

RSA[®]Conference2015

San Francisco | April 20-24 | Moscone Center

CHANGE

Challenge today's security thinking

SESSION ID: AST3-W01

The Hidden Hazards on Online Ads – Emerging Tactic of Choice



 #RSAC

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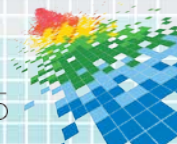
Casey Oppenheim

CEO, Disconnect
@disconnectme



Overview

- ◆ Anatomy of malvertising
- ◆ Impact to online brands, trust sites and integrity of advertising
- ◆ Impact & issues from the consumer POV
- ◆ What you (a security leader) can do
- ◆ Apply



Why Care

IN DEPTH

Malicious advertising offers broad reach and quick rewards for malware perpetrators

Dynamic, expanding advertising scene opening juicy targets for Internet bandits

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By John P. Mello Jr.

March 12, 2014 — CSO — A burgeoning and dynamic online advertising market is creating an abundance of opportunity for cyber criminals.

Malware-infected ads now greatest threat to mobile security

NEWS 5 Mar, 2014 Jane McCallion

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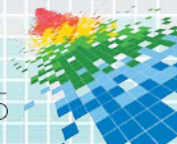


Porn slips into second place as main vector for attack on smartphones.

Advertising outstrips porn as top malware gateway

Porn is now the third leading threat vector, driving users to malware 16 per cent of the time

Brian Karlovsky (ARN) | 13 March, 2014 11:33



What Is Malvertising



1 User visits a trusted website via a link, types the URL directly or uses their favorites

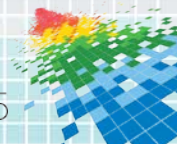
2 Ad tricks user / or auto downloads (“driveby”) a program that installs malware

3 Captures & forwards data back to creator, turns into bots, installs ransomware and other

4 Used for identity theft, ACH fraud, account take over, corporate espionage and other crimes

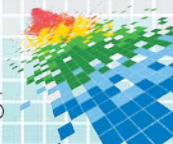
Impact

All site visitors
Plus the reputation of advertisers, sites & brands

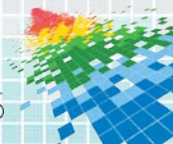
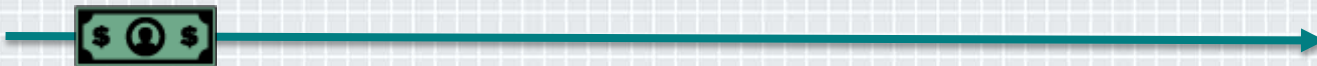
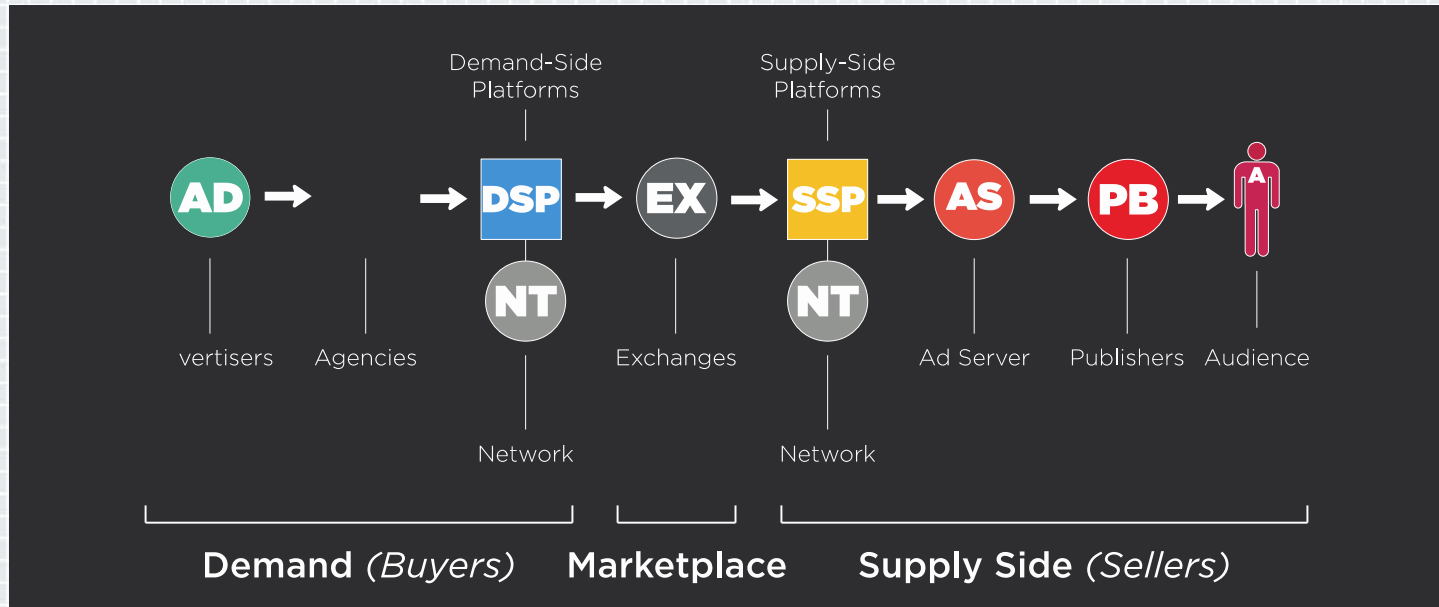


The Impact

- ◆ Consumer Trust in advertising
 - ◆ 57% of users don't click ads due to privacy/security concerns
- ◆ Brand reputation of the sites that unknowingly served the malvertising
- ◆ End user & organization impact
 - ◆ Malware, ransomware, id theft
- ◆ Blocking – financial impact to sites' ability to provide user content & services funded by advertising

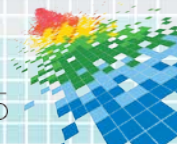


Ad Ecosystem 101



Why Do Cybercriminals Like Malvertising?

- ◆ Often hard to replicate
- ◆ The ecosystem makes it difficult to detect source / cause
- ◆ Leveraged & amplified impact
- ◆ Increased precision & targeting (aka interest based malvertising)
- ◆ Low cost – high returns

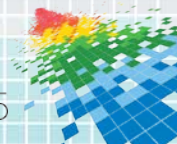


Solutions – Today & The Future

Today

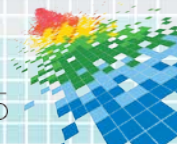
- ◆ Downstream Partner Vetting
- ◆ Onboarding
- ◆ Continuous Monitoring
- ◆ Transparency & Communication

Future ?



Apply What You Have Learned Today

- ◆ Next week you should:
 - ◆ Document all partners in advertising ecosystem
 - ◆ Document all 3rd-party website vendors
- ◆ In the first three months following this presentation you should:
 - ◆ Conduct due diligence on these partners
- ◆ Within six months you should:
 - ◆ Incorporate public-facing, web-based security operation



Resources & Related Reading

- ◆ Anti-Malvertising Best Practices <https://otalliance.org/malvertising>
- ◆ Data Sharing / Threat Intelligence
 - ◆ Facebook ThreatExchange <https://threatexchange.fb.com/>
Participants include Bitly, Dropbox, Pinterest, Tumblr, Twitter & Yahoo
 - ◆ DoubleClick Malvertising Group
- ◆ Trust About Malvertising
<http://www.darkreading.com/vulnerabilities---threats/the-truth-about-malvertising---/a/d-id/1318641>

