



IDC MarketScape

IDC MarketScape: Worldwide Virtual Client Computing Software 2015 Vendor Assessment

Robert Young

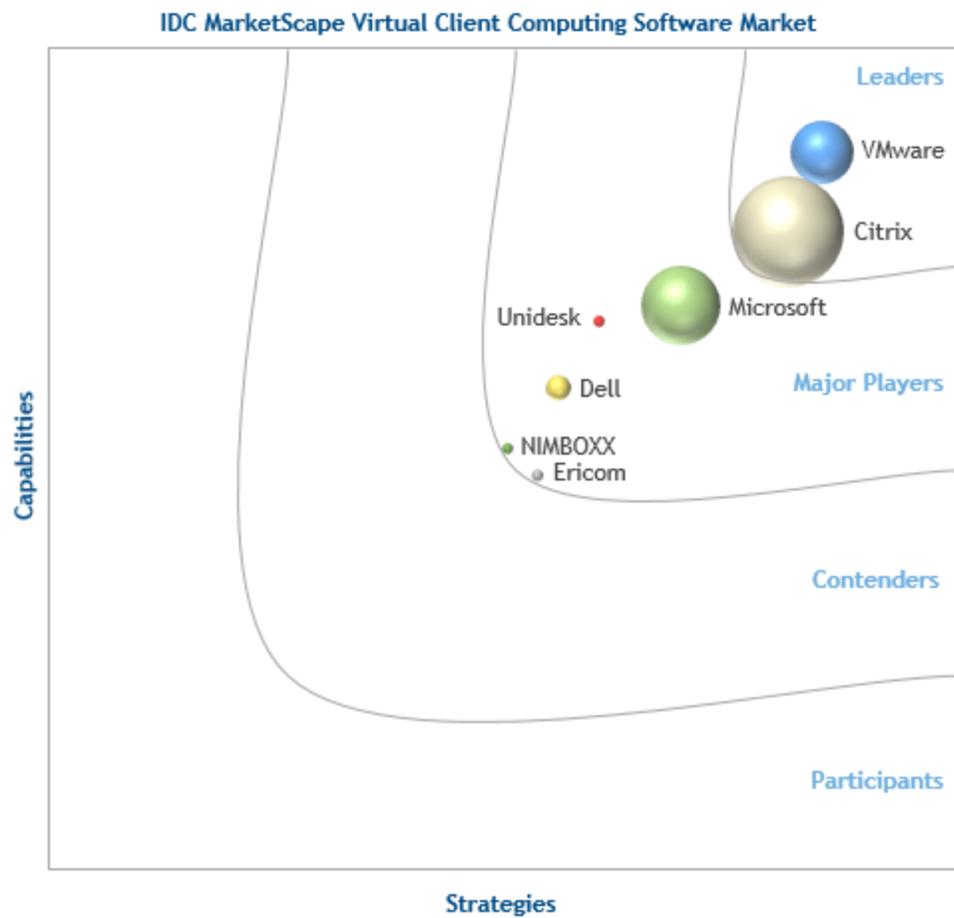
David Laing

THIS IDC MARKETSCOPE EXCERPT FEATURES: ERICOM

IDC MARKETSCOPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Virtual Client Computing Software Vendor Assessment



Source: IDC, 2015

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Virtual Client Computing Software 2015 Vendor Assessment (Doc #256606). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IDC OPINION

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 software vendors. This evaluation is based on a comprehensive framework and a set of parameters expected to be most conducive to success in providing client virtualization solutions, during both the short term and the long term. As the client virtualization software 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, which is quickly becoming a must-have for next-generation IT.
- Workspace as a service (WaaS) is a growing factor in the market because customers do not have to take on capex for back-end servers and can essentially pay as they go. This can be particularly important for start-ups or businesses that are seeking to scale rapidly. In some cases, software suppliers such as Microsoft (Azure) and VMware (Horizon View and Horizon Air) participate by hosting WaaS in their own public clouds. The presence of Amazon Web Services (AWS) in the market provides plenty of competition for other cloud service providers (CSPs) as well.
- Within this IDC MarketScape we looked for strategies to evolve virtual client computing (VCC) products originally designed for on-premise enterprise deployments to the multitenant deployments needed to make the VCC suppliers' CSP partners successful.
- Many innovations are coming from the smaller start-ups, which often build their whole business around those differentiating innovations. The market itself is beginning to consolidate as larger vendors acquire unique smaller firms to access new capabilities and customer groups.
- Larger vendors generally offer more capabilities to their customers; thus many of them continue to lead in this study. Increased capabilities and acquisitions can be a double-edged sword in that added complexity and integrating them all into a simple set of management tools can be a daunting task.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

This IDC MarketScape includes vendors that create and sell software in the client virtualization space, with a focus on centralized virtual desktops (CVDs), distributed virtual desktops, and virtual user

session (VUS) 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 earning at least \$10 million in revenue or demonstrate enough momentum in the marketplace to make nearly \$10 million in 2015 according to IDC estimates.

The client virtualization software market has started to enter the maturity phase, and many vendors, through acquisitions, have started to expand their capabilities into physical desktop management, enterprise mobile management, and application management.

However, some key vendors made a few missteps along the way. For example, NComputing perhaps placed too much focus on mobility management software at the expense of its core thin-client products. Although we expect that the recent sale of the core assets to a company run by one of its original founders will stabilize NComputing, we were unable to include it in this IDC MarketScape as the company was unable to participate during negotiations and the future stability is currently being undermined by loss of market share in the thin-client market. If NComputing were to wind down, Citrix, at a minimum may be interested in acquiring the Numo 3 SoC IP to license it to original design manufacturers (ODMs), as Numo 3 chips were specifically designed for thin-clients in Citrix deployments. There is also a possibility that NComputing might be purchased by a well-capitalized entity that wishes to enter the VCC and/or thin-client market or expand its presence. IDC believes that from outside the VCC market, the best synergy might be seen with a software, hardware, or publishing supplier in the education and/or healthcare market.

In addition, we are also not able to include Moka5 due to recent downsizing actions that significantly reduced the capabilities needed for the new product and go-to-market strategies that had been on the company's road map. Given that other VCC suppliers now or will likely have distributed virtual desktop (DVD) products of their own, it is now more uncertain whether this former niche market will be attractive enough for Moka5 to be acquired, but its patents, IP, partnerships, and loyal customer base in industries such as oil and gas do provide value.

ESSENTIAL BUYER GUIDANCE

Windows is not dead, it's just evolving, and as Windows 10 releases, the need to provide legacy applications on Windows 10 endpoints will be a VCC driver. Even though Microsoft has announced tools that allow for developers to port Win32 and .NET applications to Windows 10, many enterprises will still prefer multiple options and VCC would be an important primary or backup alternative. Therefore, VCC suppliers and/or their channel partners must be able to demonstrate how critical third-party and/or internally developed applications can be virtualized using their software. Nearly every organization needs to deal with different operating systems and different form factors and yet still retain the capability to deliver legacy Windows-based applications to all of these different devices over both local and wide area networks.

End users will become more selective on the type, form factor, and overall quantity of devices they carry. There will still be a mix of corporate and personally owned, but these devices must be managed in a manner that limits the amount of impact to the end user. Business users will increasingly demand to use the applications they need, on any device, anywhere, and at any time. This can require that the client virtualization solution optimizes itself to the device and available connectivity.

Buyers should therefore look for the following characteristics when evaluating client virtualization solutions:

- **Scalability:** Solutions need to be able to scale to support your sized deployment and still be manageable. Not all solutions need to be able to scale out to 10,000 seats, if they are purposefully built for SMB organizations; however, in those cases, simplicity becomes a defining factor.
- **Device compatibility:** Basic client-side support for Apple iOS and Mac OS, Android, Windows, Chrome, HTML5, and thin/zero client devices should be expected. With that said, the support for peripherals is a defining factor. For example, if a user needs to print a document from a mobile device, can the VCC software support this use case?
- **Mobile experience virtualization:** Streaming Windows applications to mobile devices is table stakes. To take it to the next level, vendors need to be able to improve the experience of streaming keyboard- and mouse-based applications on touch-first devices. This can be accomplished through client software, improved protocols, and/or mobile-optimized APIs.
- **Storage optimization:** Storage is a key component for client virtualization and there are multiple ways to improve performance and reduce costs. Vendors that offer ways of reducing storage costs are more likely to offer better total cost of ownership, but that conversation must include performance. For example, a server with a RAID array may be less costly than a carefully integrated solution that has SSDs in close proximity to the virtual machines (VMs) supported by traditional disks for less time-sensitive archiving.
- **Cloud enabled:** If a vendor's solution is not currently cloud enabled, it needs to be on the vendor's 18-month road map. While IDC does not expect cloud deployments to be the norm in the next year, many customers will start to explore the option – either as a primary delivery model or in a hybrid environment.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. The criteria in this study's underlying analysis is applied uniformly to all vendors covered. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description in this section provides a summary of a vendor's strengths and challenges and opportunities. The 2015 IDC MarketScape for virtual client computing should be considered on its own rather than in comparison to any previously published version as the scoring has been updated based on the current market and, in some cases, is more conservative.

Ericom

This is the first year IDC has covered Ericom, and we have placed it in the Major Players category in this IDC MarketScape. Ericom's position reflects its ability to provide connection broker support for most, if not all, endpoints. Ericom was one of the first to market with advanced HTML5 endpoint support. As the competitive offerings for HTML5 were limited in both number and capability, such as full support of peripherals, Ericom gained traction in markets that embraced Chromebooks, such as education.

In March 2015, Ericom announced the general availability of Connect, its new application and VDI access management software product. Although previous generations of Ericom's access solutions were noted by customers for their simplicity, much like competitive products, there were some apparent limitations with respect to scalability.

For instance, historically a single access management server running Ericom's earlier generation connection broker would be connected to multiple Windows Terminal Servers (or VDI platforms) and manage several thousand users accessing the applications hosted on these servers (or virtual desktops hosted on VDI platforms), which were providing the necessary processing, storage, and connectivity. This performance was on par with other competitive products.

In sharp contrast, Ericom has stated that the new Ericom Connect has been reengineered from the ground up and is capable of managing up to 100,000 concurrent users/sessions with each access management server.

Ericom is targeting the offering to enterprise-level organizations seeking added scalability while maintaining the simplicity that SMBs/smaller-sized IT organizations require. Likewise, IDC believes that Ericom has followed a design strategy of building from the ground up while prioritizing the subset of virtual client computing management and business analysis features that most entities need and leaving niche "nice to have" functions out.

Strengths

For several of the customers we interviewed for this IDC MarketScape study, Ericom's solution was cited as being "optimal from both a simplicity and cost standpoint." For example, by leveraging Ericom's products, independent software producers (ISPs) can provide a SaaS offering either on-premises, via a colocation or by using IaaS suppliers such as Amazon Web Services or Microsoft Azure. This type of offering allows these ISPs to ensure the company's software is installed and deployed correctly as well as providing increased flexibility and control over software licensing. Because of the simplicity of Ericom's management software, ISPs cite the ability to get a new client instance up and running in under an hour despite having minimal IT staff. In summary, Ericom claims that ISPs using its VCC software products can see upwards of 75% margin over their cost of hosting due to the scalability and lower cost of licensing and support.

Ericom's connection broker and client-side VCC software also has customer-cited strengths for support of peripheral devices such as card readers and printers. Customers are particularly pleased with Ericom's responsiveness when there are issues with peripherals. As workforces mobilize and business models change with respect to how goods are sold and security is handled, this type of support and capability will become increasingly valued.

Challenges and Opportunities

When HTML5 and Chromebooks first hit the market, unlike Ericom many other suppliers chose a "wait and see" approach before committing resources to developing virtual computing clients for those products. Likewise, in 2015, a similar opportunity is presenting itself in the form of wearable devices. Although the small display size is not compelling for many applications, there can be clever uses for these wearable devices as an auxiliary display. For example, smartwatches could serve as excellent nontouch interfaces for virtualized applications. If Ericom allocates R&D skills and budget to developing endpoint software that supports wearable peripherals, the company could once again be a front-runner in an emerging space.

In addition, Ericom's ISP customer opportunity can be expanded as Microsoft Windows 10 hits the market. If older ISP applications are virtualized and delivered as a service, they can run on Windows 10 without the need of developing and testing updated code for the new OS.

Ericom has an opportunity to gain traction in the enterprise market, but IT buyers are often risk averse and avoid change when the incumbent solutions are working "good enough." To win these larger customers, Ericom must go beyond highlighting its cited cost advantage and focus more of the value proposition on the stability and reliability of the solution. This will be a key factor because larger enterprises and channel partners often have more experienced and capitalized IT organizations, and as a result, they tend to be more concerned with the dependability of the offering than pure cost savings.

IDC believes that IT organizations will need to more efficiently deliver and provide access to virtualized desktops and applications to improve business agility while simultaneously streamlining IT overhead. Therefore, Ericom must clearly articulate and demonstrate how the advanced monitoring, management, and reporting capabilities found in its V7 Connect product provides IT organizations with the visibility and control needed to ensure optimal performance and scalability of datacenter resources supporting client virtualization instances.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key 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 the vendor 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 strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

The 2015 IDC MarketScape for virtual client computing should be considered on its own rather than in comparison to any previously published version as the scoring has been updated based on the current market and, in some cases, is more conservative.

IDC MarketScape 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 software 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.

LEARN MORE

Related Research

- *Citrix Synergy 2015: Unifying Users, Devices, Applications, and Data with Cloud Services* (IDC #lcUS25642215, May 2015)
- *Microsoft Build and Ignite Announcements: Enabling Modern End-User Computing Environments* (IDC #lcUS25620615, May 2015)
- *Virtual Mobile Infrastructure Technology Emerges to Address Mobility Pain Points* (IDC #lcUS25574315, April 2015)
- *VMware EUC Industry Analyst Day: Mobilizing Devices, Users, and Applications* (IDC #lcUS25534215, April 2015)

- *Dell Takes #1 Spot in Worldwide Enterprise Client Device Shipments in Fourth Quarter Amidst a Tough Quarter; Delayed Projects Should Resume in 2015, According to IDC* (IDC #prUS25503015, March 2015)
- *IDC QuickPoll: Client Virtualization – Mobilizing Workforces for Increased Versatility and Productivity* (IDC #254984, March 2015)
- *NIMBOXX Acquires Virtual Bridges VERDE VDI Product to Enhance Its Hyperconverged Portfolio* (IDC #lcUS25430315, February 2015)
- *NVIDIA and VMware to Deliver Advanced Graphics Capabilities for Desktop Virtualization* (IDC #lcUS25426215, February 2015)
- *Citrix Announces Integrated Infrastructure Offering to Optimize Delivery of Its Workspace Solutions* (IDC #lcUS25390215, January 2015)
- *Microsoft Azure RemoteApp Enters the Virtual Client Computing Market* (IDC #lcUS25384615, January 2015)
- *Worldwide Virtual Client Computing 2014-2018 Forecast Update: New Delivery Models Fuel Moderate Growth* (IDC #252838, December 2014)
- *Market Analysis Perspective: Worldwide Client Virtualization Software, 2014 – Connecting People to Solutions* (IDC #252820, November 2014)
- *Dell World 2014: Converged Offerings Optimize VDI Delivery and End Point Management* (IDC #lcUS25257514, November 2014)
- *IDC MarketScape: Worldwide Client Virtualization Software 2013 Vendor Assessment* (IDC #245100, December 2013)

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 capabilities and business strategies of many desktop virtualization vendors. This evaluation is based on a comprehensive framework and a set of parameters expected to be most conducive to success in providing client virtualization solutions, during both the short term and the long term.

"Balancing the requirement for increased governance and control over corporate information with the need to empower business users with the modern technologies they need to be productive is opening the door to increased VCC adoption in the enterprise. For OS, application, and VCC software suppliers, the new multidevice reality should increase the shift toward a user-centric model," said Robert Young, research manager, End Point Device and IT Service Management service and Cloud and Virtualization System Software research.

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

Global Headquarters

5 Speen Street
Framingham, MA 01701
USA
508.872.8200
Twitter: @IDC
idc-insights-community.com
www.idc.com

Copyright Notice

This IDC research document was published as part of an IDC continuous intelligence service, providing written research, analyst interactions, telebriefings, and conferences. Visit www.idc.com to learn more about IDC subscription and consulting services. To view a list of IDC offices worldwide, visit www.idc.com/offices. Please contact the IDC Hotline at 800.343.4952, ext. 7988 (or +1.508.988.7988) or sales@idc.com for information on applying the price of this document toward the purchase of an IDC service or for information on additional copies or Web rights.

Copyright 2015 IDC. Reproduction is forbidden unless authorized. All rights reserved.

