as providing more detail application compatibility information for 5 applications.

Which editions of XenDesktop include Remote PC Access?

The Remote PC Access feature is included in the XenDesktop Enterprise and Platinum editions. Existing XenDesktop VDI, App and EVAL customers must upgrade to XenDesktop Enterprise or Platinum to use the Remote PC Access feature.

Which editions of XenDesktop include Machine Creation Services?

Machine Creation Services are included in the following editions of XenDesktop: VDI, Enterprise and Platinum editions.
**Which editions of XenApp include Machine Creation Services?**

Machine Creation Services are included in all editions of XenApp, including Advanced, Enterprise and Platinum editions.

**What types of systems can I provision with the Machine Creations Services feature in XenDesktop VDI edition?**

Within XenDesktop you may use the Machine Creation Services to provision desktop grade operating systems to virtual desktops and server grade operating systems to XenApp servers that are part of the Citrix-provided XenDesktop deployment.

**What types of systems can I provision with the Machine Creations Services feature in XenApp?**

Within XenApp you may use the Machine Creation Services to provision server grade operating systems that are part of the Citrix-provided XenApp deployment.

**Which editions of XenDesktop include Provisioning Services?**

Provisioning Services are included in the following editions of XenDesktop: VDI, Enterprise and Platinum editions.

**Which editions of XenApp include Provisioning Services?**

Provisioning Services are included in the following editions of XenApp: Platinum editions. Provisioning Services for XenApp Enterprise is only available for VMHosted applications instances.

**What types of systems can I provision with the Provisioning Services feature in XenDesktop VDI Edition?**

Within XenDesktop VDI edition you may use the Provisioning Services feature to provision desktop grade operating systems to virtual desktops that are part of the Citrix-provided XenDesktop deployment.
What types of systems can I provision with the Provisioning Services and Machine Creation Services feature in XenDesktop Enterprise and Platinum Edition?

Within XenDesktop Enterprise and Platinum Edition you may use the Provisioning Services or Machine Creation Services feature to provision any FlexCast desktop or application delivery technology including desktop grade operating systems to any and all physical desktops or virtual desktops and thin client devices that are part of the Citrix-provided XenDesktop deployment. You may also provision any physical or virtual server systems inclusive of XenApp servers for either hosted-shared desktops or XenApp hosted apps.

<table>
<thead>
<tr>
<th>Provision Type</th>
<th>XenDesktop VDI</th>
<th>XenDesktop Enterprise</th>
<th>XenDesktop Platinum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop or Server OS to Physical Desktop</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Desktop OS to Virtual Desktop (VDI)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Server OS to Virtual Desktop (Server VDI)</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Desktop or Server OS to Thin Client</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Server OS for Hosted Desktop on Physical Server (XenApp)</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Server OS for Hosted Desktop on Virtual Server (XenApp)</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Server OS for Hosted Apps on Physical Server (XenApp)</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Server OS for Hosted Apps on Virtual Server (XenApp)</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>XenDesktop Infrastructure Physical Servers</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>XenDesktop Infrastructure Virtual Servers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Other servers, whether virtual or physical, must be part of the Citrix-provided XenDesktop deployment which includes any FlexCast desktop or application delivery technology.

Any server, whether virtual or physical, that is not part of the Citrix-provided XenDesktop deployment are not permitted to be provisioned or provisioned to as part of these entitlements.

Where are the XenDesktop and XenApp version upgrades located?

Version upgrades are available from citrix.com in the My Account portal under Toolbox / Upgrade My Products / Version Upgrade Options. Once in this section, instructions are available to download the XenDesktop version upgrade.

How is EdgeSight technology in Director licensed in XenDesktop and XenApp 7.x environment?

EdgeSight enables features and functionality within Director based on the version of the XenDesktop and XenApp license available.

XenDesktop and XenApp – All editions
• Includes real-time monitoring and basic troubleshooting for up to 7 days of data

XenDesktop and XenApp Platinum Edition adds:
• EdgeSight performance management— with up to a full year of trend data available, detailed performance management, capacity management, and SLA monitoring let you keep track of your infrastructure.
• Network analysis – provided by NetScaler HDX Insight, this advanced feature makes it possible to isolate and manage your ICA network performance.

Additional performance management and network analysis is available when EdgeSight is integrated with Citrix NetScaler HDX Insight.

**Can EdgeSight technology in XenDesktop and XenApp 7.x Director monitor previous versions of XenDesktop and XenApp?**

Yes, customers may use EdgeSight in XenDesktop Director to monitor lower versions of XenDesktop VDA (5.6 or below), but a XenDesktop 7.x Delivery Controller must be used and limited data will be monitored. Customers may use EdgeSight in XenApp Director to troubleshoot user sessions in lower versions of XenApp (6.5), but EdgeSight in Director does not monitor the XenApp 6.5 farm.

**How is EdgeSight licensed in previous versions of XenDesktop?**

Legacy EdgeSight cannot monitor a XenDesktop 7.x environment. The following table provides guidance on EdgeSight 5.x for XenDesktop 5.6 or lower:

<table>
<thead>
<tr>
<th>License Bundle</th>
<th>EdgeSight for XenApp Advanced Agent*</th>
<th>EdgeSight for XenApp Basic Agent**</th>
<th>EdgeSight for VDA Agent</th>
<th>EdgeSight for EndPoint Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>XenDesktop 5.x Platinum</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
</tr>
<tr>
<td>EdgeSight for EndPoints</td>
<td></td>
<td></td>
<td></td>
<td>Included</td>
</tr>
</tbody>
</table>

*EdgeSight Advanced: Basic functionality plus application & desktop usage and end user experience data is collected
**EdgeSight Basic: High level performance monitoring and troubleshooting is collected for XenApp servers and apps
***EdgeSight for EndPoint Agent: Is included in XenDesktop Platinum or it can be purchased as a stand-alone product. An EndPoint is defined as the client machine used to access virtual apps and desktops.

**How is profile management licensed in a XenDesktop or XenApp environment?**
Profile management requires that an authentic XenDesktop VDI, Enterprise or Platinum edition license or XenApp Advanced, Enterprise or Platinum edition license is installed on a license server.

How is Citrix XenServer licensed in a XenApp or XenDesktop environment?

With Citrix XenServer 6.5, no additional licensing is required. XenApp and XenDesktop customers are entitled to use Citrix XenServer features in conjunction with all other Citrix components included in their respective XenApp/XenDesktop edition. Access to individual component updates is based on active software maintenance for those components is based on the terms of the customer’s support contract.

What are the constraints on the use of the advanced virtualization management capabilities (aka XenServer Enterprise) delivered as part of XenDesktop?

Every edition of XenApp and XenDesktop has access to many of XenServer’s advanced virtualization management features, with a few features only being accessible by the Platinum editions of XenApp or XenDesktop. A complete list of all features enabled by a XenApp or XenDesktop license can be found on the XenServer v6.5 Feature Matrix.

Use of the XenServer entitlements permits virtualization of any and all infrastructure required to deliver XenApp and XenDesktop feature components accessed exclusively by XenApp or XenDesktop licensed users or devices.

Additional infrastructure support servers, such as Microsoft domain controllers and SQL servers are also covered by this entitlement; providing they are deployed in the same Citrix XenServer resource pool as the XenApp or XenDesktop infrastructure covered by this license, and providing those support servers are used to support the XenApp or XenDesktop infrastructure only.

The Citrix XenServer entitlement contained within the XenDesktop or XenApp license may not be used for Citrix XenServer resource pools which do not host XenDesktop or XenApp infrastructure or Virtual Deliver Agents (VDAs). Citrix XenServer must be purchased separately for these resource pools.

Two product editions are available with Citrix XenServer 6.5; Standard and Enterprise. Each has a set of features and capabilities that can be purchased on a per-CPU socket basis, either as a perpetual or annual based license.

How is Secure Access licensed in a XenDesktop or XenApp environment?

The Secure Access feature of XenDesktop and XenApp Platinum edition is licensed by the NetScaler Gateway Universal license. Secure Access includes advanced access control and data protection features which are enabled when you deliver the NetScaler Gateway Universal license on NetScaler Gateway Advanced or Enterprise software. The Secure Access feature of XenDesktop VDI or Enterprise edition or XenApp Advanced or Enterprise edition is enabled by the NetScaler Gateway Platform license. The NetScaler Gateway Platform license must be deployed to a NetScaler Gateway VPX or appliance running NetScaler Gateway Standard Edition 4.6 or later, or to a NetScaler Gateway Enterprise Edition or NetScaler appliance running version 9.2 or later.

What NetScaler Gateway license is delivered to enable the Secure Access feature of XenDesktop VDI and Enterprise Editions?
The Secure Access feature of XenDesktop VDI and Enterprise Editions is enabled by a NetScaler Gateway Platform license. The Platform license is included when you purchase NetScaler Gateway and enables secure remote access to hosted desktops without requiring a VPN tunnel.

**What NetScaler Gateway license is delivered to enable the Secure Access feature of XenApp Advanced and Enterprise Editions?**

The Secure Access feature of XenApp Advanced and Enterprise Editions is enabled by a NetScaler Gateway Platform license. The Platform license is included when you purchase NetScaler Gateway and enables secure remote access to published apps without requiring a VPN tunnel.

**What NetScaler Gateway license is delivered to enable the Secure “Smart Access” feature of XenDesktop Platinum Edition or XenApp Platinum Edition?**

The Secure “Smart Access” feature of XenDesktop Platinum Edition is enabled by a NetScaler Gateway Universal license. NetScaler Gateway Universal licenses enable all NetScaler Gateway features and can be deployed on all NetScaler Gateway MPX or VPX models.

**Are there restrictions to the NetScaler Gateway Appliances that can be deployed in a XenDesktop VDI or Enterprise Edition environment?**

No. The Secure Access feature of XenDesktop VDI or Enterprise Editions is enabled by a NetScaler Gateway Platform license. The NetScaler Gateway Platform license enables secure remote access to hosted desktops and can be deployed on all NetScaler Gateway MPX or VPX models.

**Are there restrictions to the NetScaler Gateway Appliances that can be deployed in a XenApp Advanced or Enterprise Edition environment?**

No. The Secure Access feature of XenApp Advanced or Enterprise Editions is enabled by a NetScaler Gateway Platform license. The NetScaler Gateway Platform license enables secure remote access to hosted desktops and can be deployed on all NetScaler Gateway MPX or VPX models.

**Are there restrictions to the NetScaler Gateway or NetScaler Appliances that can be deployed in a XenDesktop Platinum Edition or XenApp Platinum Edition environment?**

No. The Secure Access feature of XenDesktop and XenApp Platinum Edition is enabled by a NetScaler Gateway Universal license. NetScaler Gateway Universal licenses enable all features across each NetScaler Gateway Edition and can be deployed on all NetScaler Gateway MPX or VPX models.

**Is Secure Gateway supported in a XenDesktop or XenApp 7.x environment?**

The legacy Secure Gateway feature is not supported with XenDesktop 7.x or XenApp 7.x. NetScaler Gateway is the recommended method of secure remote access for HDX traffic for all FlexCast desktop and application delivery models.

**Is Web Interface supported in a XenDesktop or XenApp 7.x environment?**

Yes, Web Interface 5.4 is supported with the release of XenDesktop 7.5 and XenApp 7.5 to allow for the transition to StoreFront. The extended support does not alter the Web Interface end of support date, which
is Aug 24th 2016. Extended support for Web Interface includes XenDesktop 7.6, 7.5, 7.1 & 7.0 and XenApp 7.5 & 7.6.

**How are HDX WAN Optimization licenses used in a XenDesktop Platinum environment?**

The HDX WAN Optimization feature of XenDesktop Platinum Edition is enabled by both CloudBridge Plug-in and CloudBridge VPX licenses. Because the CloudBridge and the CloudBridge Plug-in requires a symmetric configuration (e.g. a WAN optimization solution on both sides of the network), this HDX WAN Optimization feature is only enabled when you deploy a CloudBridge VPX or CloudBridge Plug-in license in conjunction with a CloudBridge appliance at the data center. Appliance options for the data center include the CloudBridge 2000, 3000, 4000, 5000 or VPX series appliances. Please note that CloudBridge Plug-ins can be used for mobile and remote users who are not located within an office that is part of your corporate network. Hardware appliances for branch locations can be optionally purchased in addition to XenDesktop Platinum licenses.

**Can the CloudBridge VPX appliances obtained as part of the XenDesktop Platinum entitlement be used in the data center?**

No. Customers must purchase a CloudBridge appliance, either physical or virtual, for the data center.

**Are any XenDesktop non-Platinum customers or XenApp (any edition) customers entitled to free HDX WAN Optimization with CloudBridge VPX?**

No. Only XenDesktop Platinum customers are entitled to use CloudBridge VPX (for free) to deliver desktops and apps via XenDesktop. Existing non-Platinum XenDesktop customers are encouraged to upgrade to XenDesktop Platinum. Existing XenApp customers are encouraged to trade up to XenDesktop Platinum leveraging the Citrix Trade-up to XenDesktop program.

**Do all XenDesktop Platinum customers with perpetual, annual or campus licenses qualify for CloudBridge VPX licenses?**

Yes, all XenDesktop Platinum customers under perpetual, annual or campus license programs receive entitlement for HDX WAN Optimization, powered by Citrix CloudBridge VPX.

**Can customers leverage the CloudBridge VPX entitlement at all branch offices if they purchase XenDesktop Platinum?**

The CloudBridge VPX entitlement can be used only in branch offices where at least one (1) XenDesktop Platinum license is utilized.

**Can customers leverage the CloudBridge VPX entitlement to accelerate non-XenDesktop (non-ICA) traffic?**

Yes. This offer entitles XenDesktop Platinum customers to use free CloudBridge VPX to accelerate all traffic over WAN links to remote sites where XenDesktop Platinum is being used.

**Can customers use the CloudBridge VPX entitlement if they deliver XenDesktop via XenClient – using the Local VM delivery method?**

Yes. Any model may be used as long as XenDesktop Platinum traffic is delivered to the location(s) where CloudBridge VPX is installed.
How will Citrix enforce the pre-requisite for utilizing the free CloudBridge VPX licenses only at sites where XenDesktop Platinum licenses are being used?

At this time, Citrix will enforce this using the CloudBridge End-User License Agreement (EULA). The product teams are evaluating options for developing in-product enforcement for the future.

What do XenDesktop Platinum customers receive relative to CloudBridge?

XenDesktop Platinum customers – including those who are new, those who trade up from either XenApp or other versions of XenDesktop, and/or existing XenDesktop Platinum customers with active Subscription Advantage – receive a single Citrix CloudBridge license entitlement containing 1,000 CloudBridge VPX-45 licenses. As documented in the Citrix CloudBridge End User License Agreement (EULA), CloudBridge VPX licenses received through a XenDesktop Platinum purchase may only be used at locations to which XenDesktop Platinum traffic is delivered.

With Citrix CloudBridge VPX-45, customers can optimize and accelerate desktops and applications to branch offices with up to 45Mbps WAN (wide-area network) links, the equivalent of thirty T1 lines.

Please note there is no inherent limit on the numbers of branch office workers that the Citrix CloudBridge VPX will support, other than the given traffic and network conditions on branch WAN networks.

Do customers need separate licenses for the different CloudBridge VPX platforms (Microsoft Hyper-V, Citrix XenServer and VMware vSphere)?

No. The same licenses work for all hypervisor platforms. All existing and new CloudBridge VPX licenses work equally well for Microsoft Hyper-V, XenServer or VMware vSphere. Any current licenses can easily be re-allocated to another CloudBridge VPX instance (on either hypervisor) through the Citrix license activation and management system. Similarly, CloudBridge VPX licenses installed on a Citrix license server can be checked out by any CloudBridge VPX instance on any hypervisor.

Do customers need to upgrade all of their licenses to XenDesktop Platinum, or just the ones that will be effectively used between accelerated branch offices?

Customers need to purchase or upgrade to XenDesktop Platinum licenses only for those users in branch offices or locations where the included CloudBridge VPX entitlements will be allocated and deployed.

What if a customer needs to deliver XenDesktop Platinum to more than 1000 branch offices or sites?

XenDesktop Platinum customers may contact Citrix Technical Support to receive additional CloudBridge VPX-45 licenses if needed.

What if a customer doesn’t use all the 1000 CloudBridge VPX licenses initially, and wants more later?

Customers may allocate and activate as many CloudBridge VPX licenses as they need to roll out XenDesktop Platinum to the desired number of branch offices. Later, when they roll out XenDesktop Platinum to more branch offices, they can then return to the Citrix Activation System (CAS) to allocate more licenses. Customers do not need to allocate the pool of licenses all at once – they only need to allocate and activate as many as needed because the remainder will be available perpetually.
What happens if an existing XenDesktop Platinum customer places an order for additional XenDesktop Platinum licenses?

Each time a XenDesktop Platinum order is placed the customer will receive another entitlement for 1000 CloudBridge VPX licenses in their My Account page.

How will customers receive the CloudBridge VPX entitlement?

The entitlement will be delivered to each customer's My Account page as a 1000-unit line item for CloudBridge VPX-45 licenses. The 1000 units are essentially unlimited for almost all customers.

Are there restrictions to the CloudBridge Appliances that can be deployed in a XenDesktop Platinum Edition environment?

No. Any model CloudBridge appliance (including VPX) can be deployed in conjunction with XenDesktop. However, please note that only CloudBridge appliances and CloudBridge VPX (except the branch appliances – 400, 600, 700, 800 and 1000WS series or all Branch Repeater) connect to CloudBridge plug-ins so it is important to deploy one of these appliances in the data center. Any CloudBridge appliance or CloudBridge plug-ins may be deployed at branch offices, and mobile or remote users outside a branch office will always use the CloudBridge plug-in for HDX WAN Optimization. This provides maximum flexibility to choose the appliance configurations that best fit your network requirements.

Does XenDesktop/XenApp Platinum Edition also provide an entitlement to the CloudBridge Client Plug In?

Yes. Citrix CloudBridge Plug-in CCUs are included in the Platinum Editions of XenApp and XenDesktop. Customers who purchase a Platinum Edition of one of these products are entitled to an equal number of CloudBridge Plug-in Client CCUs are XenApp/XenDesktop CCUs.

Does NetScaler Platinum Edition also provide an entitlement to the CloudBridge Client Plug In?

Yes. Citrix CloudBridge Client Plug In is also included within the NetScaler Platinum Edition entitlement. Customers who purchase a NetScaler Platinum Edition appliance are entitled to 100 CCUs for CloudBridge Plug Ins.

LICENSE UPGRADE

What are the XenDesktop version upgrade paths for existing XenDesktop customers?

Citrix XenDesktop customers with active Subscription Advantage (XenDesktop 7.6, as of 15th of August 2014) are automatically entitled to a version upgrade to the newest version of XenDesktop at no charge, providing them with all the flexibility and functionality of the comprehensive desktop virtualization solution. See table below:

<table>
<thead>
<tr>
<th>Current Edition</th>
<th>XenDesktop 7.6 VDI</th>
<th>XenDesktop 7.6 Enterprise</th>
<th>XenDesktop 7.6 Platinum</th>
</tr>
</thead>
<tbody>
<tr>
<td>To</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How do I upgrade my existing XenDesktop environment to the newer version of XenDesktop?
Existing XenDesktop customers with active Subscription Advantage should utilize the secure My Account portal via [www.citrix.com](http://www.citrix.com) to download and install the latest version of XenDesktop.

How do I upgrade my existing XenApp environment to the newer version of XenApp?
Existing XenApp customers with active Subscription Advantage should utilize the secure My Account portal via [www.citrix.com](http://www.citrix.com) to download and install the latest version of XenApp and associated migration tools.

How do I retrieve my licenses?
Customers must visit Manage Licenses toolbox on the secure My Account portal via [www.citrix.com](http://www.citrix.com) to allocate and generate license files.

How do I Trade-up my existing XenApp environment to XenDesktop?
Existing XenApp customers can leverage the Trade-up to XenDesktop Program as a cost-effective, low risk path to leverage their XenApp investment and move to the industry standard in desktop virtualization, XenDesktop. To complete the trade-up process install your new XenDesktop license(s) to your license server and deploy the components of XenDesktop you require in your environment. Please note you must remove the XenApp license file(s) from your license server that were rescinded as part of the trade-up purchase.

What are the XenDesktop edition upgrade options available for purchase?
See table below:

<table>
<thead>
<tr>
<th>Current Edition</th>
<th>XenDesktop Enterprise</th>
<th>XenDesktop Platinum</th>
</tr>
</thead>
<tbody>
<tr>
<td>XenDesktop VDI</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>XenDesktop Enterprise</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

How do I fulfill my XenDesktop edition upgrade purchase?
All XenDesktop licenses that you wish to edition upgrade can be identified via the secure My Account portal via [www.citrix.com](http://www.citrix.com). Submission of a purchase order for this edition upgrade will be fulfilled in the same manner that additional license purchases are fulfilled today. All license(s) purchased are immediately
available post transaction on the My Account portal for allocation and download to your license server. Please note you must remove any existing XenDesktop license file(s) from your license server that were rescinded as part of the edition upgrade purchase.

What are the upgrade paths via the Trade-up to XenDesktop Program?

See table below.

<table>
<thead>
<tr>
<th>Trade-Ups (From)</th>
<th>(To)</th>
<th>XenDesktop Enterprise</th>
<th>XenDesktop Platinum</th>
</tr>
</thead>
<tbody>
<tr>
<td>XenApp Fundamentals</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>XenApp Advanced</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>XenApp Enterprise</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>XenApp Platinum</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

*Use the Trade-up to XenDesktop calculator to find out how much you can save by taking advantage of this program.

How do I fulfill my Trade-up to XenDesktop purchase?

All XenApp licenses that you want to Trade-up to XenDesktop can be identified via the secure My Account portal via [www.citrix.com](http://www.citrix.com). Submission of a purchase order for the Trade-up will be fulfilled in the same way that additional licenses purchases are fulfilled today. All licenses purchased are immediately available post transaction on the secure My Account portal for allocation and download to your license server. Please note you must remove the existing XenApp Advanced, Enterprise or Platinum CCU license file(s) or XenApp Fundamentals NU license from your license server that were rescinded as part of the trade-up process.

What is license rescission?

In the context of version, edition, or Trade-up transactions, license rescission refers to the cancellation of all rights associated with those identified licenses being replaced as part of a version upgrade, edition upgrade or trade-up transaction.

Where do I go to identify licenses for rescission as part of a version, edition or Trade-up transaction?

Identification of licenses to be rescinded as part of a version upgrade, edition upgrade or Trade-up is facilitated via the secure My Account portal via [www.citrix.com](http://www.citrix.com).

How long do I have after a version upgrade, edition upgrade or Trade-up transaction to relicense my environment?

Customers are granted a grace period of 90 calendar days post transaction to remove rescinded license file(s) from their license server in order to remain in compliance with Citrix licensing terms and conditions. Please note, at the point of version upgrade, edition upgrade, or Trade-up transaction access to licenses identified
for rescission is immediately removed from the secure My Account portal via www.citrix.com. Customers are advised to make a backup copy in case of license server failure during the 90 day grace period.

**Do I need to upgrade my license server when installing XenDesktop or XenApp?**

Citrix recommends that customers always use the latest available version of the license server. However at a minimum, customers must be on version 11.11 for XenDesktop and XenApp 7.x licenses to be properly counted.
Microsoft Licensing

(ALWAYS REFER TO MICROSOFT DIRECTLY FOR THE MOST UP-TO-DATE LICENSING INFORMATION ABOUT MICROSOFT LICENSING REQUIREMENTS)

What are the Microsoft license requirements for the different XenDesktop or XenApp deployment options?

The table below details the Microsoft licenses required for the different desktop delivery models, based on the following guidelines.

1. Remote Desktop Services Client Access Licenses (RDS CAL) are required for hosted shared desktops (server OS) and published apps.
2. Virtual Enterprise Centralized Desktop (VECD) or Windows Virtual Desktop Access (VDA) license is required for any hosted, streamed or virtual desktops (desktop OS)
3. VDI Suite is required for hosted VM desktops with Hyper-V

<table>
<thead>
<tr>
<th>XenDesktop Delivery Model</th>
<th>Required Microsoft Licenses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VDA</td>
</tr>
<tr>
<td>Hosted shared desktops (shared server desktop)</td>
<td></td>
</tr>
<tr>
<td>Server virtual desktop (server VDI)</td>
<td></td>
</tr>
<tr>
<td>Hosted VM-based desktops (VDI)</td>
<td>✓</td>
</tr>
<tr>
<td>Hosted blade PC desktops</td>
<td>✓</td>
</tr>
<tr>
<td>Local streamed desktops</td>
<td>✓</td>
</tr>
<tr>
<td>Virtual apps to installed desktops</td>
<td></td>
</tr>
<tr>
<td>Remote PC Access (Physical Desktops)***</td>
<td></td>
</tr>
<tr>
<td>Local VM-based desktops (offline)</td>
<td>✓</td>
</tr>
</tbody>
</table>

* The VDI Suites are a cost-effective subscription suite offering that includes a restricted RDS-CAL as well as a restricted set of SCCM CML use rights; they can be purchased with the option to include MDOP or not.
** RDS CALs are required for XenDesktop 7.x Enterprise or Platinum Edition, XenApp Advanced, Enterprise or Platinum deployments using Server OS machine catalogs that host either desktops and/or applications. They are also required for any model using hosted on-demand apps by XenApp or XenDesktop 7.x if using ServerOS-based catalogs.
***Remote PC Access (Physical Desktops) requires that the physical desktop operating system is licensed by Microsoft, a VDA or RDS CAL are not required.
What is the Microsoft VDI Suite and how does it add value to XenDesktop?

Microsoft VDI Suite gives customers a cost-effective solution for acquiring the complete Microsoft platform needed to fully utilize the features of XenDesktop. The Microsoft VDI offerings, combined with Citrix XenDesktop, offer advanced functionality such as Microsoft Application Virtualization, integrated management, single instance management, and broad support for Citrix HDX endpoints across multiple device and network configurations.

The Microsoft VDI Suites include:

- Windows Server 2008R2 Remote Desktop Services (RDS) Complete VDI remoting infrastructure for delivery pooled virtual desktops or personal virtual desktops (but no session desktop or applications)
- Microsoft Desktop Optimization Pack (MDOP): Allowing customers to implement technologies such as Application Virtualization for physical or virtual desktops.
- System Center Configuration Manager Client Management License with restricted use rights to VMM CML use rights only.

What is a Microsoft RDS CAL and when do I need one?

Remote Desktop Services (RDS, formerly known as Terminal Services in Windows Server 2008) functionality lets you remotely execute applications or an entire desktop on a Windows-based session host server from a wide range of devices over virtually any type of network connection; it also lets you remotely execute virtual machine-based (virtual) desktops on a Hyper-V-based virtualization host server. Citrix customers deploying hosted shared desktops (published desktops/session based desktops) or virtual applications (XenApp) will need Remote Desktop Services to remain compliant with Microsoft licensing terms.

What is a Microsoft VDA and when do I need one?

Windows VDA is a device based subscription designed to help organizations license devices that do not qualify for Windows Client SA, such as thin clients and contractor-owned PCs, so these devices can access a virtual desktop. Windows VDA is available through all major Microsoft Volume Licensing (VL) programs.

Microsoft licenses Windows for virtual desktop by access device:

- Virtual desktop access rights are a benefit of Windows Client Software Assurance (SA). Customers who intend to use PCs covered under SA have access to their Virtual Desktop Infrastructure (VDI) desktops at no additional charge.
- Customers who want to use devices that do not qualify for Windows Client SA, such as thin clients, will need to license those devices with Windows Virtual Desktop Access (VDA) in order to access a Windows VDI desktop. Windows VDA is also applicable to third party devices, such as contractor or employee-owned PCs.
- There are additional options for licensing access to virtual desktops hosted on VDI. If certain conditions are met, a Windows RT-based device such as a Surface RT can be used to access virtual desktops hosted on a VDI without any special licensing. For devices not covered by Windows RT special access rights, a Companion Subscription License (CSL) provides the single primary user of a
SA- or VDA-covered device to use up to four different ‘companion devices’ to access the organization’s VDI while on or off the organization’s physical premises.

Learn more about Microsoft licensing at Microsoft.com.

**Linux Licensing**

(Always refer to Red Hat and SUSE directly for the most up-to-date licensing information)

What are the SUSE license requirements for the Linux Virtual Desktop?

A SUSE Linux Enterprise license is required for every physical or virtual server delivering Linux Virtual Desktops via XenApp or XenDesktop. The SUSE Linux Enterprise license and subscription is owned and managed independent of the XenApp and XenDesktop license server.

What are the Red Hat license requirements for the Linux Virtual Desktop?

A Red Hat Enterprise Linux (RHEL) Server license is required for every physical or virtual server delivering Linux Virtual Desktops via XenApp or XenDesktop. The RHEL license and subscription is owned and managed independent of the XenApp and XenDesktop license server.

**Disaster Recovery & Maintenance**

How do I license my disaster recovery site?

The same licenses that are provided for your production environment can be used to support your disaster recovery environment. This requires your disaster recovery environment to be configured and managed independently of your production environment. Please note the license server in your disaster recovery environment must have an identical hostname to the license server in your production environment.

What happens if my license server is offline for maintenance activity?

There is a standard 15 day grace period that allows your systems to continue to function without degradation of performance or denial of service to support license server maintenance requirements.

What happens if my license server is unrecoverable?

In a scenario where you have a backup copy of your license file(s) available you have 30 days to simply rename an existing server in your environment to have the identical hostname as your original license server, install the license server component and your backup license file(s) to relicense your environment.

What happens if my license server is unrecoverable and I do not have a backup copy of my license file(s) immediately available?
In a scenario where you do not have a backup copy of your license file(s) immediately available you have 30 days to simply access your My Account portal and download your license file(s), rename an existing server in your environment to have the same hostname as your original license server, install the license server component and the license file(s) you have downloaded to relicense your environment.

**What happens if my license server is unrecoverable and I cannot rename an existing server in my environment?**

In a scenario where you are unable to rename an existing server in your environment you have 30 days to simply identify another server in your environment, install the license server component, access your My Account portal, re-host your license file(s) using the hostname of the new server you have selected, download and install these license file(s) to relicense your environment.

**Does any failure of the Citrix License Server create degradation in performance or denial of service to users?**

No. The 30 day grace period feature in XenDesktop or XenApp prevents customers from experiencing degradation in performance and denial of service to users as the result of a license server failure.

**How can I get a copy of my license file?**

You can obtain a copy of your license file(s) from your Citrix License Server or alternatively all purchased license(s) and allocated license file(s) are available from the secure My Account portal via [www.citrix.com](http://www.citrix.com).