



News Fact Sheet

Intel and McAfee to Accelerate Cloud Adoption by Addressing Growing Security Challenges

May 4, 2012 — Cloud computing adoption continues to gain momentum as companies aim to become more agile and efficient, and strive to manage the growth in users, devices and data traffic. In fact, by 2015, Intel Corporation expects that more than 3 billion connected users and 15 billion connected devices will be driving more than 1,500 exabytes of cloud traffic. Meanwhile, IDC estimates that about 20 percent of all digital data – or 1,400 exabytes – will be stored or processed in the cloud.

However, even as cloud adoption increases to keep up with this growth, security remains a top concern as businesses determine how to best protect sensitive data while also meeting a growing range of compliance requirements.

Today, Intel and McAfee provided insight into the security challenges facing IT as they consider cloud computing adoption, and discussed how they are helping businesses build new lines of defense through joint innovation and currently available solutions. The companies also outlined the areas that will have to be addressed in the future to make cloud computing safer and more secure.

IT Pain Points

To provide a deeper understanding of the issues facing IT, and how the industry can boost confidence in an organization's adoption of cloud computing via better security practices, Intel recently sponsored an in-depth [survey](#) of IT professionals. Results showed that 61 percent of IT professionals are concerned about the loss of visibility in private clouds, 55 percent are concerned about lack of data protection in public clouds and 57 percent will not put data that require meeting specific compliance requirements into cloud datacenters. Respondents indicated that addressing these issues would enhance their confidence around security and accelerate the adoption of cloud computing in their companies.

The Solution: Intel and McAfee Joint Innovation

Together, Intel and McAfee are taking a holistic approach to address cloud security challenges and establish confidence in the use of private, public and hybrid clouds. The shared mission of Intel and McAfee is to enable worry-free cloud computing that is as secure as, or even more secure than, traditional, best-in-class enterprise IT security. Both companies are focused on

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four areas to deliver better security for cloud environments while also enabling a broad range of open, interoperable security solutions via industry collaboration. These include securing cloud data centers, securing the network connections, securing the devices that connect to cloud services and accelerating the development of unified standards for cloud security.

Securing Cloud Datacenters

Challenge: Today, IT managers have a high degree of control over their traditional enterprise data centers, which are bolstered by mature security tools and processes to monitor systems and perform necessary auditing to meet compliance requirements. With cloud infrastructure, IT equipment is typically virtualized and shared across multiple lines of business or even multiple organizations, resulting in reduced control of and visibility into the infrastructure security capabilities compared to traditional enterprise IT. These challenges are further amplified when using off-premise public cloud infrastructure which is managed by third parties. In addition, performing audits across private and public cloud data centers is complex, making it difficult to meet specific compliance requirements, thus lowering confidence in security.

Solution: Intel and McAfee's focus is on improving the integrity of the infrastructure while focusing on protecting data, and delivering capabilities to make it easier to audit cloud environments to meet compliance requirements. For example, [McAfee ePolicy Orchestrator \(McAfee ePO\)](#) software provides consistent security-policy management across physical, virtual and cloud environments. Via custom integration, McAfee ePO software can be used to enforce policies in cloud data centers to determine, for example, whether [Intel® Trusted Execution Technology \(Intel® TXT\)](#) has been run or not. Intel® TXT is a hardware security solution that helps protect IT infrastructures against software-based attacks by validating the integrity of key components within an Intel® Xeon® processor E5 family-based server at startup. Other technologies available today include [McAfee® Management for Optimized Virtual Environments AntiVirus \(McAfee® MOVE AntiVirus\)](#), which delivers improved anti-malware and threat protection performance and resource utilization for virtual desktops and servers, and [McAfee Application Control](#), which proactively mitigates the risk of data breaches, targeted attacks and unplanned downtime through ensuring only authorized code runs.

Future Intel and McAfee developments are expected to broaden and strengthen data protection, security enforcement and auditability across cloud infrastructures.

Securing the Connections

Challenge: Two major concerns that companies have when considering cloud computing are the possibility of data loss and the ability to restrict access to information. Users with multiple or weak passwords are a potential security hazard, and the risks and costs associated with multiple passwords are particularly relevant for any large organization leveraging cloud-based applications. Meanwhile, email and Web traffic flowing between remote offices and mobile devices used by employees can be a significant source of data leakage.

Solution: The [McAfee® Cloud Security Platform](#) improves security by protecting data, email, Web traffic and identities which are being transferred between devices and data centers. With the McAfee Cloud Security Platform, IT departments can restrict information access by extending and applying access and security policies into the cloud. The McAfee Cloud Security

Platform takes advantage of the unique [McAfee Global Threat Intelligence™ \(McAfee GTI\)](#) technology to provide real-time protection against known and emerging threats. With visibility across all key threat vectors — file, Web, email and network — and a view into the latest vulnerabilities across the IT industry, McAfee correlates real-world data collected from millions of sensors around the globe to deliver the comprehensive protection for cloud connections.

In the future, the McAfee Cloud Security Platform will evolve to better protect cloud infrastructure via integrity assessments, provide asset control and protection, and enable broader auditing and network security capabilities.

Securing the Devices

Challenge: The explosive growth of devices, combined with trends such as “BYOD – Bring Your Own Device,” is creating new challenges for cloud security. These include complex identity management in which employees are managing, on average, 12 user name/password combinations, new forms of malware and a growing range of online attacks requiring new and improved levels of security for devices accessing cloud services.

Solution: To reduce these risks, Intel and McAfee are improving security of devices, such as desktops and notebooks, by protecting data and restricting access to data and applications. [McAfee® Deep Defender](#), a joint solution developed by McAfee and Intel, represents the next generation of hardware-enhanced endpoint security. Enabled by [McAfee® DeepSAFE™](#) technology, McAfee Deep Defender provides hardware-enhanced security that uses [Intel® Virtualization Technology \(Intel® VT\)](#) built into Intel® Core® i3, i5 and i7 processors to detect and delete, in real-time, low-level threats that are difficult to detect with traditional operating system (OS)-based security techniques. To further enhance identity management across clouds, [McAfee® Cloud Identity Manager](#), which is part of the McAfee Cloud Security Platform, provides on-premise, comprehensive software-based access control for cloud applications using enterprise identities, or [Intel Cloud SSO](#) (single-sign on) provides “identity as a service” solution in the cloud. Intel® Identity Protection Technology provides additional hardware-enhanced security technology that is difficult to tamper with and goes beyond user name and passwords to provide a second factor of authentication.

Future developments will focus on advancements in data and identity protection for devices accessing cloud services.

Ecosystem Collaboration to Drive Industry Standards & Enable Security Solutions

Intel and McAfee are engaged with several industry standards bodies, including the Cloud Security Alliance and Open Data Center Alliance, to accelerate more consistent cloud security standards. In addition, both companies are working with a broad range of systems and software providers to enable open, interoperable solutions for cloud security so that IT can more easily deploy solutions to strengthen cloud security. Through the Intel Cloud Builders program, more than 50 partners are collaborating with Intel and more than 130 hardware and software partners are delivering security solutions as part of the McAfee Security Innovation Alliance.

Now and Moving Forward

Intel and McAfee have a shared, multi-year mission to enable highly secure cloud computing over time to ensure that for any given workload running on any connected infrastructure, IT departments can know that:

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- Data, applications and infrastructure are secure.
- Corporate compliance requirements are automatically met.
- Corporate security policies are automatically applied throughout the workload lifecycle.
- Solutions provide 24/7 reporting and are easy to implement.

With hardware-enhanced security technologies, plus software solutions and services available from Intel and McAfee, along with solutions enabled with a broad ecosystem of partners, companies can start building a secure foundation today on a path toward worry-free cloud security of the future.

About Intel

Intel (NASDAQ: INTC) is a world leader in computing innovation. The company designs and builds the essential technologies that serve as the foundation for the world's computing devices. Additional information about Intel is available at newsroom.intel.com and blogs.intel.com.

About McAfee

McAfee, a wholly owned subsidiary of Intel Corporation, is the world's largest dedicated security technology company. McAfee delivers proactive and proven solutions and services that help secure systems, networks, and mobile devices around the world, allowing users to safely connect to the Internet, browse and shop the Web more securely. Backed by its unrivaled Global Threat Intelligence, McAfee creates innovative products that empower home users, businesses, the public sector and service providers by enabling them to prove compliance with regulations, protect data, prevent disruptions, identify vulnerabilities, and continuously monitor and improve their security. McAfee is relentlessly focused on constantly finding new ways to keep our customers safe. Further information is available at www.mcafee.com.

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