



Understanding Microsoft Licensing for a Virtual Desktop Infrastructure (VDI) Environment

When it comes to virtualization, VDI has been one of the hottest topics and fastest growing areas for companies. The VDI solution allows for IT staff to centralize their apps, desktops, and data securely in the data center, while only a device containing a small footprint exists at the client end. These centralized advantages allow for a reduction in IT administration costs, power and cooling costs for PCs, and overall reduction in PC cost when converting to thin clients or extending a desktop refresh beyond the three year mark.

A Virtual Desktop Infrastructure requires a management system responsible for delivering desktops to end users. This is known as a desktop connection broker and is available through vendors like Citrix and VMware.

In addition to the broker software, Microsoft has introduced a subscription licensing model called Vista Enterprise Centralized Desktop (VECD) for customers who want to deploy VDI in their environment. This license grants the customer the Microsoft licensing rights to host virtual desktops in the data center and access them using a client device such as a PC, thin client (desktop appliance), or mobile device.

Besides the VECD route for VDI, a company can choose to purchase individual copies of retail licenses of Vista. The retail version is also called a fully packaged product (FPP). The limitation behind the FPP is that a client connecting to a VDI solution can only connect to one virtual desktop. In addition, each virtual desktop must be built separately due to each license having to be installed for each virtual desktop. VECD can use one license key, so that thousands of virtual desktops can be deployed using a single desktop image.

Confused yet? Let's put together some frequently asked questions and scenarios.

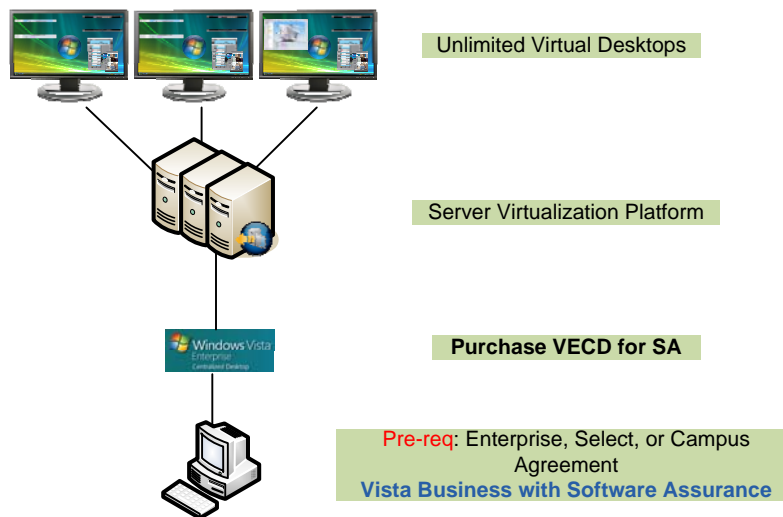


Frequently Asked Questions

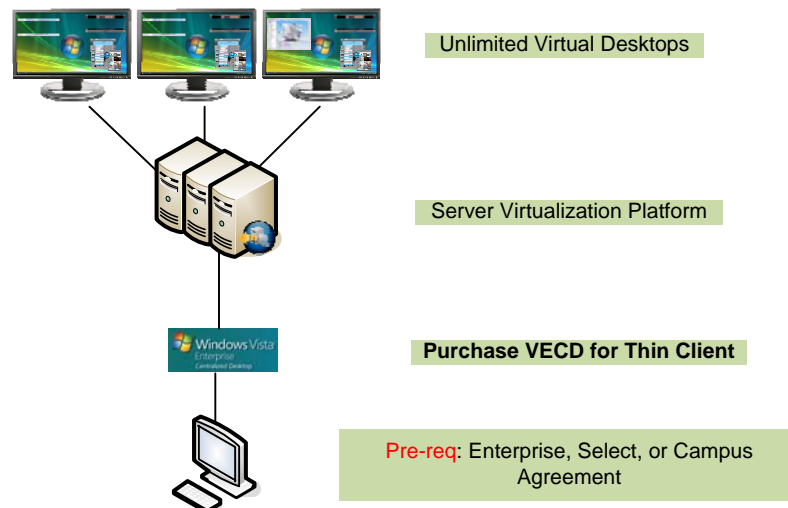
- 1. How does the FPP work for virtual desktops?**
 - a. The FPP grants a thin client or PC running an OEM license to connect to just one virtual desktop. Each virtual desktop is licensed independently with a FPP license.
- 2. Can I use OEM licenses as the virtual desktop?**
 - a. No
- 3. If I use the FPP as the virtual desktop, can I use my OEM licenses on the client PCs?**
 - a. Yes.
- 4. How can a customer buy VECD?**
 - a. The customer must have a Microsoft Enterprise Agreement, Select Agreement, or Campus and School Agreement first.
- 5. How does VECD licensing work for using a thin client compared to a PC?**
 - a. For traditional PCs, the computer must be licensed for Vista Business with Software Assurance (SA) for Windows even though the device may be downgraded to Windows XP Professional. In addition to the SA, a Microsoft VECD for SA licenses must be purchased (Approximately \$23 USD/year).
 - b. For any thin client or other device that cannot run a full version of Windows, only a VECD for thin clients license must be purchased for each device (\$110 USD/year).
- 6. Why is the cost higher for thin clients over a PC?**
 - a. The VECD license for the PC takes into account that you already purchased a Windows operating system, where with a thin client you wouldn't have.
- 7. What if I don't have software assurance on the client device?**
 - a. Customers can select the Fully Purchased Product model, or add Software Assurance to their existing PCs.
- 8. How many virtual desktops can I build with a VECD license?**
 - a. Unlimited. VECD is licensed based on the client device, not the virtual desktop.
- 9. How many virtual desktops can a client device connect to at once?**
 - a. Four virtual machines can be accessed from a single client device.



10. How does VECD work when retaining PCs?



11. How does VECD work when purchasing thin clients?



12. What operating system can the virtual desktop run with VECD?

- a. Vista Business or Vista Ultimate. Using “downgrade rights”, the virtual machines can also run Windows XP Professional or Windows 2000 Professional.

13. Can someone working from home access a virtual desktop with VECD?

- a. If the user has been given access to a company PC with VECD, then the user can connect to a virtual desktop using their home PC.



Scenarios

1. Company XYZ has 50 thin clients, 250 Windows XP desktops, and 25 laptops. The company wants to implement VDI for all devices and has an existing Enterprise agreement. All of the desktops have SA on them, but the laptops were purchased with OEM licenses. In order to use VECD for VDI, what must the company purchase?
 - Purchase 25 licenses of Vista Business for SA
 - Purchase 275 licenses of VECD for SA
 - Purchase 50 licenses of VECD for Thin Clients
2. Company ABC has 300 desktops running OEM licenses of Windows XP. The company wants to retain all of the PCs and move into a VDI solution. What must the company purchase from Microsoft for VDI?
 - Purchase 300 retail copies of Vista Business (FPP)

OR

 - Obtain an Enterprise Agreement
 - Purchase 300 licenses of Vista Business for SA
 - Purchase 300 licenses of VECD for SA

Conclusion

Before you invest in a VDI solution, consider all the costs behind moving towards a virtual desktop deployment. Microsoft Licensing must be purchased, as well as the VDI connection broker solution.

Questions?

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