

COMPETITIVE ANALYSIS

IDC MarketScape: Worldwide Client Virtualization 2012 Vendor Analysis

Brett Waldman

Iris Feng

IN THIS EXCERPT

The content for this excerpt was taken directly from the IDC MarketScape: Worldwide Client Virtualization 2012 Vendor Analysis by Brett Waldman and Iris Feng (Doc # 237753). All or parts of the following sections are included in this excerpt: IDC Opinion, In This Study, Situation Overview, Future Outlook, Essential Guidance, and Synopsis. Also included is Figure 1.

IDC OPINION

The desktop is going through a transformation, and the days of IT dictating what device end users will use are nearly over. The rise of bring your own device (BYOD) is creating governance and regulatory nightmares while providing end users with unprecedented flexibility and agility. While IT is still intrigued by the possibility of a better desktop management model and the operational savings client virtualization could deliver, it is the increased governance and ability to deliver desktops, applications, and data to any device that is driving today's purchases. Although the market is still emerging, many vendors have emerged to provide solutions. Customers are in turn confused about the capability and addressability of each vendor's solution. This IDC study represents the vendor assessment model called the IDC MarketScape. This research is a quantitative and qualitative assessment of the characteristics that explain a vendor's success in the marketplace and help anticipate the vendor's ascendancy. The study assesses the capability and business strategy of many client virtualization vendors. This evaluation is based on a comprehensive framework and set of parameters expected to be most conducive to success in providing client virtualization solutions, during both the short and the long term. As the client virtualization market is a highly competitive one, all vendors performed relatively well in the study. Key findings include:

- ☒ All vendors in this study can provide the underlying virtual desktop provision and management capabilities. Leading vendors are more likely to offer solutions that address a broader audience with simplified management tools as holistically being able to manage desktop, mobile, and cloud applications from a single management console is quickly becoming a must-have for next-generation IT.
- ☒ Larger vendors naturally offer more capabilities to their customers; thus many of them lead in this study. However, many innovations are coming from the smaller start-ups, which build their whole business around those differentiating innovations. The result is many start-ups are gaining rapid traction in the market and performed well in this study.
- ☒ The client virtualization market is maturing at a rapid pace; new approaches such as workspace as a service (WaaS) and mobile experience virtualization are beginning to emerge. The market itself is beginning to consolidate as larger vendors acquire unique smaller firms to access new capabilities and customer groups.

IN THIS STUDY

This IDC study assesses the capability and business strategy of many vendors in the client virtualization market. These vendors are selected based on their capabilities to provide centralized management solutions utilizing one or more client virtualization technologies such as centralized virtual desktop or virtual user session software. This evaluation is based on a comprehensive framework and set of parameters expected to be most conducive to success in providing virtual desktop solutions for the short and the long term.

This study encompasses 11 vendors in the client virtualization space, ranging from large software solution vendors including Microsoft, VMware, Citrix, Quest Software, Oracle, and Red Hat to small vendors including MokaFive, Virtual Bridges, NComputing, Desktime, and Unidesk. IDC believes that by having a wide range of vendors, and solutions, we can provide unbiased analysis of each vendor's strengths and weaknesses, thus helping technology buyers making more informed purchase decisions.

Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of a review board of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

IDC defines virtual client computing (VCC) as a client computing model that leverages a range of software and virtualization solutions to improve upon the limitations associated with the traditional distributed desktop environment. The VCC model encompasses four client virtualization technologies, which are discussed in the sections that follow.

Desktop Virtualization

Desktop virtualization technologies utilize hypervisor to decouple an operating system (OS) from the host hardware and isolate the specific client environment from other OSs running aboard a physical device. There are two types of desktop virtualization technologies:

- ☒ Centralized virtual desktop (CVD, or more commonly known as VDI) is a form of server-based computing; it utilizes server-grade hypervisor to host multiple unique and isolated client operating systems aboard a single server or group of

servers in the datacenter environment. The virtual desktops are delivered to end users' devices via the network.

- ☒ Distributed virtual desktop (DVD) leverages client-grade hypervisor and/or host operating systems in an isolated environment on a distributed client device, such as a laptop. Therefore, the virtual machine resides on the local client hardware.

Application Virtualization

Application virtualization software encapsulates and isolates an application from its underlying host operating system, as well as from other local applications running within a client environment.

Virtual User Session

Virtual user session (VUS) is a mature server-based computing model that creates a shared environment to host multiple users from a single operating system. Each user gets access to his/her own profile and instances of installed applications.

User State Virtualization

User state virtualization (USV) encapsulates and isolates an end user's profile information and settings from its underlying host operating system, as well as from other local applications.

SITUATION OVERVIEW

Introduction

The push to adopt client virtualization technologies initially came from organizations that successfully implemented server virtualization. The attractive ROI and immediate reduction of capital expense on hardware of server virtualization led to the (often incorrect) assumption that a similar cost savings could be found through client virtualization. However, the presumption that client virtualization would lead to mitigating other headaches including management, security, backups, and reducing user-caused system problems has proven to be true.

Existing hindrances to effective desktop management, combined with reduced IT budget during the past recession, have the organizational IT leadership turning to virtualization for reducing end-user computing costs. Enterprises have quickly discovered that the use of virtualization to support desktop workloads creates a range of significant benefits. These benefits include improved IT management efficiency, price efficiencies, and capabilities. IDC defines these benefits in one of the following three buckets:

- ☒ **Quantifiable benefits.** Virtual machines rely less on the horsepower of the endpoint devices themselves, thus creating an opportunity for IT to significantly drive down the cost of endpoint hardware either by extending the life span of existing PCs by repurposing them as virtual machine endpoints or by replacing PCs with thin-client devices. The simplified management model of desktop

virtualization can further drive down the total IT costs by enabling IT to work more efficiently. Additionally, client virtualization can make users more productive by improving desktop reliability and lessening the need to contact support. However, some cost benefits can be offset by increased costs for hardware and software required to put a client virtualization solution in place.

- ☒ **Functional benefits.** The ability to move data from the edge of the IT environment into the datacenter inherently reduces the security risks to an IT organization. Data backup is improved because user data resides within the datacenter, which becomes easier to ensure full compliance. This is even more important in a BYOD scenario. Disaster recovery is also significantly simplified because central IT staff can effortlessly revert virtual desktops to their last known good states.
- ☒ **Organizational benefits.** Traditional tension between IT and the rest of the organization can be lessened with client virtualization. Because virtual desktop environments are easier to manage and secure than traditional desktops, IT can provide end users more freedom and promote goodwill. Virtual desktops can also improve the user experience, especially when compared with an aging physical PC. Additionally, virtual desktops can allow users ubiquitous access to their virtual desktops on any devices, which can improve overall user satisfaction.

IDC MarketScape Vendor Inclusion Criteria

This IDC MarketScape includes vendors that create and sell software in the client virtualization space, with a focus centralized virtual desktops, distributed virtual desktops, and virtual user session software. Vendors that offer user state virtualization or application virtualization products but not one of the aforementioned products were not included because these two types of solutions address a certain need in the market but do not fulfill a direct need for client virtualization solutions. Vendors also needed to be producing at least \$10 million in revenue or demonstrate enough momentum in the marketplace that IDC expects the company to make near \$10 million by 2013. Future Outlook

FUTURE OUTLOOK

IDC MarketScape: Worldwide Client Virtualization Vendor Assessment

The IDC MarketScape vendor assessment for the client virtualization software market represents IDC's assessment on which vendors are well positioned today through current capabilities and which are best positioned to gain market share over the next few years. Positioning in the upper right of the grid indicates that vendors are well positioned to gain market share. For the purposes of discussion, IDC divided potential key strategy measures for success into two primary categories: capabilities and strategies.

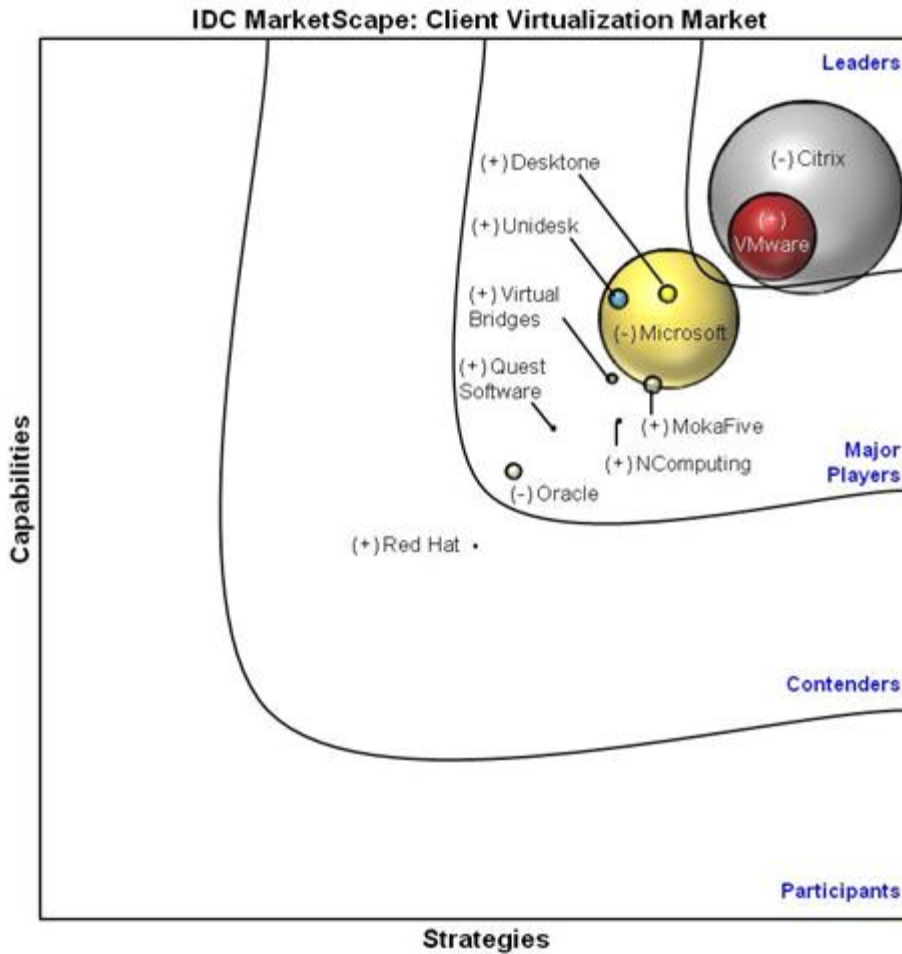
Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned it is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategy category focuses on high-level strategic decisions and underlying assumptions about offerings, customer segments, business, and go-to-market plans for the future, in this case defined as the next three to five years. Under this category, analysts look at whether or not a supplier's strategies in various areas are aligned with customer requirements (and spending) over a defined future time period.

Figure 1 shows each vendor's position in the vendor assessment chart. Its market share is indicated by the size of the bubble, and a (+), (-), or (=) icon indicates whether or not the vendor is growing faster than, slower than, or even with, respectively, overall market growth.

FIGURE 1

IDC MarketScape: Worldwide Client Virtualization Vendor Assessment



Source: IDC, 2012

Vendor Summary Analysis

In this section, we provide background information on vendors in this IDC MarketScape and their capability, strategy, and IDC's qualitative assessment.

Oracle

According to IDC analysis and buyer perception, Oracle is an IDC MarketScape Major Player in client virtualization.

Oracle made its entrance to the client virtualization space with Oracle Virtual Desktop Infrastructure, a VDI solution inherited from Sun's acquisition of Oracle in 2010, and has since improved upon the solution focusing on storage support and application delivery that supports Windows, Linux Mac OS X, and iPad. Besides Oracle VDI,

Oracle's client virtualization portfolio also includes Secure Global Desktop for application virtualization and Sun Ray clients.

Being both a software and a hardware vendor gives Oracle the advantage to lower integration and infrastructure costs by having hardware and software engineered together. Oracle VDI can be deployed on Oracle hardware to provide a single vendor VDI solution. The product is also optimized to run on Oracle systems — leveraging features of the Oracle Sun ZFS Storage Appliance to provide robust storage performance.

Note that Oracle's client virtualization solution is the only virtual desktop platform that is certified for use with Oracle's huge enterprise application portfolio. With that said, Oracle's client virtualization solution would make good sense for customers that are already using Oracle products to adopt and create a full Oracle stack, reinforcing the advantages of procuring hardware, middleware, and desktop virtualization all from the same vendor. However, it's less appealing to customers that are less Oracle centric to adopt or to make a switch from their current solutions.

While Oracle's unique "one-stop shop" idea works in favor of customers that want to build a single-vendor stack with Oracle, it's also important to be able to build upon that idea to reach out to the broader audience in the market. Oracle plans to see further integrations of Oracle Virtual Desktop Infrastructure with storage and systems, as well as applications, in the near future.

ESSENTIAL GUIDANCE

Actions to Consider

The rapid rise of mobile and cloud applications is quickly subverting IT's ability to maintain control and regulate mandated governance issues, relegating existing PC management tools from complete solutions to point products. It is for this reason that client virtualization is moving from a nice-to-have solution to a must-have solution, especially as it is subsumed into larger solutions that manage desktops, applications, and data in a holistic manner.

IDC believes that, given the advances made by the client virtualization vendors and partners as well as the emerging service provider (cloud) hosted models, ROI for client virtualization can become an achievable and measureable benefit. Of course, an organization shouldn't approach client virtualization purely because of ROI. Client virtualization is a new model of managed end-user computing, and organizations should approach it with a clear understanding of how client virtualization can benefit their environments in an operational sense.

When evaluating client virtualization vendors, it is more important to focus on the solutions the specific vendors provide than to focus on the size of the vendor. Many start-ups in this IDC MarketScape offer unique capabilities that can minimize the initial cost of deployment, simplify management, and improve user experience. In fact, most start-ups have larger customers and partnerships that ensure their survival.

As the enterprise culture becomes increasingly driven by younger, more connected, and mobile workers, companies that don't build the foundation to support flexible computing will find workers harder to manage and, to an extent, harder to retain. IDC believes client virtualization is still in the early phases, and now is a great time for organizations to evaluate and invest in solutions that can better manage end users, regardless of where they are or what they use. Organizations failing to do so could risk losing their competitive advantage in the long term.

LEARN MORE

Related Research

- ☒ *Worldwide Virtual Client Computing 2012–2016 Forecast Update and 2011 Vendor Shares: A Competitive Market View* (IDC #237408, November 2012)
- ☒ *VMware Furthers Its Mobile Strategy with Introduction of the Horizon Suite* (IDC #lcUS23679012, September 2012)
- ☒ *Technology Assessment: Mobile Virtualization and BYOD Solutions* (IDC #236934, September 2012)
- ☒ *Worldwide Virtual Client Computing 2012–2016 Forecast and 2011 Vendor Shares: The Transformation of a Transition* (IDC #235469, June 2012)
- ☒ *Citrix Synergy 2012: Life Slicing the Enterprise* (IDC #234963, May 2012)
- ☒ *NVIDIA VGX: Bringing the Client Virtualization Experience to the Next Level* (IDC #234852, May 2012)
- ☒ *The Five Stages of Bring Your Own Device* (IDC #234386, April 2012)
- ☒ *Dell Acquires Wyse to Provide End-to-End Desktop Virtualization* (IDC #lcUS23421112, April 2012)
- ☒ *NComputing: From Hardware to Software — Providing an End-to-End Client Virtualization Solution* (IDC #233023, February 2012)
- ☒ *Liquidware Labs Private Vendor Watchlist Profile: Completing the Client Virtualization Life Cycle from Assessment to Management* (IDC #233005, February 2012)
- ☒ *OnLive Aims for Business Users with Virtual Desktop Offering* (IDC #lcSG23259212, January 2012)
- ☒ *IDC's Software Taxonomy, 2012* (IDC #235401, June 2012)

Synopsis

This IDC study represents the vendor assessment model called the IDC MarketScape. This research is a quantitative and qualitative assessment of the

characteristics that explain a vendor's success in the client virtualization marketplace and help anticipate the vendor's ascendancy. IDC assesses the capability and business strategy of many desktop virtualization vendors. This evaluation is based on a comprehensive framework and set of parameters expected to be most conducive to success in providing desktop virtualization solutions, during both the short and the long term.

"The rise of mobile and cloud applications is subverting existing IT management paradigms. Holistically being able to manage desktop, mobile, and cloud applications from a single management console is quickly becoming a must-have for next-generation IT," said Brett Waldman, research manager, Client Virtualization Software. "With the market rapidly changing, vendors are innovating to keep up with the increasingly demanding end-user workforce and regulatory issues that the consumerization of IT is bringing upon IT departments. It is important to understand the strengths and capabilities to understand which vendors are a good fit for a specific organization."

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