Testing the Security of your Applications
Safeguarding business critical systems and applications
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Organizations are under increased pressure to innovate, rapidly develop new applications, and adopt new technologies such as social, mobile, analytics, cloud and the Internet of Things (SMACT). This increases the security risk to business applications and systems.

It is a very real and present risk. The number of security breaches reported is escalating – between 2013 and 2014 alone attacks grew by 120%¹ – and the threat of an attack from hacktivists or criminal organizations is more pertinent today than ever before.

The average yearly cost of cybercrime for large organizations in 2014 was US$7.6m – a 10.4% net increase over the previous year². Combine this with data breach incidents costing companies $194 on average per compromised record and it’s clear that major attacks could potentially result in losses totaling tens or even hundreds of millions. This accrues not only through lost revenue, but as a result of reputational damage that can destroy trust to increase losses still further.

A key reason for this increased vulnerability is the speed at which new applications are released. Web and mobile applications capture and hold customer data, including credit card information. Yet, because of the pressure to release quickly, the security checks needed to manage applications and systems in depth are often incomplete. This leaves organizations open to attack.

¹ Factiva, ‘Major News and Business Publications’ database; Thomson Financial, Investext database; databases of various security agencies
Improve Application Security
Improve Application Security

Simply reacting to security breaches is no longer good enough: businesses must take a proactive approach to protecting their IT estates. It is essential to systematically test all web and mobile applications before release, particularly if they are highly regulated. Yet the right people to carry out this testing are both difficult to find and costly to employ, plus their work isn’t scalable nor repeatable. We offer a comprehensive solution designed to address this growing threat to your business applications.

Powered by HPE Fortify on Demand, our Application Security Testing solution makes it simple and fast to initiate fundamental security controls, whether you have just a few applications or are looking to launch a comprehensive security program across your organization without large upfront investment. The solution combines dynamic and static testing technologies with our deep expertise in software assurance to protect your organization from security breaches and contain threats before they can cause damage to reputation or revenue.

It solves a significant problem for organizations seeking to introduce new ways of working and engaging with their customers. Until now, finding a single security testing tool solution has been near impossible: on premise tools require significant investment upfront and traditional penetration testing is carried out too late to identify and fix issues. Those that do carry out security testing have typically focused on the network and infrastructure layers, but 80% of breaches occur at the application layer, with more than 60% of applications having serious flaws. Application Security Testing from Capgemini, Sogeti and HPE has changed the game.

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Managing the Risk
Managing the Risk – What We Deliver

Our solution combines market leading technology with the deep security expertise of our people. Powered by HPE Fortify on Demand, it sits within our cybersecurity portfolio and perfectly complements our wide range of established software testing and Quality Assurance services. We will support your digital transformation, giving you the reassurance you need to embrace new ways of working.

Application Security Testing is quick to implement, cost effective, and protects your applications in three easy steps:

1. **Initiate**
   - You upload your code – source and/or executable, or you provide the URL.

2. **Test**
   - We conduct 3 different types of analyses – static analysis, dynamic analysis, and manual analysis – for web or mobile applications.

3. **Review**
   - Our cybersecurity experts review the results to ensure they are accurate before releasing them to your own private website. A detailed web interface and report are made available. We help you to prioritize fixes.
Managing the Risk – What We Deliver

The solution embraces different levels of risk, from simple marketing sites, to internal/external business applications that hold personally identifiable data, and even those that hold credit card or SSN information. Applications are assessed for risk and business criticality, such as how much your day-to-day operations depend on them. The level of risk determines the different levels of dynamic, static and manual analysis we undertake to keep your business running smoothly day in, day out.

We also support mobile applications in client, network and server tiers, across Apple, Android, Windows Phone and Blackberry.

In addition to carrying out thorough testing on your applications, we provide you with the intelligence you need to effectively and definitely resolve any issues found. Dashboards provide a simple view of the status of all your application security testing projects, while more comprehensive reports ensure that you meet security compliance requirements. In addition our experts work with you to remove duplications and prioritize fixes.
Best Practice Approach
Best Practice Approach

Our approach is based on 5 key steps:

1. Discover
   Identify the scope of the problem

2. Patch
   Fix the critical vulnerabilities in high risk applications

3. Security Gate
   Establish a Security Gate – this ensures applications are tested for security prior to deployment

4. Shift-Left
   Add security controls earlier in the Software Development Lifecycle each time testing is completed – this may require a change in the way applications are developed

5. Mature
   Raise the security bar
Benefits
How Do You Benefit?

Our solution is simple, fast, comprehensive and flexible. This means that your application security testing capability can be up and running quickly in line with your appetite for risk and digital transformation strategy.

- **Simple**
  - Launch your application security initiative in < 1 day
  - No hardware or software investments
  - No in house security experts to hire, train and retain

- **Fast & Comprehensive**
  - Scale to test all applications in your organization
  - Less than 1 week turn-around on application security results
  - Supports 1000s of applications for the desktop, mobile or cloud
  - Dynamic and static testing with manual review

- **Flexible**
  - Test any application from anywhere
  - Secure commercial, open source and third party applications
  - Test applications in the cloud or on premise, almost on demand
How Do You Benefit?

Your organization will benefit from our solid testing experience and innovation track record, along with the following solution components:

- Technology regularly checked and updated by HPE’s Security Research team who find four times the number of new critical vulnerabilities than the rest of the market combined.\(^4\)
- Access to a wealth of cybersecurity experts from Capgemini and Sogeti, who add value by manually reviewing results for false positives/negatives, and collaborate with your team to prioritize fixes and resolve vulnerabilities.
- Easy to purchase application security testing with flexible pricing options (single assessment or subscription). The fixed price model operates regardless of the size of the applications being tested.
- The combined power and expertise of two world market leaders – In 2014 Gartner positioned Capgemini Group as a leader for Testing Services, and HPE for Application Security Testing.
- The industry’s largest security research team.
- Support for ABAP, COBOL and IAST coding and testing.

You gain a full, high quality solution for your security testing – whether you need to test just a few applications or an entire application transformation program. Manual reviews ensure we find all critical vulnerabilities, and our rapid turnaround time integrates well with different delivery methods, including Waterfall and Agile.

\(^4\) Frost and Sullivan
Why Capgemini, Sogeti and HPE?
Why Capgemini, Sogeti and HPE?

**Extensive Track Record**

Our proven testing approach across infrastructure and applications (including enterprise/industrial systems, web, human, mobile and Internet of Things) improves security and time to market for new offers and software solutions. You will gain the confidence to adopt SMACT technologies as you continue your digital transformation.

Capgemini Group is recognized by Gartner, and positioned as a leader by NelsonHall for Transformation-Focused Testing Services, and by Ovum for Outsourced Testing Services for 2014-15. With a testing and assurance heritage that stretches back over 20 years, our knowledge and experience is unparalleled and our clients from a wide range of industries trust us to deliver consistently, time after time. HPE’s Fortify on Demand is acknowledged by Gartner as a leading Application Security Testing tool.

Our 2,500 security consultants worldwide offer a wealth of expertise. Their deep know-how in security is complemented by our investment in Research & Development teams in Europe, our IT Security Evaluation Facility (ITSEF) and dedicated Security Operation Centers (SOCs).
Why Capgemini, Sogeti and HPE?

Intellectual Property & Innovation

We make significant investment to further develop our reputation as a global testing services thought leader. We also fund business focused research and development through our worldwide Solutions Innovation Centers and Global Centers of Excellence.

As you would expect from a global leader in application security testing, we work to the highest industry standards:

- Cybersecurity Maturity & Health Assessment (CMHA) – to benchmark and provide you with a security roadmap;
- TMap® — the de facto industry standard for structured testing;
- TPI® — the world’s number one model for assessing and improving test processes;
- PointZERO® — a framework that delivers parallel step-by-step improvement based on an array of measures, methods and tools, leading to business solutions that are fit for purpose and right first time;
- The Capgemini World Quality Report combines data from over 400 organizations worldwide, providing intelligence on market trends in testing technologies, processes, organizations, outsourcing, and economics.

Application Security Testing from Capgemini, Sogeti and HPE will keep your organization ahead of current and emerging cyber threats in a rapidly changing business and information technology landscape.
Case Study – British Gas & HPE Fortify on Demand

Managed security testing service in the cloud improves application security, reduces cost, and boosts efficiency

**Objective:** To identify and fix vulnerabilities in British Gas applications early in the software development lifecycle to reduce costs, improve efficiency, and enhance application security

**Approach:** Cloud-based Fortify on Demand was used for static and dynamic scanning of code that had been developed in-house by British Gas and by third parties. British Gas has a long history of traditional information security, but the changing landscape called for a new approach. “Obviously the way you handle vulnerabilities in the emerging threat space, including social engineering, is totally different from traditional firewall protection,” says Paul Phillips, Head of Software Assurance and Integration. “It’s a whole different mindset and a whole different approach.”

**Benefits:** Fortify on Demand has helped British Gas ensure that its applications comply with industry regulations. “We have a defined framework and governance process in place that we share, and that seems to tick the boxes in terms of what we need to demonstrate from a compliance perspective,” Phillips says.

British Gas has also realized benefits in its application development process. Continues Phillips, “We’ve got a ‘shift left’ culture in terms of maturing the code more rapidly now: it’s easier to maintain and has fewer vulnerabilities. I can see a definite downward trend in the volume and severity of vulnerabilities in our source code compared to when we started using Fortify on Demand.”

About Capgemini and Sogeti

With 180,000 people in over 40 countries, Capgemini is one of the world’s foremost providers of consulting, technology and outsourcing services. The Group reported 2014 global revenues of EUR 10.573 billion. Together with its clients, Capgemini creates and delivers business, technology and digital solutions that fit their needs, enabling them to achieve innovation and competitiveness. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

Sogeti is a leading provider of technology and software testing, specializing in Application, Infrastructure and Engineering Services. Sogeti offers cutting-edge solutions around Testing, Business Intelligence & Analytics, Mobile, Cloud and Cyber Security. Sogeti brings together more than 20,000 professionals in 15 countries and has a strong local presence in over 100 locations in Europe, USA and India. Sogeti is a wholly-owned subsidiary of Cap Gemini S.A., listed on the Paris Stock Exchange.

Capgemini and Sogeti are experts in IT infrastructure and application integration. Together, we offer a complete range of cybersecurity services to guide and secure the digital transformation of companies and administrations. Our 2,500 professional employees support you in defining and implementing your cybersecurity strategies. We protect your IT, industrial systems, and the Internet of Things (IoT) products & systems. We have the resources to strengthen your defenses, optimize your investments and control your risks. They include our security experts (Infrastructures, Applications, Endpoints, Identity and Access Management), and our R&D team that specializes in malware analysis and forensics. We have ethical hackers, eight multi-tenant security operation centers (SOC) around the world, a Information Technology Security Evaluation Facility, and we are a global leader in the field of testing.

Find more information at:
www.capgemini.com/cybersecurity or www.sogeti.com/cybersecurity

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