IBM Cloud Managed Services security

Put your cloud security into the hands of dedicated experts

Taking your business to the cloud can provide impressive gains in infrastructure agility, efficiency and cost reduction. But if the potential benefits are so compelling, why haven’t more organizations made the move? Security is arguably the biggest reason for concern. In fact, the IBM 2015 Global C-suite Study noted the majority of CXOs, irrespective of role, think IT security is a top risk.1

Security uncertainties may be a showstopper for some organizations, but they don’t need to be. Achieving security in the cloud simply requires smarter and highly responsive security solutions. You need resources and expertise to cost-effectively mitigate internet threats, protect your corporate data and infrastructure, and manage compliance on an ongoing basis.

How can you best achieve cloud security without adding complexity or hampering business agility? How can you be sure your cloud infrastructure provides the level of security, compliance, reliability and global scalability your business demands?

Safeguard your data and infrastructure with managed security services

IBM Cloud Managed Services® (CMS) security allows you to capitalize on the agility and efficiency of the cloud with robust, flexible and fully managed security capabilities. Industry-leading tools and processes, along with security experts, help reduce the complexity and cost of your security solution and manage compliance more effectively. CMS security can be implemented without capital investment and provides a predictable pay-as-you-go cost structure, helping eliminate the unexpected burdens and expenses that come with managing staff and technology.
One of the biggest risks in any infrastructure is overlooking security flaws because of time, expertise and resources. CMS security can help close that gap through cutting-edge technologies, layered security practices and highly flexible managed services designed to meet the specific demands of your business. From migration, testing and deployment to incident management and compliance, IBM experts help you get the most out of your cloud deployment (Figure 1).

**Improve visibility into emerging threats**

An escalating threat landscape, tight budgets and limited skilled resources have stretched traditional in-house security programs to their limits. CMS security is designed to ease these burdens while helping to sharpen your competitive advantage. Highly trained security specialists provide you with some of the most advanced monitoring and management expertise available, as well as deep insight into the security issues most often faced by organizations with mission-critical operations in the cloud.

With CMS security, you get real-time, around-the-clock protection and live, expert management, monitoring and escalation for critical server devices across a variety of platforms and operating systems. Robust IBM cloud infrastructure meets the enhanced security demands required in common regulated environments, in addition to a worldwide cloud presence.

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**Managed infrastructure-as-a-service (CMS)**

<table>
<thead>
<tr>
<th>IBM managed</th>
<th>IBM managed service (optional)</th>
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<tbody>
<tr>
<td>Network intrusion prevention</td>
<td>VM disaster recovery</td>
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<td>DDoS protection</td>
<td>Security information event management</td>
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<td>Identity and access management</td>
<td>Log management</td>
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<td>OS and middleware hardening</td>
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<td>OS and middleware patching</td>
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<td>Firewalls and gateways</td>
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<td>Antivirus and malware protection</td>
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<td>Infrastructure disaster recovery</td>
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<td>Secure uplink</td>
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<td>Security awareness training</td>
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*Figure 1.* CMS security includes management and monitoring at the operating system security level, and offers backup and recovery and identity access management, to support enterprise-class workloads.

CMS security offers preemptive protection and rapid threat resolution, helping to reduce potential damages and losses. Continuous monitoring and granular control add visibility into attacks. The services are designed to detect anomalies in network traffic that could be signs of an attack before they ever affect your critical data and infrastructure.

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**Leave your security worries to the experts**

IBM treats your enterprise data with the same safeguards as our own.

- Security policy is designed, researched, maintained and enforced by IBM
- Patching is built into the environment
- Regular vulnerability scanning provides a simple, cost-effective way to minimize threats
- Security experts are always available and ready to respond to security incidents
- Services include a performance-based service-level agreement (SLA)
Protect your data with built-in security at all levels

IBM offers expertise and best practices gained from years of experience managing and operating security-rich enterprise data centers around the world, including our own. CMS security is designed to address your specific business and workload requirements.

- **Incident response:** Security monitoring, alerting and incident response services are standard with every virtual machine (VM). IBM takes care of incidents for all managed systems and assists with forensic analysis.
- **Automated patching:** Managed database and middleware services include creating and configuring database instances; providing capacity and performance optimization; and installing database, operating system and middleware patches and security fixes.
- **Internet security:** Internet connectivity services include enterprise-class network security protections such as intrusion prevention and Distributed Denial-of-Service (DDoS) protection services. Inbound filtering helps defend internet-facing workloads from common internet-based attacks, while outbound filtering detects compromised VMs being used for malicious purposes.
- **Firewall protection:** IBM monitors and manages the firewall for you, including patching, logging and rule management. The virtual firewall service controls all traffic into and out of security zones, as well as between security zones and outside networks.
- **Antivirus and malware protection:** Antivirus protection capabilities include in-memory and real-time scanning for malicious code on all inbound and outbound transmissions. IBM experts handle the configuration of automated periodic updates to apply the latest antivirus files.
- **Network intrusion prevention:** A managed intrusion prevention system monitors security events in real time, providing an additional layer of security beyond the firewall to monitor for potential malicious activities.

- **Vulnerability management:** Your managed cloud infrastructure is regularly scanned for vulnerabilities using industry-standard tools. Master images are regularly updated to the latest security patches. All new VMs are brought up to the latest patch level.
- **Disaster recovery:** Multiple disaster recovery options help protect your critical workloads in the event of a disaster. These services allow for failover to and fail back from a secondary site with a defined recovery time objective (RTO).

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Benefit from industry-leading expertise and best practices

CMS security helps protect your data and infrastructure with a combination of risk mitigation, layered security practices and preemptive tools and techniques.

<table>
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<th>Features</th>
<th>Benefits</th>
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<tr>
<td>Assistance and guidance on compliance</td>
<td>Enables around-the-clock protection of data from internet threats and rapid threat resolution</td>
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<tr>
<td>Preemptive protection from internet threats by leveraging the IBM® X-Force® security research and development team</td>
<td>Helps reduce IT complexity and security-related staffing, training, maintenance and infrastructure costs</td>
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<td>Around-the-clock expert monitoring, management, incident response and support for networks and servers</td>
<td>Helps more effectively manage regulatory compliance</td>
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Move to the cloud with confidence
CMS security lets you easily tap into the benefits of cloud computing without the extra burden and expense that come with maintaining a secure cloud environment and meeting ongoing compliance demands. With efficient, automated management, your IT staff can focus on tasks that are more strategic to your enterprise—including exploring ways of using your managed cloud to help transform the business.

Why IBM?
IBM offers deep expertise and a wide range of capabilities for cloud. IBM cloud solutions are designed to help you get ahead of the competition with speed and flexibility and make faster and better business decisions with total visibility and control. IBM can help you deploy on an infrastructure built for speed, rapidly design and build applications, and deliver and manage new capabilities in the cloud.

IBM has a cloud strategy and solution set that it is continuously enhancing to meet key consumer products and retailing imperatives: developing smarter products and supply chains, delivering a smarter shopping experience and building smarter operations.

For more information
To learn more about IBM Cloud Managed Services security, contact your IBM representative or IBM Business Partner, or visit: ibm.biz/ibm-cms

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1 Redefining Boundaries Insights from the Global C-suite Study, 2015, IBM Institute for Business Value