

# Welcome to OWASP Bay Area Application Security Summit July 23rd, 2009



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# The OWASP Foundation <a href="http://www.owasp.org">http://www.owasp.org</a>

## **Agenda**

- 1.30 1.45 Welcome, Overview Mandeep Khera
- 1.45 2.30 Development Issues within AJAX Applications: How to Divert Threats Lars Ewe, CTO, Cenzic
- 2.30 3.30 Building a Corporate App Security Assessment Program-Rob Jerdonek and Topher Chung, Intuit
- 3.30 4.00 Networking Break
- 4.00 5.00 Mastering Session Management Siva Ram, Lead Security Consultant, AppSec Consulting
- 5.00 6.00 From Rivals to BFF: WAF & VA Unite Brian Contos, Chief Security Strategist, Imperva
- 6.00 8.00 Networking Reception Food and Drinks

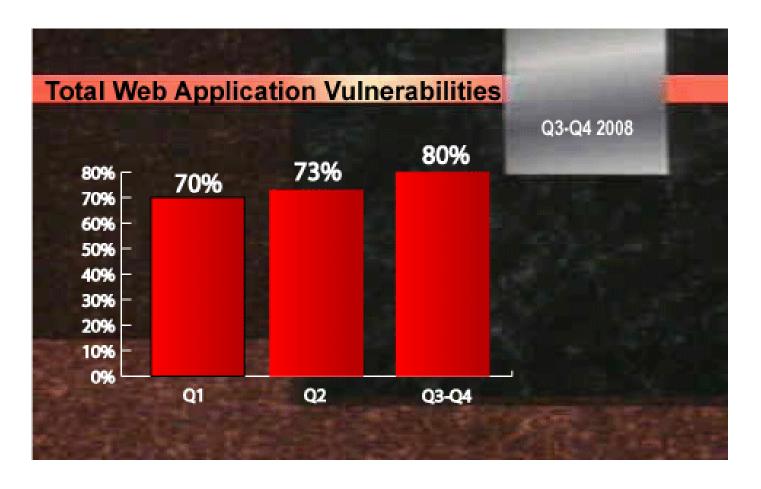
## Thanks to our sponsors!!





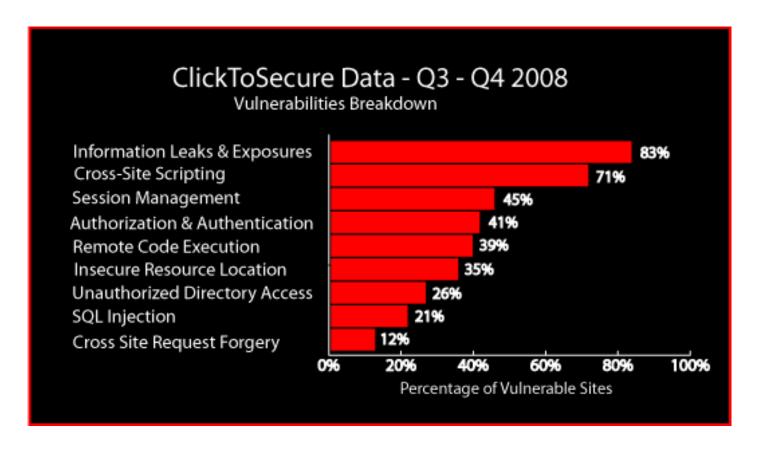


#### Web Vulnerabilities Trend



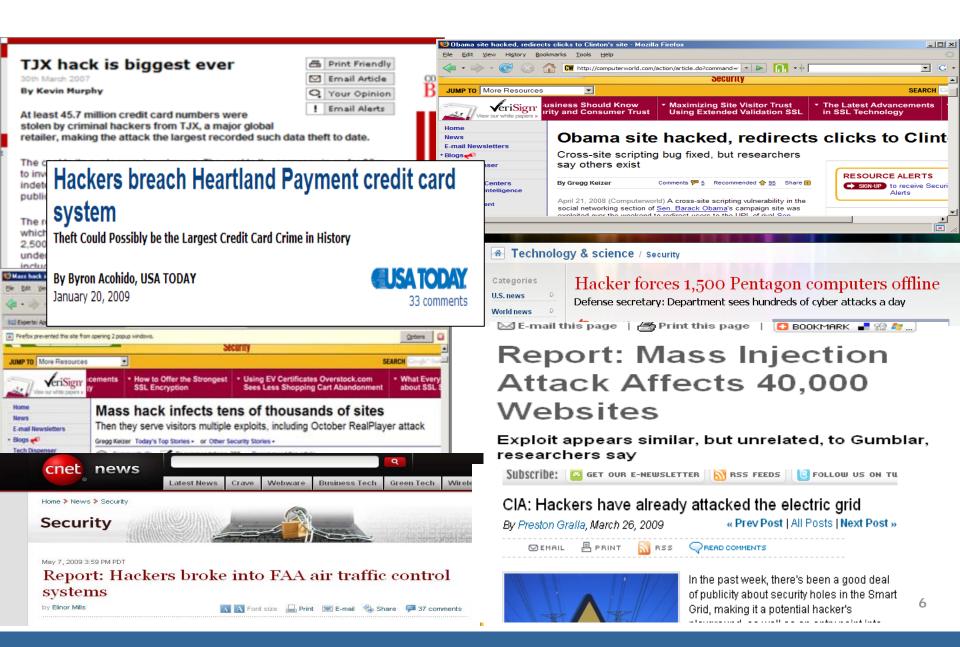
**Source:** Cenzic Q3-Q4 Trends Report

#### Breakdown of Vulnerabilities



**Source:** Cenzic Q3-Q4, 2008 Application Trends Report

#### No One Wants To Be in the Press



## Why Is App Security a Must Now?

- Over 285M records compromised in 2008
  - 99.6% compromised from servers and applications
- Hackers are attacking every one
  - Banks, Credit Unions, Government Agencies, Small companies, Large companies – Equal opportunity
- ■80% of vulnerabilities are in apps
  - Hacker go where there are holes
- Regulations
  - Payment Card Industry (PCI) continues to drive the need for app security; other new regulations also coming

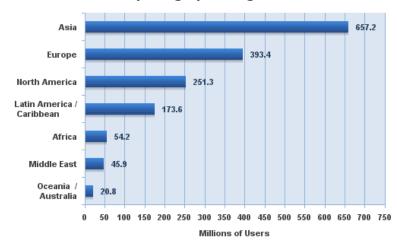


#### **Internet Usage Continues to Grow**

| WORLD INTERNET USAGE AND POPULATION STATISTICS |                            |                                 |                               |                               |                              |                        |
|--|----------------------------|---------------------------------|-------------------------------|-------------------------------|------------------------------|------------------------|
| World Regions                                  | Population<br>( 2008 Est.) | Internet Users<br>Dec. 31, 2000 | Internet Users<br>Latest Data | Penetration<br>(% Population) | Users<br>Growth<br>2000-2008 | Users<br>% of<br>Table |
| <u>Africa</u>                                  | 975,330,899                | 4,514,400                       | 54,171,500                    | 5.6 %                         | 1,100.0 %                    | 3.4 %                  |
| <u>Asia</u>                                    | 3,780,819,792              | 114,304,000                     | 657,170,816                   | 17.4 %                        | 474.9 %                      | 41.2 %                 |
| <u>Europe</u>                                  | 803,903,540                | 105,096,093                     | 393,373,398                   | 48.9 %                        | 274.3 %                      | 24.6 %                 |
| Middle East                                    | 196,767,614                | 3,284,800                       | 45,861,346                    | 23.3 %                        | 1,296.2 %                    | 2.9 %                  |
| North America                                  | 337,572,949                | 108,096,800                     | 251,290,489                   | 74.4 %                        | 132.5 %                      | 15.7 %                 |
| Latin America/Caribbean                        | 581,249,892                | 18,068,919                      | 173,619,140                   | 29.9 %                        | 860.9 %                      | 10.9 %                 |
| Oceania / Australia                            | 34,384,384                 | 7,620,480                       | 20,783,419                    | 60.4 %                        | 172.7 %                      | 1.3 %                  |
| WORLD TOTAL                                    | 6,710,029,070              | 360,985,492                     | 1,596,270,108                 | 23.8 %                        | 342.2 %                      | 100.0 %                |

NOTES: (1) Internet Usage and World Population Statistics are for March 31, 2009. (2) CLICK on each world region name for detailed regional usage information. (3) Demographic (Population) numbers are based on data from the <u>US Census Bureau</u>. (4) Internet usage information comes from data published by <u>Nielsen Online</u>, by the <u>International Telecommunications Union</u>, by <u>GfK</u>, local Regulators and other reliable sources. (5) For definitions, disclaimer, and navigation help, please refer to the <u>Site Surfing Guide</u>. (6) Information in this site may be cited, giving the due credit to <a href="https://www.internetworldstats.com">www.internetworldstats.com</a>. Copyright © 2001 - 2009, Miniwatts Marketing Group. All rights reserved worldwide.

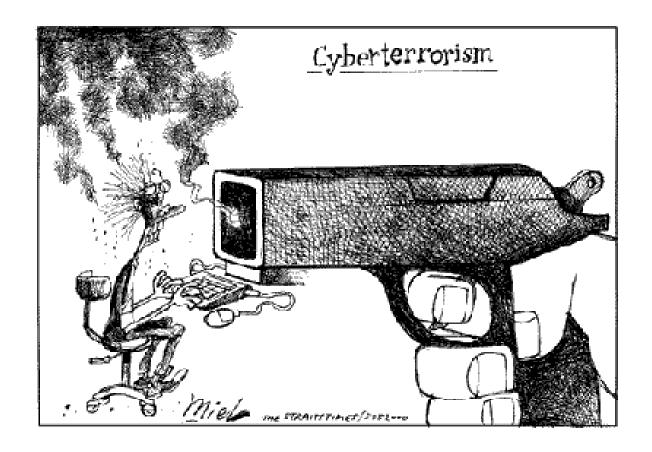
#### Internet Users in the World by Geographic Regions



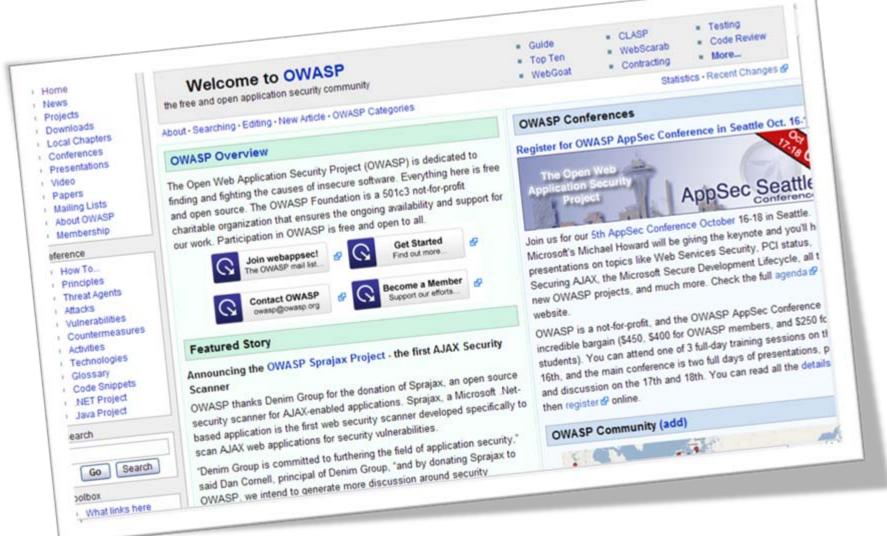
Source: Internet World Stats - www.internetworldstats.com/stats.htm



## Cyberwars..



# www.owasp.org



#### **OWASP**

■ The Open Web Application Security Project (OWASP)

■ International not-for-profit charitable Open Source organization funded primarily by volunteers time, OWASP Memberships, and OWASP Conference fees

■ Participation in OWASP is free and open to all

#### **OWASP Mission**

■ To make application security "visible," so that people and organizations can make informed decisions about application security risks

#### **OWASP Resources and Community**

## Documentation (Wiki and Books)

Code Review, Testing, Building, Legal, more ...

#### Code Projects

 Defensive, Offensive (Test tools), Education, Process, more ...

#### Chapters

Over 130 and growing

#### Conferences

Major and minor events all around the world

#### OWASP Conferences (2008-2009)



#### **OWASP Top 10**

- The Ten Most Critical
  Web Application Security
  Vulnerabilities
- 2007 Release
- A great start, but <u>not</u> a standard



## **Key Application Security Vulnerabilities**

A1: Cross Site Scripting (XSS) A2: Injection Flaws A3: Malicious File Execution

A4: Insecure Direct Object Reference

A5: Cross Site Request Forgery (CSRF) A6: Information Leakage and Improper Error Handling A7: Broken
Authentication
and Session
Management

A8: Insecure Cryptographic Storage

A9: Insecure Communications A10: Failure to Restrict URL Access



OWASP
The Open Web Application Security Project http://www.owasp.org

www.owasp.org/index.php?title=Top 10 2007



#### Lot more than OWASP Top 10

- OWASP .NET Project
- OWASP ASDR Project
- OWASP AntiSamy Project
- OWASP AppSec FAQ Project
- OWASP Application Security Assessment Standards Project
- OWASP Application Security Metrics Project
- OWASP Application Security Requirements Project
- OWASP CAL9000 Project
- OWASP CLASP Project
- OWASP CSRFGuard Project
- OWASP CSRFTester Project
- OWASP Career Development Project
- OWASP Certification Criteria Project
- OWASP Certification Project
- OWASP Code Review Project
- OWASP Communications Project
- OWASP DirBuster Project
- OWASP Education Project
- OWASP Encoding Project
- OWASP Enterprise Security API
- OWASP Flash Security Project
- OWASP Guide Project
- OWASP Honeycomb Project
- OWASP Insecure Web App Project
- OWASP Interceptor Project

- OWASP JBroFuzz
- OWASP Java Project
- OWASP LAPSE Project
- OWASP Legal Project
- OWASP Live CD Project
- OWASP Logging Project
- OWASP Orizon Project
- OWASP PHP Project
- OWASP Pantera Web Assessment Studio Project
- OWASP SASAP Project
- OWASP SQLiX Project
- OWASP SWAAT Project
- OWASP Sprajax Project
- OWASP Testing Project
- OWASP Tools Project
- OWASP Top Ten Project
- OWASP Validation Project
- OWASP WASS Project
- OWASP WSFuzzer Project
- OWASP Web Services Security Project
- OWASP WebGoat Project
- OWASP WebScarab Project
- OWASP XML Security Gateway Evaluation Criteria Project
- OWASP on the Move Project

## What Does Membership Do For OWASP?

- Funds OWASP Speakers via OWASP On the Move
- **■** Funds Season of Code projects
- Helps Support Local Chapters
  - ▶ A portion of your membership fees helps fund your local chapter

## **Membership Benefits**

- Individual Members
- Organizational Supporters
- **■** University Supporters

#### **Individual Members**

- Cost: \$50/year
- First Time Members Get A Membership Pack:
  - ▶ Membership card and certificate
  - ▶ OWASP DVD
  - Attractive OWASP t-shirt
  - OWASP tote bag
  - ▶ Pen
- 10% discount on OWASP conferences

## **Organizational Supporters**

- Cost: \$5000/year
- Logo on OWASP website
- Online job postings on OWASP website
- Invitation to special OWASP events such as Industry Outreach
- Two complimentary attendees to OWASP annual Summit
- Employees get 10% discount on OWASP conferences
- Onsite OWASP briefing

## **University Supporters**

- No cost (!) Universities must agree to provide meeting space twice per year and to include OWASP in their curriculum
- Must be an accredited University
- Logo on OWASP website
- OWASP briefings for University students and staff

## **Upcoming Conferences**

■ August 26<sup>th</sup>, 2009 – UC Irvine -AppSec Academia Symposium

■ Nov 10 – 13, 2009 – Wash DC, OWASP Appsec USA,