## WED. JULY 31 07:00-17:00 REGISTRATION BREAKFAST Sponsored by 🎨 LOOKINGGLASS / Forum Ballroom 08:00-08:50 ROOM Roman IV Roman I / III Palace II Palace III Augustus V / VI Palace I Augustus I / II Augustus III / IV Welcome & Introduction to Black Hat USA 2013 / Augustus Ballroom 08:50-09:00 09:00-10:00 Keynote Speaker: General Keith B. Alexander / Augustus Ballroom 10:00-10:15 10:15-11:15 Mainframes: The Past Will New Trends in FastFlux Networks Combating the Insider Threat Beyond the Application: Cellular How to Build a SpyPhone BlackberryOS 10 From a Security With BIGDATA comes BIG Lessons from Surviving a Java Every-Days: Exploiting Come to Haunt You responsibility: Practical (Wei Xu + Xinran Wang) 300Ghns Denial of at the FRI: Real-world Lessons Privacy Regulatory Space (Kevin McNamee) Perspective Software Running on Three (Philip Young) (Ralf-Philipp Weinmann) exploiting of MDX injections Service Attack Learned (Christie Dudley) Billion Devices (Patrick Reidy) (Dmitry Chastuhin) (Matthew Prince) (Brian Gorenc + **a** 🚳 👊 Jasiel Spelman) CrowdSource: An Open Source. 0 **\*\*** Legal Considerations for Crowd Trained Machine Learning Model for Malware Detection Cellular Research (Joshua Saxe) (Marcia Hofmann) (P) Coffee Service Sponsored by ...... / Octavius Ballroom 11:15-11:45 11:45-12:45 Black-box Assessment of Shattering Illusions in Lock-Free Power Analysis Attacks for Denving Service to DDoS What Security Researchers Just-In-Time Code Reuse: The A Tale of One Software Bypass TLS 'Secrets' Million Browser Botnet Pseudorandom Algorithms Worlds: Compiler/Hardware Cheapskates Protection Services Need to Know About More Things Change, the More of Windows 8 Secure Boot (NextGen\$) (Jeremiah Grossman + (Derek Soeder + Behaviors in OSes and VMs (Colin O'Flynn) (Allison Nixon) Anti-Hacking Law They Stay the Same (Yuriy Bulygin + Matt Johansen) Oleksandr Bazhaniuk ± Christopher Ahad + (Marc Blanchou) (Marcia Hofmann) (Kevin Snow + Lucas Davi) **4** Gabriel Acevedo) Andrew Furtak) **(1)** Denial of Service as a Service -Password Hashing: Asymmetrical Warfare at its Finest The Future is Now (Robert Masse) (JP Aumasson) 12:45-14:15 Lunch Sponsored by QUALYS / Forum Ballroom 14:15-15:15 End-to-end Analysis of Domain Pass the Hash and Other Credential Flying In the Dark - All the Things Universal DDoS Legal Aspects of BIOS Security I Can Hear You Now: Traffic Lawful Access Panel (Matt **Evading Deep Inspection for** Generating Algorithm Malware Not to Do When Hacking Hardware Theft and Reuse: Mitigating the risk Mitigation Bypass Full-spectrum Computer (John Rutterworth + Interception and Remote Blaze & Brewster Kahle & Fun and Shell of Lateral Movement and Privilege (Matthew Watchinski) (Tony Miu + Albert Hui + Wai Leng) Network (Active) Defense Corey Kallenberg + Mobile Phone Cloning with a Jennifer Valentino-DeVries & (Opi Niemi + Antti Levomäki) (Jason Geffner) Escalation (Robert Clark) Xeno Kovah) Compromised CDMA Femtocell Alan Davidson) **a** 🐼 (Mark Simos + Patrick Jungles) (Tom Ritter + Doug DePerry + Andrew Rahimi) **O** Break 15:15-15:30 15:30-16:30 JavaScript Static Security Analysis How to grow a TREE (Taint-Enabled Maltego Tungsten As a Untwining Twine A Practical Attack Against MDM TOR... ALL-THE-THINGS! Buying into the Bias: Why Clickjacking Revisited: Let's Get Physical: Breaking Made Easy with JSPrime Reverse Engineering Environment) Collaborative Attack Platform (Jon Chittenden + Anson Gomes) (Jason Geffner) Vulnerability Statistics Suck A Perceptual View of UI Solutions Home Security Systems and (Nishant Das Patnaik + from a CBASS (Cross-platform (Roelof Temmingh + (Daniel Brodie + (Jericho + Steve Christey) Security Bypassing Building Controls **4** 🚱 🗩 (Devdatta Akhawe) Sarathi Sabyasachi Sahoo) Binary Automated Symbolic-Andrew MacPherson) Michael Shaulov) (Drew Porter + Stephen Smith) execution System) LTE Booms with Vulnerabilities Truncating TLS Sessions to **D** 🐒 📮 (Nathan Li + Loc Nguyen + (Ankit Gupta) Violate Beliefs Xing Li + James Just) (Ben Smyth + Alfredo Pironti) **OPSEC Failures of Spies** (Matthew Cole) Coffee Service Sponsored by July / Octavius Ballroom 17:00-18:00 Hacking, Surveilling, and The Weh IS Vulnerable: XSS Predicting Susceptibility to Smashing the Font Scaler Engine in Pixel-Perfect Timing Attacks How CVSS is DOSsing Your BinaryPig - Scalable Malware Hiding @ Depth - Exploring. Mactans: Injecting Malware Defense on the BattleFront Socialbots on Twitter Analytics in Hadoop Windows Kernel with HTML5 Deceiving Victims on Smart TV Patching Policy (and wasting Subverting, and Breaking NAND Into iOS Devices via Malicious (Grea Wroblewski + Rvan Barnett) (Chris Sumner + Randall Wald) (Zachary Hanif + Telvis Calhoun + (Ling Chuan Lee + Lee Yee Chan) (Paul Stone) (SeungJin 'Beist' Lee) your money) Flash Memory Chargers Jason Trost) (Luca Allodi + Fabio Massacci) (Josh 'mOnk' Thomas) (Billy Lau + Yeongjin Jang + **4** $\triangleleft$ **(1)** Chengyu Song) ø Malicious File for Exploiting (A) (D) (T Forensic Software (Takahiro Haruyama + Hiroshi Suzuki) Sponsor Hall Reception Sponsored by: Diamond, Platinum Plus, Platinum Sponsors / Octavius Ballroom 17:30-19:00 18:30-19:30 PWNIE Awards / Augustus III/IV

KEY: 🕢 AppSec 😤 DDoS 🕜 Malware 🔊 Cellular 📵 Hardware/Low Level 🚇 Social 📵 Mobile 😯 SCADA/ICS 🚷 Network 📀 Defense 🙆 Exploit Development 🜐 Management 😥 Crypto 🍵 Consumer

## WED. JULY 31

	Workshops	3		Arsenal Presentations				
ROOM	Pompeian	Florentine	Milano Ballroom VII	Milano Ballroom VIII	Milano Ballroom III	Milano Ballroom		
10:15-11:15			the Pwn Pad Express V	Defense Evasion Modeling — Bypassing the Cyber Kill Chain: What's Getting Past Your Layered Security? Sponsored by: NSS Labs	How to Avoid Becoming the Next Watering Hole Sponsored by: RisklQ	ThreadFix by Dan Cornell		
	Practical Pentesting of ERPs and Business Applications	Methodologies of Hacking Embedded Security Appliances (Rob Bathurst + Mark Carey)				Xenotix xB0T by Ajin Abraham		
11:15-11:45	(Alexander Polyakov + Alexey Tyurin)		Coffee/Refreshments Bre	Coffee/Refreshments Break - Sponsored Workshop & Arsenal Reception Room				
11:45-12:45	<b>4</b>		How to Pentest 1000 Branch Offices Sponsored by: Pwnie Express		Demystifying Mobile Application Security: Improve Your Approach to Blacklisting Apps Sponsored by: RisklQ	SocialKlepto by Jason Ding		
						lce-hole by Darren Manners		
12:45-14:15	Lunch		Lunch/Learn Mixer - Sponsored Workshop & Arsenal Reception Room  Sponsored by ONSS Labo RisklQ					
14:15-15:15		PDF Attack: A Journey from the Exploit Kit to the Shellcode (Jose Miguel Esparza)	The Spikes Challenge: Solving the Browser Malware Epidemic Sponsored by: Spikes	The Hangover Cyber Espionage Report – Tools, Tactics and Tracking Sponsored by: Norman Shark	"Kaizen" a CTF Sponsored by: Booz Allen Hamilton	iMAS - iOS Mobile Application Security Libraries by Gregg Ganley		
	Embedded Devices Security and Firmware RE (Jonas Zaddach + Andrei Costin)					Vscan by Federico Massa		
15:15-15:30			Coffee/Refreshments Break - Sponsored Workshop & Arsenal Reception Room					
15:30-16:30			The Spikes Challenge: Solving the Browser Malware Epidemic Sponsored by: Spikes	The Hangover Cyber Espionage Report – Tools, Tactics and Tracking Sponsored by: Norman Shark	"Kaizen" a CTF Sponsored by: Booz Allen Hamilton	ShellNoob by Yanick Fratantonio		
						Dude, WTF in My Car? By Alberto Garcia Illera + Javier Vazquez Vidal		
16:30-18:00		<b>17:00-18:00</b> To be Announced	Afternoon Mixer - Sponsored Workshop & Arsenal Reception Room  Sponsored by     Sponsored by					

Arsenal									
Milano Ballroom				Milano Ballroom					
	Station 1 Station 2 Station 3 Station 4		Station 4	Station 5	Station 6	Station 7	Station 8		
	OSfooler: Remote OS Fingerprinting is Over by Jaime Sanchez	WebVerify by Luis Antonio Rosales Marco	RAFT 3 by Gregory Fleischer + Nathan Hamiel	PyPTP by Matthew Bergin	Smartphone Pentest Framework by Georgia Weidman	FSFlow by Pat McCoy	ShellNoob by Yanick Fratantonio	Vscan by Federico Massa	
12:30-12:45	Break								
12:45-15:15	JMSDigger by Gursev Singh Kalra	ThreadFix by Dan Cornell	Lair by Tom Steele	The Cat's Meow by Taylor Pennington		Dude, WTF in My Car? by Alberto Garcia Illera + Javier Vasquez Vidal	Automated Electromechanical PIN Cracking: R2B2 and C3B0 by Justin Engler	Xenotix xBOT by Ajin Abraham	
15:15-15:30	Break								



































## THU. AUGUST 1

08:00-08:50	BREAKFAST sponsored by ACCUANT / Forum Ballroom								
08:30-16:00	REGISTRATION								
ROOM	Roman II	Roman IV	Roman I / III	Palace II	Palace III	Augustus V / VI	Palace I	Augustus I / II	Augustus III / IV
09:00-10:00	Keynote Speaker: Brian Muirhead / Augustus Ballroom								
10:00-10:15	Break								
10:15-11:15	CMX: IEEE Clean File Metadata Exchange (Mark Kennedy + Igor Muttik)	change Revenge ark Kennedy + Igor Muttik) (Skip Duckwall)		The SCADA That Didn't Cry Wolf - Who's Really Attacking Your ICS Devices - Part Deux! (Kyle Wilhoit)	Mobile Rootkits: Exploiting and Rootkitting ARM TrustZone (Thomas Roth)	Fully Arbitrary 802.3 Packet Injection: Maximizing the Ethernet Attack Surface (Andrea Barisani + Daniele Bianco)	Bluetooth Smart: The Good, the Bad, the Ugly, and the Fix!  (Mike Ryan)	Honey, I'm Home!! - Hacking Z-Wave Home Automation Systems (Behrang Fouladi + Sahand Ghanoun)	The Factoring Dead: Preparing for Cyptopocalypse (Alex Stamos + Thomas Ptacek + Tom Ritter)
	Mobile Malware: Why the Traditional AV Paradigm is Doomed, and How to Use Physics to Detect Undesirable Routines (Guy Stewart)		Big Data for Web Application Security (Mike Arpaia + Kyle Barry)			<b>⊗</b>		© <b>©</b>	<b>@ 9</b>
11:15-11:45	Coffee Service Sponsored b	⊮ ։:"LogRhythm / <b>Octavius</b>	Ballroom						
11:45-12:45	Bochspwn: Identifying 0-Days via System-Wide Memory Access Pattern Analysis (Mateusz Yofort Jurczyk + Gynvael Coldwind)	Energy Fraud and Orchestrated Blackouts: Issues with Wireless Metering Protocols (wM-Bus) (Cyrill Brunschwiler)	Dissecting CSRF Attacks and Countermeasures (Mike Shema + Sergey Shekyan + Vaagn Toukharian)	Hunting the Shadows: In-Depth Analysis of Escalated APT Attacks (Fyodor Yarochikin + Jeremy 'Birdman' Chiu + Tsung Pei Kan + Benson Wu)	The Outer Limits: Hacking The Samsung Smart TV (Aaron Grattafiori + Josh Yavor)	Revealing Embedded Fingerprints: Deriving Intelligence from USB Stack Interactions (Andy Davis)	UART THOU MAD? (Toby Kohlenberg + Mickey Shkatov)	Android: One Root to Own Them All (Jeff Forristal)	Stepping p3wns: Adventures in Full Spectrum Embedded Exploitation (Ang Oul + Michael Costello + Salvatore Stolfo)
12:45-14:15	Lunch Sponsored by Microso	oft / Forum Ballroom							
14:15-15:15	Using Online Activity as Digital Fingerprints to Create a Better Spear Phisher (Joaquim Espinhara + Ulisses Albuquerque)	Hot Knives Through Butter: Bypassing Automated Analysis Systems (Abhishek Singh + Zheng Bu)	Above My Pay Grade: Cyber Response at the National Level (Jason Healey)	UNION SELECT 'This_Talk' AS     (New Optimization and Obfuscation Techniques')%00     (Roberto Salgado)	Out of Control: Demonstrating SCADA Device Exploitation (Brian Meixell)	Funderbolt: Adventures in Thunderbolt DMA Attacks (Russ Sevinsky)	Press ROOT to Continue: Detecting OSX and Windows Bootkits with RDFU (Mario Vuksan + Tomislav Pericin)	What's on the Wire? - Physical Layer Tapping with Project Daisho (Dominic Spill + Michael Ossmann + Michael 'Dragorn' Kershaw)	Implantable Medical Devices: Hacking Humans (Barnaby Jack)
15:15-15:30	Break								
15:30-16:30	CreepyDOL: Cheap, Distributed Stalking (Brendan O'Connor)	Post Exploitation Operations with Cloud Synchronization Services (Jake Williams)	Virtual Deobfuscator - A DARPA Cyber Fast Track Funded Effort (Jason Raber)	Is that a Government in Your Network or are you Just Happy to See Me? (Eric Fiterman)	Compromising Industrial Facilities from 40 Miles Away (Lucas Apa + Carlos Penagos)	RFID Hacking: Live Free or RFID Hard (Fran Brown)	SSL, Gone in 30 Seconds - A BREACH beyond CRIME (Angelo Prado + Neal Harris + Yoel Gluck)	Exploiting Network Surveillance Cameras Like a Hollywood Hacker (Craig Heffner)	Rooting SIM Cards (Karsten Nohl)
16:30-17:00	Ice Cream Social Sponsor	ed by 💽 / Octavius Ballro	oom						
17:00-18:00	OptiROP: Hunting for ROP Gadgets in Style (Nguyen Anh Quynh)	Defending Networks With Incomplete Information: A Machine Learning Approach (Alexandre Pinto) (Aaron Grattafiori + Josh Yavor)	Teridian SoC Exploitation: Exploration of Harvard Architecture Smart Grid Systems (Josh 'mtnk' Thomas + Nathan Keltner)	Bugalyze.com - Detecting bugs using decompilation and data flow analysis (Silvio Cesare)	Hacking Like in the Movies: Visualizing Page Tables for Local Exploitation (Georg 'Oxff' Wicherski + Alexandru Radocea)	Home Invasion v2.0 - Attacking Network-Controlled Hardware (Daniel Crowley + David Bryan + Jennifer Savage)	Multiplexed Wired Attack Surfaces (Michael Ossmann + Kyle Kos' Osborn)	Owning the Routing Table - Part II (Gabi Nakibly)	Spy-jacking the Booters (Brian Krebs + Lance James)





































## THU. AUGUST 1

	Workshops	s	Arsenal Presentations			
ROOM	Pompeian Florentine		Milano Ballroom			
10:15-11:15			Mandiant Redline by Theodore Wilson			
	DO-IT-YOURSELF CELLULAR IDS	Mo' Malware, Mo' Problems - Cuckoo Sandbox to the Rescue (Jurriaan Bremer + Claudio Guarnieri + Mark Schloesser)	Drozer (formerly known as Mercury) by Tyrone Erasmus + Daniel Bradberry			
11:15-11:45	(Sherri Davidoff + David Harrison +Scott Fretheim)		Break			
11:45-12:45	•		Social-Engineer Toolkit by David Kennedy			
			ModSecurity by Ryan Barnett			
12:45-14:15	Lunch					
14:15-15:15			Viproy VoIP Penetration and Exploitation Testing Kit by Fatih Ozavci			
	Network Forensics Sudden Death Workshop	JTAGulator: Assisted Discovery of On-Chip Debug Interfaces	Armitage - A Scriptable Red Team Collaboration Tool by Raphael Mudge			
15:15-15:30	(Scott Fretheim + Jonathan Neff)	(Joe Grand)	Break			
15:30-18:00			Smartphone Pentest Framework by Georgia Weidman			
			PHPMap by Matthew Bergin			

Arsenal									
Milano Ballroom					Milano Ballroom				
	Station 1 Station 2 Station 3 Station 4				Station 5	Station 6	Station 7	Station 8	
10:00-12:30	lce-hole by Darren Manners	Armitage - A Scriptable Red Team Collaboration Tool by Raphael Mudge	Information Disclosure in Facebook Graph Api with A.T.H.O.S by Michael Hudson	Binfuzz.js by Artem Dinaburg	HTExploit by Matias Katz	Invoke-ReflectivePELoader PowerShell Script by Joe Bialek	iocwriter_11 by William Gibb	WATOBO by Andreas Schmidt	
12:30-12:45	Break								
12:45-15:15	Sphere of Influence 3.2 by Darren Manners	Social-Engineer Toolkit by David Kennedy	Vega by David Mirza Ahmad	Dependency-Check by Jeremy Long	Drozer (formerly known as Mercury) by Tyrone Erasmus + Daniel Bradberry	iMAS - iOS Mobile Application Security Libraries by Gregg Ganley	Mandiant Redline by Theodore Wilson	OWASP Broken Web Applications VM by Chuck Willis	
15:15-15:30	Break								





























