



Application security highlights from the 2015 HP Security Research Cyber Risk Report

Misused application security features trouble both the Web and mobile applications



86%
Web applications with issues involving **authentication, access control, and confidentiality**



72%
Last year's rate

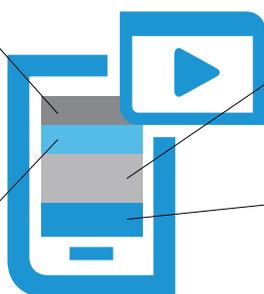


97%
Mobile applications affected by these issues

Mobile applications have unique security issues

80% of mobile applications unintentionally reveal potential benefits to malicious attackers

71% store data in an insecure manner



66% don't protect data via encrypted communication or other means

31% can reveal geolocation

Fundamental application security errors in coding are still occurring

Appsec vulnerabilities also exist outside the application code



52%
Web applications experience issues with input validation, including cross-site scripting, SQL injection, and other vulnerabilities

48%
Mobile applications with input validation vulnerabilities



82%
Web applications with vulnerabilities related to server misconfiguration, improper file settings, outdated software versions, and other issues of insecure deployment and security testing.



70%
Mobile applications impacted by these application security issues



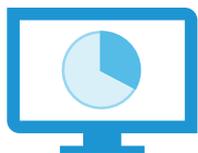
Even perfectly coded software can be dangerously vulnerable when misconfigured

Critical web security vulnerabilities impact almost half of all Web applications

Web applications:



48%
have cross-frame scripting



37%
have cross-site scripting



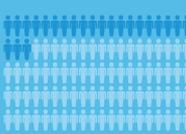
47%
have unprotected file issues due to Web server misconfigurations

Newer technologies create new avenues of attack



The Internet of Things (IoT) expands the attack surface

23%



Developers planning work on connected devices within the next six months

Conclusions

- Applications are still vulnerable to well-known attacks.
- Vulnerabilities allowing unauthorized access to files and directories are prevalent.
- Consider liabilities related to application deployment along with code-based vulnerabilities.
- Organizations that systematically perform software security testing significantly reduce risk.
- A layered approach to mobile and web application security provides much more assurance than a single technology.

Recommendations



Assess
Create an application security gate to assess all applications before they go into production.



Assure
Implement an SSA program that measures risk and improvement, incorporates threat intelligence, and enforces compliance.



Protect
Monitor and protect high-risk applications in production.

See how companies are building Software Security Assurance (SSA) programs at: hp.com/go/fortifyssa

