



save the date

march 4-6, 2012
san francisco
california

conference expo

Application Development

Sign in

- News
- Blog
- White Papers
- Webcasts
- Test Center
- Technologies
- Tech Watch
- Video
- Deep Dives
- More

[InfoWorld Home](#) / [Cloud computing](#) / InfoWorld's top 10 emerging enterprise...

NOVEMBER 21, 2011

InfoWorld's top 10 emerging enterprise technologies

Which of today's newest shipping technologies will triumph over the long haul? Here are our best guesses

By [InfoWorld staff](#) | [InfoWorld](#)

[Follow @infoworld](#)

[Print](#) |

[previous page](#)

1 2 3 4 5 6 7

[next page](#)

10. HTML5

InfoWorld has written a [huge amount about HTML5](#), but we spent some time debating internally whether to include it in this list. The naysayers pointed out that we've been putting tags together to form Web pages since the beginning of the World Wide Web. HTML5 has simply added new tags. Did we stop what we were doing to celebrate when someone invented the `` tag?

Others took the practical view that while HTML5 looks similar to old-fashioned HTML, the tasks it accomplishes are dramatically different. The local data storage, the `<canvas>` tag, and the video tag make it possible to do much more than pour marked-up words and images into a rectangle. Plus, the new HTML5 WebSockets spec defines a new way to conduct full-duplex communication for event-driven Web apps.

In the end, [Adobe's decision to end development of mobile Flash](#) tipped the debate. Suddenly an entire corner of the Web that used to deliver video, casual games, and other animated content is back in play. An entire sector of the Web development industry is going to retool as we move to HTML5 from Flash. And that represents a tectonic shift for Web developers. --Peter Wayner

9. Client-side hypervisors

Conventional [desktop virtualization](#) has faltered for two key reasons: It requires a continuous connection between client and server, and the server itself needs to be beefy to run all those desktop VMs.

A client hypervisor solves both problems. It installs on an ordinary desktop or laptop, leveraging the processing power of the client. And laptop users can take a "business VM" with them containing the OS, apps, and personal configuration settings. That VM is secure and separate from whatever else may be running on that desktop -- such as a malware some clueless user accidentally downloaded -- and you get all the virtualization management advantages, including VM snapshots, portability, easy recovery, and so on.

Type 2 client-side hypervisors such as VMware Player, VirtualBox, and Parallels Desktop have been in existence for years; they run on top of desktop Windows, Linux, or OS X to provide a container for a guest operating system. Type 1 client-side hypervisors -- which run on bare metal and treat every desktop OS as a guest -- provide better security and performance. They're also completely transparent to the end user, never a drawback in a technology looking for widespread adoption.

Client hypervisors point to a future where we bring our own computers to work and download or sync our business virtual machines to start the day. Actually, you could use any computer with a compatible client hypervisor, anywhere. The operative word is "future" -- Citrix, MokaFive, and Virtual Computer are the only companies so far to release a Type 1 client hypervisor, due in part to the

amazon web services

Learn how to take the fast on-ramp to Windows in the Cloud

Free webinar: December 8

Reserve Your Seat

Most Popular

- 2011 InfoWorld geek gadget gift guide
- 11 programming trends to watch
- Stop using these 25 passwords today
- Top inkjet all-in-one printers
- What I'm thankful for as a developer

Recommended Resources

- Advanced Persistent Threats and Other Advanced Attacks | White Paper
- A Buyer's Guide to Data Loss Protection Solutions | White Paper

problem Windows has dealt with for years: supplying a sufficient number of drivers to run across a broad array of hardware. However, these companies will be joined next year by Microsoft itself, which plans to include [Hyper-V in Windows 8](#).

Make no mistake, Windows 8 Hyper-V will require 64-bit Intel or AMD hardware. Don't expect bare-metal virtualization from your ARM-based Windows 8 tablet -- or any other tablet -- anytime soon. Note too that, unlike Citrix, MokaFive, and Virtual Computer, which built their client hypervisors with the express purpose of easing Windows systems management, Microsoft has stated that Windows 8 Hyper-V will be aimed strictly at developers and IT pros.

But hey, we're talking about Microsoft. It won't stop with developers and IT pros. Yes, tablets are making their way into the workplace, but the fact of the matter is that large-scale Windows desktop deployments are not going away, and Microsoft will be under more pressure than ever to make them easier to manage. With more and more employees working outside of the office -- or using a stipend to buy their own PCs and bring them to work -- the security and manageability of the client-side hypervisor will offer a compelling desktop computing alternative. --Eric Knorr

[◀ previous page](#)

1 2 3 4 5 6 7

[next page ▶](#)

Tags: [cloud computing](#), [big data](#), [application development](#), [computer memory](#), [server virtualization](#), [virtual desktop](#), [html5](#), [network convergence](#), [network management](#), [solid state drives](#), [servers](#), [identity management](#), [business intelligence](#), [computer hardware](#), [consumerization of it](#), [data center](#), [mobile technology](#), [networking](#), [security](#), [storage](#), [virtualization](#)

[Print](#) |

Sign up for [InfoWorld's Today's Headlines: First Look Newsletter](#). ▶

🕒 From CIO.com

- [Hottest Tablets for Your Holiday Wishlist](#)
- [15 Best iPhone Apps for Newbies](#)
- [20 Best Browser Apps of 2011](#)
- [Why Law Enforcement Can't Stop Hackers](#)

🕒 Questions From IT Pros

- [Useful Windows 8 shortcuts](#)
 - [How to renegotiate software contracts](#)
 - [Is the Windows 8 Start screen customizable?](#)
 - [What are the key elements in a risk response team?](#)
- » [Read more at ITworld Answers](#)

🕒 Additional Resources



WHITE PAPER

Handling Security via the Cloud

Few readers need to be told that the Internet is a dangerous place. Anyone in the IT field is aware that viruses, spam, and malicious Web sites exist. Knowledge of these attacks and vulnerabilities was the domain of specialized security gurus just a few years ago. But the need to understand computer security has spread beyond the domain of specialists. Today, even IT end users need to be aware of threats and countermeasures to some degree.

[Read now »](#)



WHITE PAPER

Security Threat Report 2011

Let this new 2011 Security Threat Report be your weapon in the battle against malware. It describes the significant threats of 2010, what to watch for in 2011, and more importantly, what you need to do to get ahead of them.

[Read now »](#)



WHITE PAPER

Sanity Check Your Disaster Recovery Plan

Focusing on the plan instead of the disaster helps to ensure you can survive challenges you never considered. This business continuity planning guide offers a checklist to help IT analyze threats, appoint a crisis management team, and develop a dynamic plan. Use it to simplify planning and adjust according to your business needs.

[Read now »](#)

- [Security Predictions for 2012 | White Paper](#)

- [Building a Trusted Warehouse: IBM InfoSphere software and IBM Netezza data warehouse appliances | White Paper](#)

- [IBM InfoSphere Information Server for Data Warehousing | Webcast](#)

- [Driving Information-led business innovation | White Paper](#)

See all [White Papers](#) / [Webcasts](#)

🕒 IT Jobs

[See All Jobs »](#) [Post a job for \\$295 »](#)

Jobs powered by [SimplyHired](#)

**WHITE PAPER****Converged Communications: People and Applications in Synchrony**

Most small and midsize organizations find implementing unified communications a daunting task, between lack of in-house expertise and complex integration issues, it's easy to back burner this project. Utilizing consultants with the experience to affordably and seamlessly migrate your infrastructure to Microsoft Exchange 2010, Lync and SharePoint can be the path to taking communications to the next level.

[Read now »](#)

[View the discussion thread.](#)



Sponsored Technology Links

[Employ excellence with Cisco-certified professionals. Learn more.](#)

[Splunk translates machine data into "aha" moments for IT and the business.](#)

[Simplify your move to cloud virtualization. Get started cutting costs and speeding deployment with HP now.](#)

[Are you ready? Take the 3-minute Cyber Threat Readiness Quiz Today.](#)

[New Video: Why MDM Alone Can't Fully Protect Your Data.](#)

[Converge your infrastructure with HP. Access white papers, case studies, videos and more.](#)

[Push the limits of virtualization with HP. Get the tech dossiers and learn how you can put an end to runaway virtual sprawl.](#)

[Samsung SSD 830 Series](#)

[Master the cloud with HP. Uncover the 5 myths of the cloud and get ready for the next step in I.T.](#)

[Register for EMC Webcast Series: Transforming IT Management](#)

[Try Windows Azure and build, host and scale applications in the cloud.](#)

[Efficient Storage: Only Thing Smaller than the Footprint is the Price](#)

[Simplify your move to cloud virtualization. Get started cutting costs and speeding deployment with HP now.](#)

[In here, AT&T cloud solutions are business grade and secure. More info.](#)

[Stop Data Loss From Android and iOS with Good for Enterprise. Free Video.](#)

[Converge your infrastructure with HP. Access a valuable case study in the CI Resource Center now.](#)

[Register for EMC Webcast Series: Transforming IT Management](#)

[Run Windows Server Apps in the Amazon Cloud. Learn how](#)

[Master the cloud with HP. Get a cloud assessment today and get ready for the next step in I.T.](#)

[Introducing the new Android™-powered Panasonic Toughpad™ family.](#)

[Reduce cost and complexity with Brocade Ethernet fabric.](#)

[Sprint 4G Enterprise WAN. A wireless business solution.](#)

[Remote Support for PCs, Macs, and Mobile Devices - Try LogMeIn Rescue Free](#)

[FREE Diskeeper Trial. NEW Instant Defrag - best performance ever. Fully Certified.](#)

[Quickly and easily develop custom iOS software solutions with FileMaker Pro.](#)

[ZT Systems Servers with Intel® Xeon® Processors>Starting at \\$1,699](#)

[Transforming your Contact Center..."SIP-ly" Stated](#)

[Mobile Optimization - It's Now or Never](#)

[Deliver virtualized applications and desktops to your employees' mobile devices. Learn how >>](#)

[AT&T Telepresence Solution Simplifies Enterprise Video](#)

[IPv6 Enabling Your Web Environment](#)

[See How to Choose the Right Active Directory Bridge Solution](#)

[Pros and Cons of iPad and iPhone Development Options. Read More.](#)

[Aligning Security to Provide the Anticipated Business Results](#)

[Servers from ZT Systems feature the Intel® Xeon® Processor>Learn More](#)

[The Business Impact of Cloud Computing](#)

[Business in a Box from AT&T: Voice and Internet Made Easy](#)

[M2M Technology: When Machines Talk, Efficiencies Soar](#)

[Business Transformation Through Telepresence](#)

[Story of Voice Transformation](#)

InfoWorld **Technology Marketplace**

[» BUY A LINK NOW](#)

[About Us](#) | [Advertise](#) | [Contact Us](#) | [Newsletters](#) | [Privacy Policy](#) | [Reprints, Permissions, Licensing](#) | [Terms of Service](#) | [About Ad Choices](#)

The IDG Network

[CFOworld](#) | [CIO](#) | [Computerworld](#) | [CSO](#) | [DEMO](#) | [GamePro](#) | [Games.net](#) | [IDC](#) | [IDG](#) | [IDG Connect](#) | [IDG Knowledge Hub](#) | [IDG TechNetwork](#) | [IDG Ventures](#) | [InfoWorld ITwhitepapers](#) | [IT World](#) | [JavaWorld](#) | [LinuxWorld](#) | [Macworld](#) | [Network World](#) | [PC World](#)

©1994-2011 Infoworld, Inc.