Project VRC: Survey Overview
State of the VDI and SBC union 2014

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1. SUMMARY

Project ‘Virtual Reality Check’ conducted the second worldwide State of the VDI and SBC union survey in February and March 2014. This survey is focused the desktop virtualization space and participants are IT Professionals who are active in the desktop virtualization industry as IT vendors, IT partners and IT departments.

The first edition of this survey was held in Q4 2012, and those results are published early 2013 on www.projectvrc.com.

This survey overview is an exclusive publication (April 2014) for survey participants.

All results in this overview are only from the 838 participants who completed the full 2014 survey. This is, in comparison to the 2013 publication with 662 completed survey responses, 27% more participants than the 2013 edition.

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2. INTRODUCTION

Welcome to “Project: Virtual Reality Check (VRC)"!

PQR and Login Consultants started this unbiased and independent R&D project early 2009. The goal of Project VRC is to analyze the developments in the Application- and Desktop Virtualization market and to objectively present the results. In the haze of the extreme rate of innovation in the virtualization market and corresponding marketing promises this information is appreciated. Therefore we published our methods and conclusions in various whitepapers which can be downloaded from www.projectvrc.com

2.1 SURVEY GOAL

The goal of the survey executed by Project Virtual Reality Check is to share insights about usage, configuration and trends in the Virtual Desktop Infrastructure and Server Based Computing industry, ‘the state of the VDI and SBC union’.

Past 6 years Project ‘Virtual Reality Check’ was, and still is, focused on executing tests, finding insights,- deep technical best practices and performance analysis in the server hosted desktop industry. The results are reported in multiple whitepapers that (after registration) were made free to download for everyone. The registration resulted in a large database of people focused on desktop virtualization solutions, best practices and performance analysis. We used this VRC community database to execute the ‘state of the VDI and SBC union, 2014 edition’.

2.2 BETTER TOGETHER

“...The two largest and most focused competitors in the Dutch Virtualization, Application Delivery and Enterprise Mobility market space are working together on Project Virtual Reality Check...” PQR and Login Consultants started this joined-venture in 2009 to share insights with the virtualization community with Project Virtual Reality Check (Project VRC). There are several reasons for PQR and Login Consultants to execute this project together:

- The Project leaders, Ruben Spruijt and Jeroen van de Kamp have known each other for a long time from the virtualization community and share the same passion for these technologies.
- Project VRC is a huge undertaking, PQR and Login Consultants individually do not have the resources, or time, to execute this project on their own. Thus is it logical to cooperate, share the workload and deliver the results together.
- Both organizations share the same technical vision, which is critically important in complicated projects like these.
2.3 CONTACT

All information about Project Virtual Reality Check can be found at www.projectvrc.com. Contact details of the participating organizations are:

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We try to provide accurate, clear, complete and usable information. We appreciate your feedback. If you have any comments, corrections, or suggestions for improvements of this document, we want to hear from you! Please send an email to Jeroen van de Kamp (j.kamp@loginconsultants.nl) or Ruben Spruijt (rsp@pqr.nl).

Please include the title of the document, the version number, and the page that you refer to, in your message.

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team@projectvrc.com
3. SURVEY SUMMARY RESULTS

3.1 PARTICIPANT INFORMATION

3.1.1 What primary responsibility do you have?

What primary responsibility do you have?

- End-User: 0.5%
- Sales & Marketing: 3.6%
- Manager (Project Manager, IT executive): 16.8%
- Technical (Engineer, Consultant, Administrator, Architect): 79.1%

3.1.2 What type of organization do you represent?

What type of organization do you represent?

- I work for an organization which uses VDI and/or SBC: 45.7%
- I work for an IT Reseller, Partner, Service Provider, System integrator: 41.5%
- I work for an IT Vendor: 12.8%
3.1.3 In which country do you work mostly?

In which country do you work mostly?

- Netherlands: 29.1%
- United States: 23.6%
- United Kingdom: 8.5%
- Germany: 7.0%
- Belgium: 3.6%
- Australia: 3.2%
- Sweden: 2.6%
- Canada: 2.6%
- Denmark: 1.9%
- France: 1.8%
- Switzerland: 1.7%
- New Zealand: 1.6%
- Spain: 1.3%
- Norway: 1.3%
- Japan: 1.0%
- Austria: 1.0%
- Italy: 0.6%
- India: 0.6%
- Portugal: 0.5%
- Israel: 0.5%
- Ireland (Republic): 0.5%
- Finland: 0.5%
- South Africa: 0.4%
- Serbia: 0.4%
- Russian Federation: 0.4%
- Mexico: 0.4%
- China: 0.4%
- Other: 3.3%
3.2 GENERAL INFORMATION

3.2.1 Which is the most important business vertical to use this VDI/SBC environment?

![Vertical Preferences Chart]

3.2.2 At this moment, what is the current size of the total user population?

![User Population Size Chart]
3.2.3 Which hypervisor(s) is currently deployed to virtualize server workloads?

Which hypervisor(s) is currently deployed to virtualize server workloads? (Other than VDI/SBC)

![Hypervisor Usage Chart]

3.3 Server Based Computing Specific Questions

3.3.1 Is Server Based Computing (SBC) used?

Is Server Based Computing (SBC) used? (Terminal Server, Microsoft RDSH, Citrix Metaframe/XenApp, etc...)

![SBC Usage Chart]
### 3.3.2 What is the most important reason to use this SBC environment?

What is the most important reason to use this SBC environment?

- Centralize Management: 31.4%
- Cost Reduction: 14.4%
- Support OffShoring / Remote Locations / Branch offices: 13.5%
- Support Flex Working: 11.1%
- Provide Desktop as a Service: 9.4%
- Support specific legacy applications: 6.5%
- Increase Security: 4.9%
- Other (please specify): 3.0%
- No Answer / Not sure: 2.7%
- Support BYO: 1.8%
- Support Developers/Power Users: 1.1%
- Lower Energy Consumption: 0.2%

### 3.3.3 What is the maximum capacity of simultaneous sessions for this SBC environment?

At this moment, what is the maximum capacity of simultaneous/concurrent user sessions for this SBC environment?

- 100,000+: 0.5%
- 25,000 - 99,999: 2.6%
- 5,000 - 24,999: 13.2%
- 1,000 - 4,999: 24.7%
- 250 - 999: 30.7%
- 1 - 249: 24.7%
- No Answer / Not Sure: 3.6%
3.3.4 Which hypervisor is currently deployed for SBC (TS/Xenapp workloads)?

Which hypervisor is currently deployed for SBC (TS/Xenapp workloads)?

3.3.5 Which SBC broker solution is currently deployed?
3.3.6 How many vCPU's are typically (average) configured for each Server VM?

How many vCPU's are typically (average) configured for each Server VM?

- 16 vCPU's or more: 1.4%
- 8 vCPU's: 8.3%
- 4 vCPU's: 36.3%
- 2 vCPU's: 34.9%
- 1 vCPU: 3.8%
- Not virtualized: running bare-metal: 5.9%
- No Answer / Not Sure: 9.4%

3.3.7 Which OS is currently deployed for the SBC server (VM's)?

Which OS is currently deployed for the SBC server (VM's)?

- Windows 2012 R2: 6.1%
- Windows 2012: 2.9%
- Windows 2008 x64 R2: 69.7%
- Windows 2008 x64: 2.4%
- Windows 2008 x86: 2.9%
- Windows 2003 (R2) x64: 2.9%
- Windows 2003 (R2) x86: 9.6%
- No Answer / Not Sure: 3.6%
3.4 HOSTED VIRTUAL DESKTOP INFRASTRUCTURE SPECIFIC QUESTIONS

3.4.1 Do you use VDI in your environment?

Do you use VDI in your environment?
(VMware View / Citrix Xendesktop / Dell vWorkspace / MS RDS)

- NO: 24.5%
- YES: 75.5%

3.4.2 In what phase is this VDI environment?

In what phase is this VDI environment?

- Production: 5 years and older: 7.0%
- Production: 2-4 years: 36.3%
- Production: up to 1 year: 22.7%
- Migration/Rollout: 13.1%
- Pre-Production Pilot: 12.0%
- Design / PoC: 7.4%
- No Answer / Not Sure: 1.4%
3.4.3 What is the most important reason to use this VDI environment?

What is the most important reason to use this VDI environment?

- Centralize Management: 23.9%
- Support Flex Working: 15.3%
- Provide Desktop as a Service: 13.1%
- Support Developers/Power Users: 10.7%
- Support Off-Shoring / Remote: 10.3%
- Cost Reduction: 8.4%
- Increase Security: 4.7%
- Other (please specify): 3.9%
- Support specific (legacy): 3.8%
- Support BYO: 3.3%
- No Answer / Not sure: 2.1%
- Lower Energy Consumption: 0.5%

3.4.4 What is the capacity of simultaneous desktop sessions for this VDI environment?

At this moment, what is the capacity of simultaneous/concurrent desktop sessions for this VDI environment?

- 100,000+: 0.3%
- 25,000 - 99,999: 0.9%
- 5,000 - 24,999: 7.4%
- 1,000 - 4,999: 21.8%
- 250 - 999: 24.8%
- 1 - 249: 41.2%
- No Answer / Not Sure: 3.5%
3.4.5 Which VDI solution is currently used to provide access to the virtual desktops?

![Graph showing the percentage of users using different VDI solutions](image)

- VMware View 5.x: 31.8%
- Citrix XenDesktop 5.x: 30.0%
- Citrix XenDesktop 7.x: 23.5%
- Dell/Quest vWorkspace 7.x and 8.x: 23.9%
- Microsoft RDS Windows Server: 2.4%
- Other (please specify): 1.4%
- Microsoft RDS Windows 2008 (R2): 1.3%
- Citrix VDI-in-a-box: 1.3%
- No broker: using direct connections: 1.3%
- No Answer / Not Sure: 1.3%
- VMware View 4.x: 0.8%
- Citrix XenDesktop 4.x or older: 0.8%
- Oracle/Sun VDI: 0.6%
- Virtual Bridges: 0.3%
- Ericom: 0.2%
- Dell/Quest vWorkspace 6.x or older: 0.2%
- Custom/Self-made Broker: 0.2%
- VMware View 3.x or older: 0.0%
- Red Hat Enterprise Virtualization: 0.0%
- 2X: 0.0%

3.4.6 Which hypervisor is currently deployed for VDI workloads?

![Graph showing the percentage of users using different hypervisors](image)

- VMware vSphere 5.0 - 5.1: 49.0%
- VMware vSphere 5.5 or higher: 19.9%
- Citrix XenServer 6.x: 10.9%
- Microsoft Hyper-V 2012 R2: 5.7%
- VMware vSphere 4.x: 3.8%
- Microsoft Hyper-V 2008 R2: 3.8%
- Microsoft Hyper-V 2012: 3.0%
- Other (please specify): 1.3%
- No Answer / Not Sure: 1.3%
- Citrix XenServer 5.x: 0.9%
- KVM: 0.3%
- Citrix XenServer 4.x or older: 0.3%
- VMware ESX 3.x or older: 0.2%
- No Virtualization Used: 0.2%
- Parallels: 0.0%
- Oracle: 0.0%
- Microsoft Hyper-V 2008: 0.0%
3.4.7 What percentage of the desktop VM are shared/pooled/stateless

What percentage of the desktop VM are shared/pooled/stateless (non-personal desktop pool a user will Logon to a random desktop every time)

- 100% - All desktops are shared/pooled/stateless: 18.5%
- 80 - 99% of the desktops are shared/pooled/stateless: 20.4%
- 60 - 79% of the desktops are shared/pooled/stateless: 13.3%
- 40 - 59% of the desktops are shared/pooled/stateless: 8.4%
- 20 - 39% of the desktops are shared/pooled/stateless: 5.1%
- 1 - 19% of the desktops are shared/pooled/stateless: 9.2%
- 0% - All desktops are personal/private/stateful: 18.6%
- No Answer / Not Sure: 6.6%

3.4.8 How many vCPU's are typically (average) configured for each desktop VM?

How many vCPU’s are typically (average) configured for each desktop VM?

- 8 vCPU’s or more: 0.3%
- 4 vCPU’s: 3.9%
- 2 vCPU’s: 56.4%
- 1 vCPU: 33.6%
- No Answer / Not Sure: 5.7%
3.4.9 Which OS is now the standard for new desktop VM's?

Which OS is now the standard for new desktop VM's?

- Windows 7 x64: 55.5%
- Windows 7 x86: 31.1%
- Windows 8.x x64: 4.9%
- Windows XP: 3.8%
- Windows Server (2008 - 2012 r2): 1.7%
- Windows 8.x x86: 1.4%
- No Answer / Not Sure: 0.9%
- Other (please specify): 0.3%
- Linux Ubuntu: 0.3%
- Linux CentOS: 0.0%
- Windows Vista: 0.0%

3.4.10 How is the virtual Windows desktop typically licensed?

How is the virtual Windows desktop typically licensed?

- Other (please specify): 3.8%
- RDS Windows Server CAL (SPLA) (using Windows server as Desktop OS): 6.3%
- Stand-alone VDA license: 12.2%
- VDA/CDL license part Microsoft Software Assurance on the Client: 57.0%
- No Answer / Not Sure: 20.7%
3.4.11 Is the storage infrastructure specifically designed for VDI workloads?

Is the storage infrastructure specifically designed for VDI workloads?

- Yes, dedicated storage solution for desktop virtualization workloads: 47.2%
- Yes, but storage solution is shared with other (server, application and database) workloads: 22.7%
- No, using standard storage solution: 22.9%
- Other (please specify): 2.7%
- No Answer / Not Sure: 4.4%

3.4.12 Which storage technologies are used to host these desktops?

Which storage technologies are used to host these desktops? (choose all that apply, max 3)

- Central Storage (SAN/NAS) using SSD + HardDisks: 38.2%
- Central Storage (SAN/NAS) using Hard Disks only: 35.2%
- Central Storage (SAN/NAS) using SSD: 6.6%
- Local Storage using PCI-E Flash Storage: 7.3%
- Local Storage using SSD's: 14.5%
- Local Storage using HardDisks: 12.0%
- Other (please specify): 6.3%
- No Answer / Not Sure: 4.7%
3.5 VDI AND SBC RELATED QUESTIONS

3.5.1 What percentage of applications are native Windows applications?

What percentage of applications are native Windows applications? (no web/mobile/html5)

- 100% - All apps are Windows applications: 15.0%
- 80 - 99% Windows Applications: 32.5%
- 60 - 79% Windows Applications: 27.0%
- 40 - 59% Windows Applications: 10.9%
- 20 - 39% Windows Applications: 4.2%
- 1 - 19% Windows Applications: 3.0%
- 0% - No Windows applications are used: 0.1%
- No Answer / Not Sure: 7.4%

3.5.2 How is this VDI/SBC environment used/considered within the organization?

How is this VDI/SBC environment used/considered within the organization? (choose best fit answer)

- Only for very specific use cases/exceptions (occasional): 5.7%
- For well defined / well known use cases or user groups: 21.8%
- Broad usage, combined with other desktop models like PCs and Laptops: 29.6%
- As many users as possible should use it, it is considered the standard: 40.2%
- No Answer / Not Sure: 2.6%
### 3.5.3 How is the user environment managed in the SBC/VDI environment?

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Group Policy Preferences</td>
<td>25.9%</td>
</tr>
<tr>
<td>Citrix User Profile Manager</td>
<td>18.7%</td>
</tr>
<tr>
<td>RES Software</td>
<td>15.2%</td>
</tr>
<tr>
<td>AppSense</td>
<td>10.9%</td>
</tr>
<tr>
<td>No Answer / Not Sure</td>
<td>7.2%</td>
</tr>
<tr>
<td>VMware View Persona</td>
<td>5.8%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>4.7%</td>
</tr>
<tr>
<td>Custom Scripts</td>
<td>3.6%</td>
</tr>
<tr>
<td>Liquidware Labs Profile Unity</td>
<td>2.4%</td>
</tr>
<tr>
<td>Immidio Flex</td>
<td>2.4%</td>
</tr>
<tr>
<td>Microsoft UE-V</td>
<td>1.3%</td>
</tr>
<tr>
<td>Dell/Quest vWorkspace</td>
<td>1.1%</td>
</tr>
<tr>
<td>Norskale Virtual User Environment</td>
<td>0.5%</td>
</tr>
<tr>
<td>Scense</td>
<td>0.5%</td>
</tr>
<tr>
<td>Tricerat Simplify Profiles</td>
<td>0.0%</td>
</tr>
<tr>
<td>PolicyPak Software</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
3.5.4 How are Windows OS and applications installed, updated & managed?

How are Windows OS and (non virtualized) applications installed, updated & managed in the VDI/SBC environment?

- Updates are manually done in master image: 33.7%
- Microsoft SCCM: 27.8%
- No Answer / Not Sure: 8.2%
- Other (please specify): 6.3%
- RES automation manager: 5.6%
- Custom Scripting: 4.8%
- Microsoft WDS / MDT: 4.2%
- Unideck: 2.0%
- Symantec Altiris: 1.7%
- Novell Zenworks: 1.1%
- LANDesk Management Suite: 0.7%
- KACE: 0.7%
- HP Openview/Radio: 0.7%
- CA Client Automation: 0.6%
- FrontRange (Enteo) DSM: 0.5%
- Login Automation Machine: 0.5%
- Matrix 42: 0.4%
- BMC BladeLogic Client Automation: 0.4%
- BigFix: 0.2%

3.5.5 Which application virtualization solution is used within this VDI/SBC environment?

Which application virtualization solution is used within this VDI/SBC environment?

- No Application Virtualization is used: 29.0%
- Microsoft App-V 5.x: 25.1%
- VMware Thinapp: 15.0%
- Microsoft App-V 4.x or older: 12.8%
- Citrix Application Streaming: 7.3%
- No Answer / Not Sure: 6.9%
- Other (please specify): 3.3%
- Symantec (Altiris) SVS: 0.4%
- Numencet: 0.2%
- Spoon: 0.1%
- Ceeed: 0.0%
3.5.6 What percentage of Windows applications are virtualized?

What percentage of Windows applications are virtualized? (versus installed normally)

- 100% - All Windows apps are virtualized: 1.7%
- 80 - 99% virtualized applications: 10.7%
- 60 - 79% virtualized applications: 13.6%
- 40 - 59% virtualized applications: 8.9%
- 20 - 39% virtualized applications: 10.5%
- 1 - 19% virtualized applications: 19.8%
- 0% - No Windows applications are virtualized: 25.8%
- No Answer / Not Sure: 8.9%

3.5.7 Which is the mostly used Antivirus solution in the VDI/SBC environment?

Which is the mostly used Antivirus solution in the VDI/SBC environment?

- McAfee End Point Protection: 18.1%
- Symantec End Point Protection: 16.3%
- Microsoft Forefront/SCED: 13.8%
- TrendMicro Deep Security: 10.4%
- TrendMicro Office Scan: 9.5%
- McAfee Move: 8.9%
- Sophos: 8.1%
- Other (please specify): 6.1%
- Kapersky: 3.2%
- Eset Smart Security: 2.1%
- BitDefender: 1.9%
- F-Secure: 0.8%
- No Answer / Not Sure: 0.5%
3.5.8 Which Office version is current standard in the VDI/SBC environment?

Which Office version is current standard in the VDI/SBC environment?

- Microsoft Office 2010: 68.7%
- Microsoft Office 2013: 13.0%
- Microsoft Office 2007: 9.5%
- Microsoft Office 2003 and older: 4.1%
- No Answer / Not Sure: 2.1%
- No Office is used: 1.0%
- Other (please specify): 0.7%
- OpenOffice: 0.5%
- LibreOffice: 0.4%

3.5.9 Are you planning an upgrade to Microsoft Office 2013?

Are you planning an upgrade to Microsoft Office 2013?

- Not investigated yet: 21.2%
- Investigating, no decision has been taken: 18.9%
- No Answer / Not Sure: 17.8%
- Migrating within a year: 14.8%
- Already fully migrated: 10.0%
- Migration planned in 2015 or later: 6.8%
- Waiting with migration because of performance overhead and impact: 6.0%
- Other (please specify): 3.0%
- No Office is used: 1.6%
3.5.10 Which server hardware brand is now used to host the VDI/SBC environment?

Which primary server hardware brand is now used to host the VDI/SBC environment?

- HP: 45.1%
- Dell: 24.3%
- Cisco: 10.9%
- IBM: 8.0%
- Unknown / No Answer: 5.0%
- Fujitsu: 2.2%
- Other (please specify): 1.8%
- SuperMicro: 1.6%
- Nutanix: 1.1%
- Oracle (Sun): 0.1%

3.5.11 Do you use specific hardware to accelerate encoding of the remoting protocol?

Do you use specific hardware to accelerate (video) encoding of the remoting protocol?

- No specific video encoding hardware used: 78.0%
- AMD Firepro: 0.0%
- NVidia GRID: 5.9%
- NVidia Quadro: 2.2%
- Teradici PCoIP Server offload card: 3.2%
- No Answer / Not Sure: 10.7%
3.5.12 Which Storage solution(s) are used for this VDI/SBC environment?

Which Storage solution(s) are used for this VDI/SBC environment? (Choose Max 3)

- NetApp: 28.5%
- EMC: 22.8%
- HP: 18.0%
- Dell: 12.8%
- No Answer / Not Sure: 10.0%
- IBM: 8.6%
- Other (please specify): 8.0%
- FusionIO: 6.4%
- Hitachi Data Systems (HDS): 5.7%
- Atlantis: 3.8%
- Tintri: 2.1%
- Nutanix: 1.4%
- Whiptail: 0.8%
- PureStorage: 0.6%
- Nexenta: 0.6%
- GreenBytes: 0.6%
- Violin Memory: 0.5%
- Nimbus: 0.4%
- Datacore: 0.4%
- XioTech: 0.1%

3.5.13 Which desktop/server image deployment-cloning solution(s) are currently used?

Which desktop/server image deployment-cloning-personalization solution(s) are currently used for the VDI/SBC environment?

- Citrix Provision Services: 37.6%
- VMware Linked Clones: 21.2%
- Full Clones: 16.9%
- No Answer / Not Sure: 16.6%
- Citrix Machine Creation Services: 12.5%
- Citrix Personal vDisk: 8.8%
- Other (please specify): 4.1%
- Microsoft Differencing Disk: 2.3%
- Unidesk: 2.2%
- NetApp Flex Clones: 1.4%
3.5.14 Do you currently use an unified communication solution in VDI/SBC?

Do you currently use an unified communication solution within the VDI/SBC environment?

- Yes, includes voice and video: 13.4%
- Yes, but no video (web cam support): 9.3%
- Partially, without voice and video (web cam) support: 13.8%
- No, but planning for the future: 23.6%
- No, and no specific plans for the future: 29.4%
- No Answer / Not Sure: 10.5%

3.5.15 Do you perform load tests in your VDI/SBC environment?

Do you perform load tests in your VDI/SBC environment?

- Other (please specify): 2.1%
- Yes, for stress testing (stability/soak tests): 3.8%
- Yes, for validating changes: 3.2%
- Yes, for load testing (evaluating optimizations and tuning): 10.9%
- Yes, for sizing and capacity evaluation: 17.8%
- Yes, for benchmarking (comparing products): 5.8%
- No, not interested: 4.1%
- No, no testing environment available: 17.5%
- No, too much time/budget/resource consuming: 23.2%
- No Answer / Not Sure: 11.6%
3.5.16  Which innovation area is most important to improve VDI/SBC adoption?

Which innovation area is most important to improve VDI/SBC adoption?

- User Experience/performance Rich Media: Audio, video and 2D/3D graphics: 16.0%
- User Experience/performance in a WAN/High latency environments: 15.6%
- Overall cost reduction of the complete technology stack (including clients, server and licenses): 14.0%
- User Experience/performance with voice, webcam, VoIP & conferencing solutions: 9.8%
- Streamline management & user experience between hosted desktops & regular desktops/laptops: 8.5%
- No Answer / Not sure: 8.1%
- Overall complexity reduction of the technology stack: 7.5%
- User Experience/performance with mobile and touch/tablet oriented devices: 6.8%
- Increase desktop session density/capacity per physical server: 4.9%
- Lower storage costs: 3.8%
- Simplify licensing: 3.5%
- Other (please specify): 1.6%

3.5.17  Will you introduce or change to a different hypervisor vendor within 2-3 years?

Will you introduce or change to a different hypervisor vendor within 2-3 years?

- No Answer / Not sure: 7.4%
- No, there is no change planned: 58.6%
- Maybe, still investigating options: 15.5%
- Seriously considering Citrix/Xen: 0.8%
- Seriously considering KVM: 0.6%
- Seriously considering Microsoft: 13.1%
- Seriously considering Parallels: 0.2%
- Seriously considering VMware: 2.3%
- Yes, to other (please specify): 1.4%
3.5.18  Will you introduce or change to new VDI/SBC broker vendor within 2-3 years?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Answer / Not sure</td>
<td>7.0%</td>
</tr>
<tr>
<td>No, there is no change planned</td>
<td>71.1%</td>
</tr>
<tr>
<td>Maybe, still investigating options</td>
<td>12.9%</td>
</tr>
<tr>
<td>Seriously considering Citrix</td>
<td>3.7%</td>
</tr>
<tr>
<td>Seriously considering Microsoft</td>
<td>2.6%</td>
</tr>
<tr>
<td>Seriously considering Quest</td>
<td>0.1%</td>
</tr>
<tr>
<td>Seriously considering Red Hat</td>
<td>0.1%</td>
</tr>
<tr>
<td>Seriously considering VMware</td>
<td>1.6%</td>
</tr>
<tr>
<td>Yes, to other (please specify)</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

3.5.19  How interested are you in DaaS offerings?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, to other (please specify)</td>
<td>1.2%</td>
</tr>
<tr>
<td>Already using DaaS on a large scale for many virtual desktops</td>
<td>1.2%</td>
</tr>
<tr>
<td>Already using DaaS on a small scale for some virtual desktops</td>
<td>2.0%</td>
</tr>
<tr>
<td>Investigating because of business request</td>
<td>10.4%</td>
</tr>
<tr>
<td>Investigating out of curiosity</td>
<td>37.1%</td>
</tr>
<tr>
<td>Not interested at all</td>
<td>36.9%</td>
</tr>
<tr>
<td>No Answer / Not sure</td>
<td>11.2%</td>
</tr>
</tbody>
</table>
3.5.20 Are thin-clients used to connect to the VDI/SBC environment?

Are thin-clients used to connect to the VDI/SBC environment? (Other than PC’s, laptops, tablets, smartphones)

- 100% - Only thin-clients are used: 4.3%
- 80 - 99% thin-clients: 17.8%
- 60 - 79% thin-clients: 14.8%
- 40 - 59% thin-clients: 11.1%
- 20 - 39% thin-clients: 9.8%
- 1 - 19% thin-clients: 18.1%
- 0% - No thin clients are used at all: 19.2%
- No Answer / Not Sure: 4.9%

3.5.21 Which Client Side Desktop Virtualization Solution is used?

Which Client Side Desktop Virtualization Solution is used?

- None, no clients side virtualization is used: 68.1%
- VMWare Fusion / Player / Workstation: 10.3%
- Citrix XenClient: 8.0%
- VMware Mirage: 2.4%
- Microsoft Windows 8 - HyperV: 2.1%
- Other (please specify): 1.40%
- Moka5: 1.0%
- Virtual Bridges VERDE/leaf: 0.2%
- No Answer / Not Sure: 7.9%
4. ABOUT THE AUTHORS

4.1 ABOUT LOGIN CONSULTANTS

Innovations of the desktop infrastructure bring significant benefits in the areas of cost, security, and user experience. The challenge is to find the perfect balance between end-user freedom and manageability. Exponential growth of possibilities when it comes to devices, virtualization technologies, application models and cloud solutions make it difficult to keep an eye on the ball.

Login Consultants is an independent international IT service provider specialized in End User Computing. We help our clients in finding the optimal balance between IT control and end user flexibility. Our goal is create innovative solutions which simplify future change. Our success with our customers is built on the quality of integration combined with a smart migration approach and the manageability of the solution after deployment.

Login Consultants has an experienced team with over 140 consultants in The Netherlands, Belgium and Germany. Our consultants have accreditations from Microsoft, Citrix and VMware, and are regularly invited to speak at national and international events. They are involved as experts in online and printed IT publications and actively participate in relevant technical blogs.

Login Consultants’ innovative drive is materialized in our own Solutions-lab. The specialists of Login Consultants continuously create innovative software solutions to support and enhance the quality of centralized desktop implementations. These efforts resulted in a suite of software tools adding value to the software solutions of Citrix, Microsoft, VMware and others. These freeware tools are used and appreciated by thousands of companies worldwide. The Solution-lab of Login Consultants has been the incubator for successful software solutions, like Flex Profiles, Login VSI and Automation Machine for Hosted Desktops.

4.2 ABOUT PQR

PQR is the professional ICT infrastructure specialist focusing on the availability of data, applications and work spaces with optimized user experience in a secure and manageable way.

PQR provides its customers innovative ICT solutions, from on-premise to cloud management, without processes getting complex. Simplicity in ICT, that’s what PQR stands for.

PQR has traceable references and a wide range of expertise in the field, proven by many of our high partner statuses and certifications. PQR is Citrix Platinum Solution Advisor, HDS Tier 1 Platinum Partner, HP GOLD Preferred Partner, Microsoft Gold Partner, NetApp Star Partner, RES Platinum Reseller, VMware Premier Partner en VMware Gold Authorized Consultant Partner.
PQR’s approach is based on four main pillars:

- Data & System Availability
- Application & Desktop Delivery
- Secure Access & Secure Networking
- Advanced IT Infrastructure & (Cloud) Management

PQR, founded in 1990, is headquartered in De Meern and counts over 107 employees. In fiscal year 2011/2012 posted sales of €94.9 million and a net after tax profit of €4.6 million have been recorded.

4.3 TEAM MEMBERS

Sven Huisman, Consultant @ PQR

Sven Huisman (1977) studied Information Management in Utrecht. He started his career as system engineer and meanwhile he has over 10 years of experience in the IT business. He is one of PQR’s technical consultants, focusing on Application and Desktop Delivery, hardware and software virtualization. Sven advises, designs, implements and migrates advanced ICT-infrastructures. He is a Citrix Certified Enterprise Administrator (CCEA), a Microsoft Certified Systems Engineer (MCSE) and a VMware Certified Professional (VCP). Sven is blogging about virtualization on VirtualFuture.info and was awarded as VMware vExpert. To contact Sven directly send an email to shu@pqr.nl. Follow Sven on twitter.

Ryan Bijkerk, Consultant @ Login VSI

Ryan Bijkerk (1989) started in the beginning of 2013 as a consultant at Login VSI. Ryan is involved in the development progress of Login VSI and coordinates a team of developers based on Scrum and Agile. Ryan also provides support to a large range of customers with a focus on Login VSI version 4. For Project VRC he is responsible for the test and the quality of these tests. Ryan also analyzes the results and discusses this with the Project VRC team and helps with writing the whitepapers. Ryan is blogging about his experience and solutions at Logitblog.com. To contact Ryan directly send an email to r.bijkerk@loginvsi.com or follow Ryan on twitter.

Jeroen van de Kamp, CTO @ Login Consultants

As Chief Technology Officer, Jeroen van de Kamp (1972) is responsible for defining and executing the technical strategy for Login Consultants. From the start, Jeroen has played a critical role in the technical growth and accreditation Login has accumulated over the years. He has developed several core solutions which allow Login Consultants to easily differentiate themselves in the infrastructure consulting market.

Jeroen is also responsible for several well-known publications like the Flex Profile Kit, TCT templates & "The black hole effect". Because of his contribution to the technical community van de Kamp is recognized as a thought-leader in the application delivery industry and has become a residential speaker for seminars like BriForum, Citrix
Solution Summit and many others. He is one of the 25 members worldwide who participate in the exclusive "Citrix Technology Professional" program. Jeroen is still engaged with strategic key accounts for Login Consultants, defining and realizing all-encompassing strategies for complex application, desktop and server delivery infrastructures. Previous to his position as CTO at Login Consultants Jeroen held positions as Infrastructure Architect at Login Consultants; as IT Consultant at QFace ICT and as IT specialist at ASG de Veer. To contact Jeroen directly send an email to j.vandekamp@loginconsultants.nl or follow him on twitter: @thejeroen.

Ruben Spruijt, CTO @ PQR

Ruben Spruijt (1975) is CTO and focuses primarily on Enterprise Mobility, Virtualization and Cloud Management. He is actively involved in determining PQR’s vision and strategy. Ruben is a Microsoft Most Valuable Professional (MVP), Citrix Technology Professional (CTP) and VMware vExpert and is the only European with these three virtualization awards. He gives customers advice and has them benefit from his expertise; he motivates his colleagues and writes blogs, articles and opinion pieces on a regular basis. During presentations in several national and international congresses, Ruben shares his thoughts and knowledge on application and desktop delivery, and on virtualization solutions. To contact Ruben directly send an email to rsp@pqr.nl. Follow Ruben on twitter: @rspruijt.