

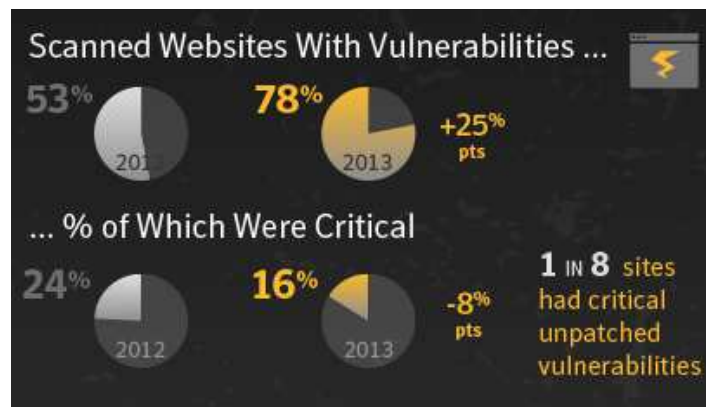


## Application Security: To the future and beyond OWASP LATAM TOUR 2014

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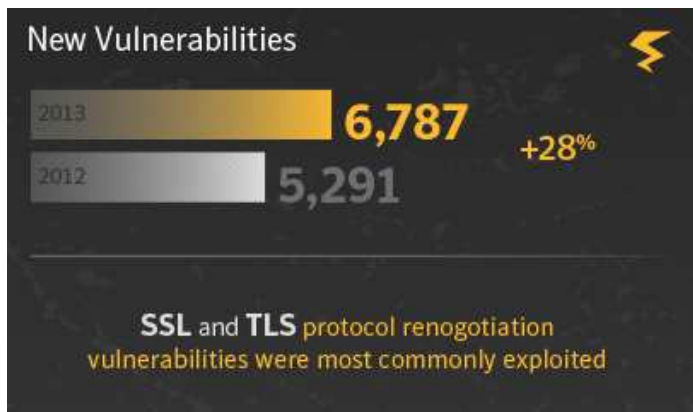
### Software Threats



## Software Threats



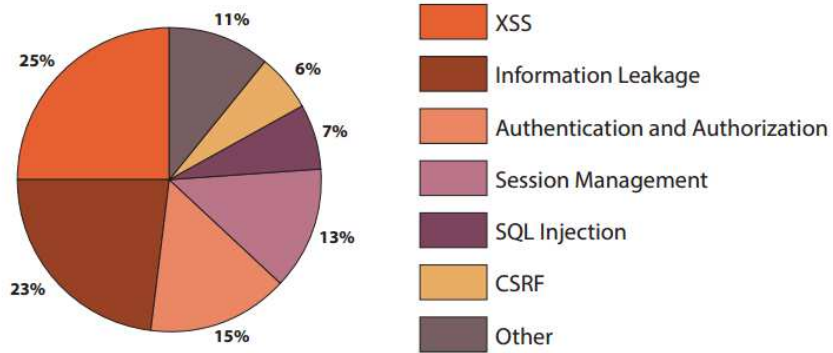
## Software Threats



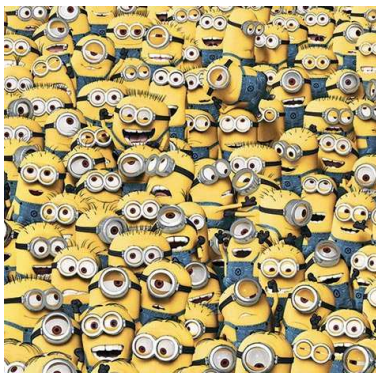
KEEP CALM AND goto fail;



## Web Application Threats



## Web Application Threats



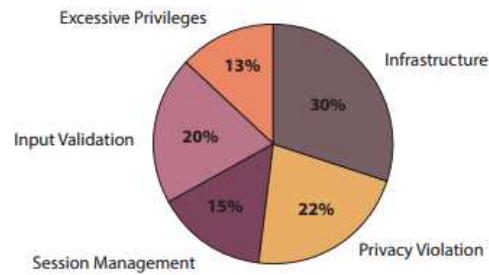
### OWASP Top 10 2013

A9 – Using Components with known vulnerabilities

Proliferation of APIs  
Code Reuse  
COTS



## Mobile Application Threats



2+ Million Apps combined



## Mobile Application Threats



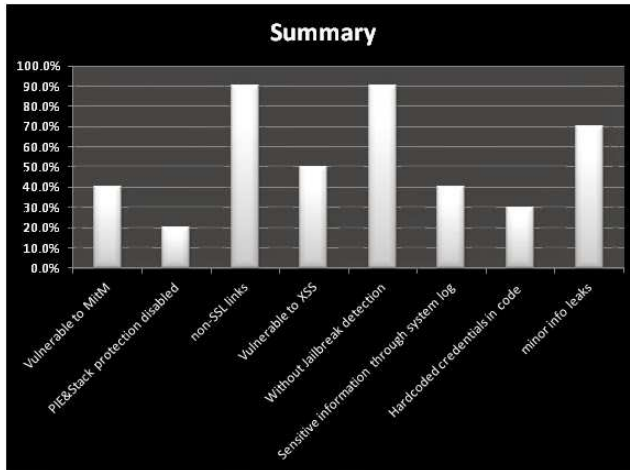
[https://docs.google.com/file/d/0B3\\_TQgTE2uPcMkdBOExKNjh0N28/edit](https://docs.google.com/file/d/0B3_TQgTE2uPcMkdBOExKNjh0N28/edit)

Android WebView Exploit, 70% Devices Vulnerable (Feb 2014)

- Android 4.0-4.2
- Javascript vulnerability
- Discovered 2012
- Google Glass
- Metasploit



## Mobile Application Threats



iOS Mobile Banking Apps  
- 40 apps sampled from major financial institutions.  
90% contain vulnerabilities.  
- New vectors of attack.



## Mobile Application Threats



### Tesla Model S API Authentication Flaws via Mobile App

- 6 chars password
- Token valid for 3 months
- No track of valid tokens
- Caching of token
- Storage of credentials



## Embedded systems

[Toyota Prius “Intelligent” park hack](#)

[Hacked Smart Refrigerators sending spam](#)

[Nissan Recalls Over 1M Cars for Air Bag Glitch](#)



## Recommendations

Developer Awareness

Risk Based approach

Security Testing & Code Review

Web Application Firewall/SIEM

Stringent Review of 3<sup>rd</sup> Party Apps/APIs

Mobile App Reverse-Engineering Protection



Thank you

Questions?



Sources:

[Symantec Internet Security Threat Report 2014](#)

[Cenzic Vulnerability Trends Report 2014](#)

[OWASP Mobile Security Project](#)



## About Cycubix Limited:

Founded in 2011, Cycubix provides information security goods and services including:

- **Risk Management:** Identification, assessment and mitigation of information security risks. Implementation of risk metrics and supporting management information (e.g. risk dashboards).
- **Application Security:** Technical consultancy in the areas of penetration testing, secure code review and secure application development; assuring that IT application software and infrastructure are designed, implemented, and operated in accordance with applicable security standards and best practices (OWASP, SANS).
- **Security Assurance & Compliance:** Implementation and management of information security policies, processes and projects that adhere to industry standards such as ISO27001, PCI.
- **Security Training:** Delivery of trainings in various information security topics for technical and business audiences.

