**AppSec USA 2011** 



### **The OWASP Foundation**

http://www.owasp.org

# Testing from the Cloud: Is the sky falling?

Matt Tesauro OWASP Foundation Board Member, WTE Project Lead matt.tesauro@owasp.org

> "In between Jobs" Soon to be at Rackspace



### Who's this Matt guy anyway?

- Broad IT background Developer, DBA, Sys Admin, Pen Tester, Application Security professional, CISSP, CEH, RHCE, Linux+
- Long history with Linux and Open Source Contributor to many projects Leader of OWASP Live CD / WTE
  - OWASP Foundation Board Member

### FUNEMPLOYED



# **OWASP WTE: A History**



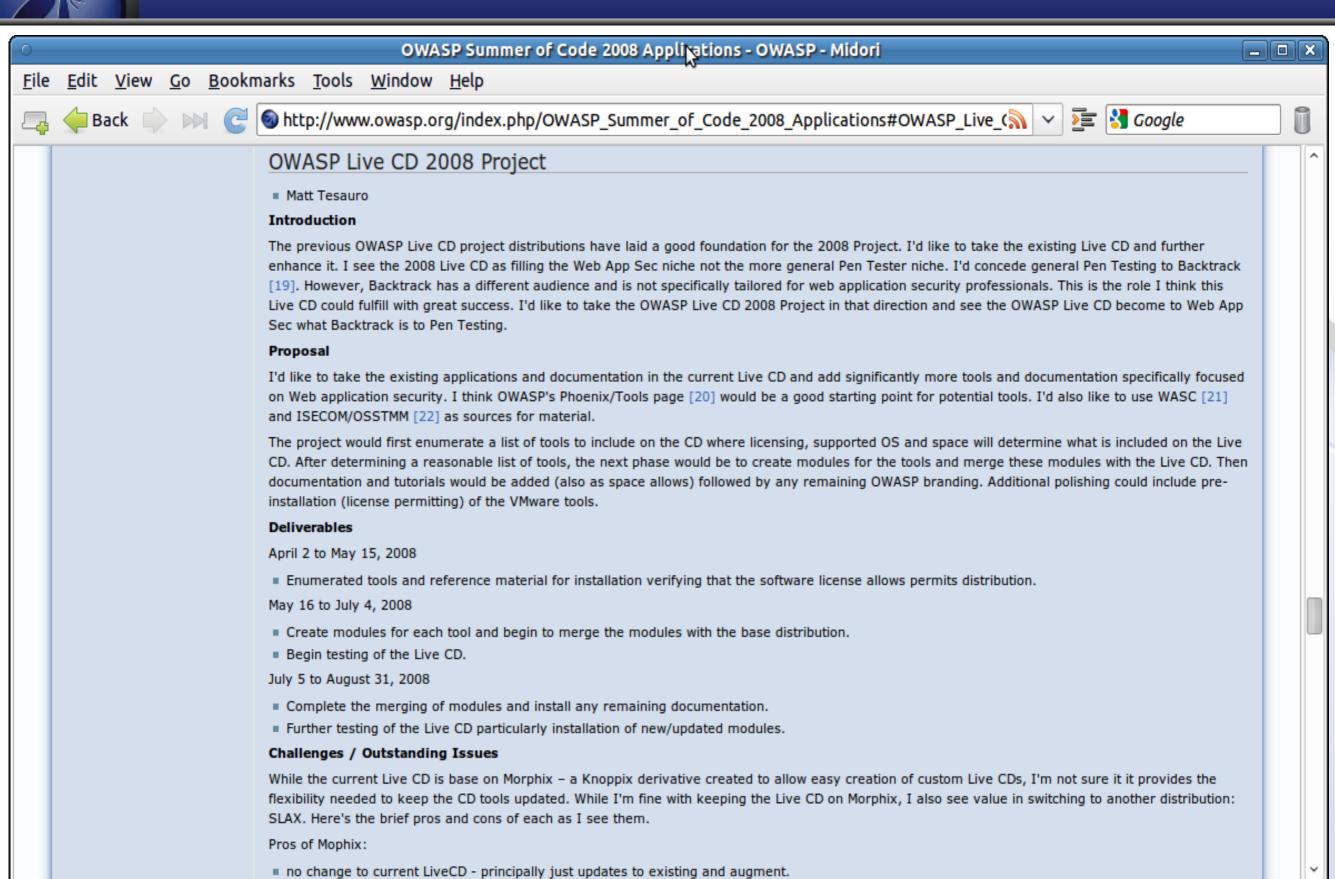
#### Press Release - OWASP Summer of Code 2008

ដ្រា	from	Paulo Coimbra <paulo.coimbra@owasp.org></paulo.coimbra@owasp.org>	hide details 3/4/08	Keply to all
	to	OWASP - ALL <owasp-all@lists.owasp.org></owasp-all@lists.owasp.org>		
	date	Tue, Mar 4, 2008 at 1:33 PM		
SI	ubject	Press Release - OWASP Summer of Code 2008		
maili	ng list	owasp-all.lists.owasp.org Filter messages from this mailing list		

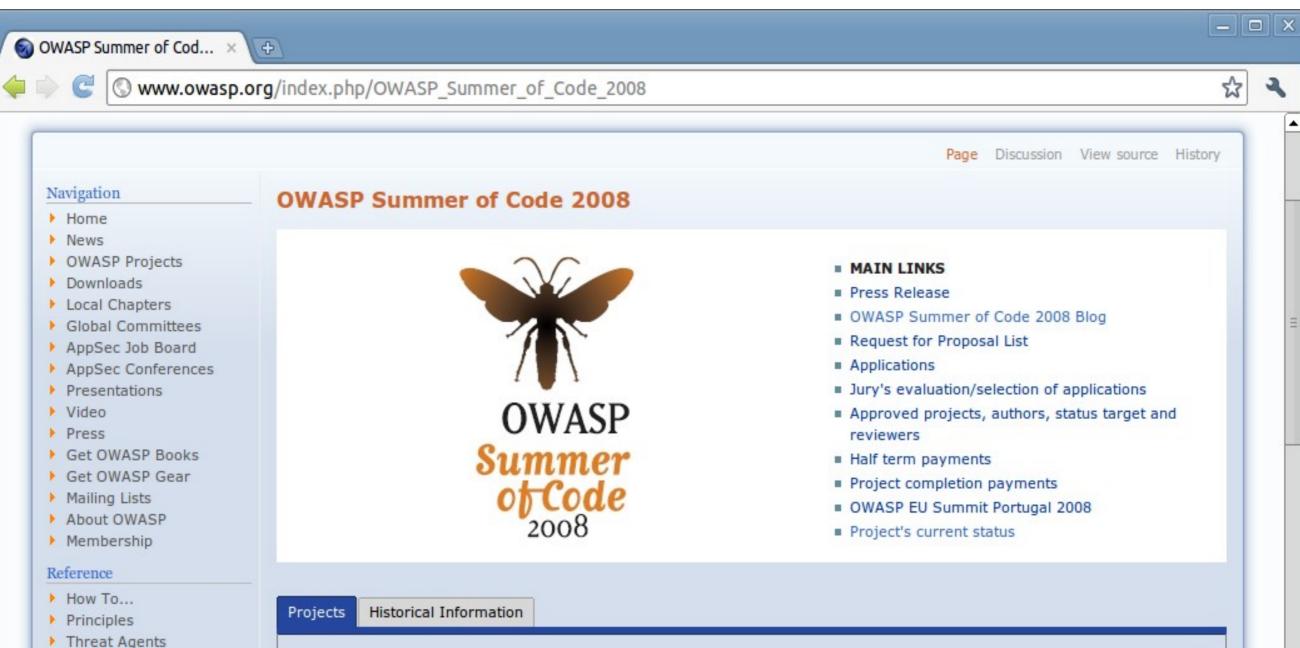
#### **OWASP Summer of Code 2008 - Sponsorship Initiative**

- <u>The OWASP Summer of Code 2008 (SoC 2008</u>) aims to financially sponsor contributions to OWASP Projects. SoC 2008 follows the previous <u>OWASP Spring of Code 2007</u>, in which 21 projects were sponsored with a budget of \$117,500, and the <u>OWASP Autumn of Code 2006</u>, in which 9 projects were sponsored with a budget of \$20,000.
- The SoC 2008 is an open sponsorship program were participants/developers are paid to work on OWASP (and web security) related projects.
- The SoC 2008 is also an opportunity for external individual or company sponsors to challenge the
  participants/developers to work in areas in which they are willing to invest additional funding, provided that
  these areas are relevant and beneficial to the OWASP community.
- The initial Budget for SoC 2008 will be \$100,000 and it is funded by OWASP using current membership fees and profits from past conferences. In parallel with the Request for Proposals, OWASP would like to invite individuals and companies that benefit from OWASP projects to join OWASP as a member. In addition to the current Membership benefits, the new OWASP members will be able to allocate membership fees to SoC 2008 projects they are interested in.
- There is no geographical, age or any other form of restrictions to who can apply for an "OWASP Summer of Code 2008" sponsorship. The only requirement is that the candidate shows the potential to accomplish the project's objectives and the commitment to dedicate the time required to complete it in the allocated time frame (projects must be completed by 30th August 2008).
- Prospective candidates should visit <u>SoC 2008 page</u> for more information.









- Attacks
- Vulnerabilities
- Controls
- Activities
- Technologies
- Glossary
- Code Snippets
- .NET Project
- Java Project

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100% Completion Projects	Author
OWASP Testing Guide v3	Matteo Meucci
OWASP Ruby on Rails Security Guide v2	Heiko Webers
OWASP Live CD 2008 Project	Matt Tesauro
OWASP Code review guide, V1.1	Eoin Keary
OWASP AntiSamy .NET	Arshan Dabirsiaghi
OWASP .NET Project Leader	Mark Roxberry



# Current Release OWASP WTE Sept 2011

- Previous Releases
  - •OWASP WTE Feb 2011
  - •OWASP WTE Beta Jan 2010
  - •AppSecEU May 2009
  - AustinTerrier Feb 2009
  - Portugal Release Dec 2008
  - •SoC Release Sept 2008
  - Beta1 and Beta2 releases during the SoC

Note: Not all of these had ISO, VirtualBox and Vmware versions



# Overall downloads: 330,081 (as of 2009-10-05)

### Other fun facts

- ~5,094 GB of bandwidth since launch (Jul 2008)
- Most downloads in 1 month = 81,607 (Mar 2009)

### There's a new kid in town

## **OWASP WTE**

### Web Testing Environment



### The project has grown to more than just a Live CD

- VMWare installs/appliances
- VirtualBox installs
- USB Installs
- Training Environments
- Cloud???

Add in the transition to Ubuntu/Debian and the possibilities are endless (plus the 26,000+ packages in the repos)

## GOAL

Make application security tools and documentation easily available and easy to use

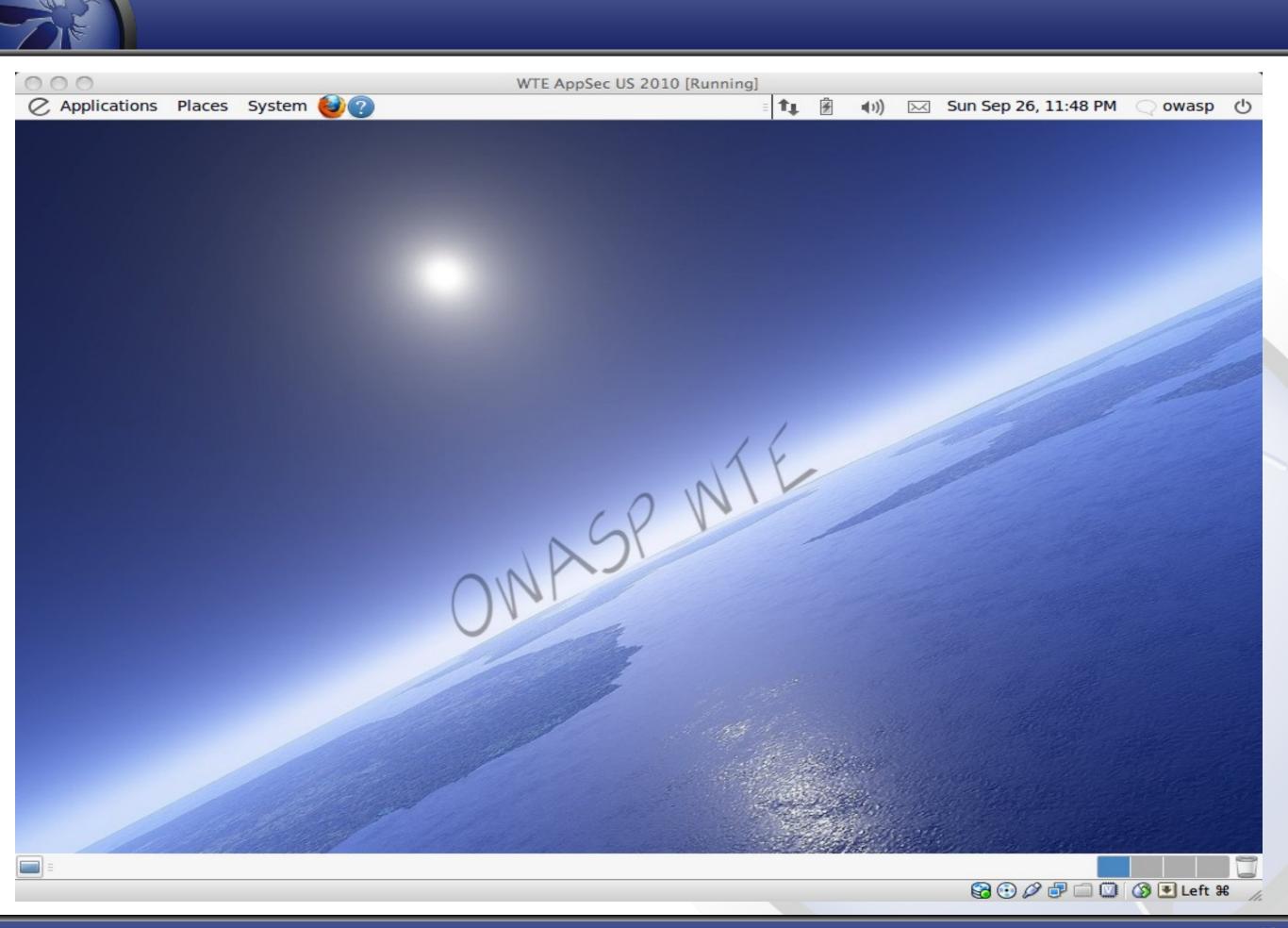
Compliment's OWASP goal to make app security visible

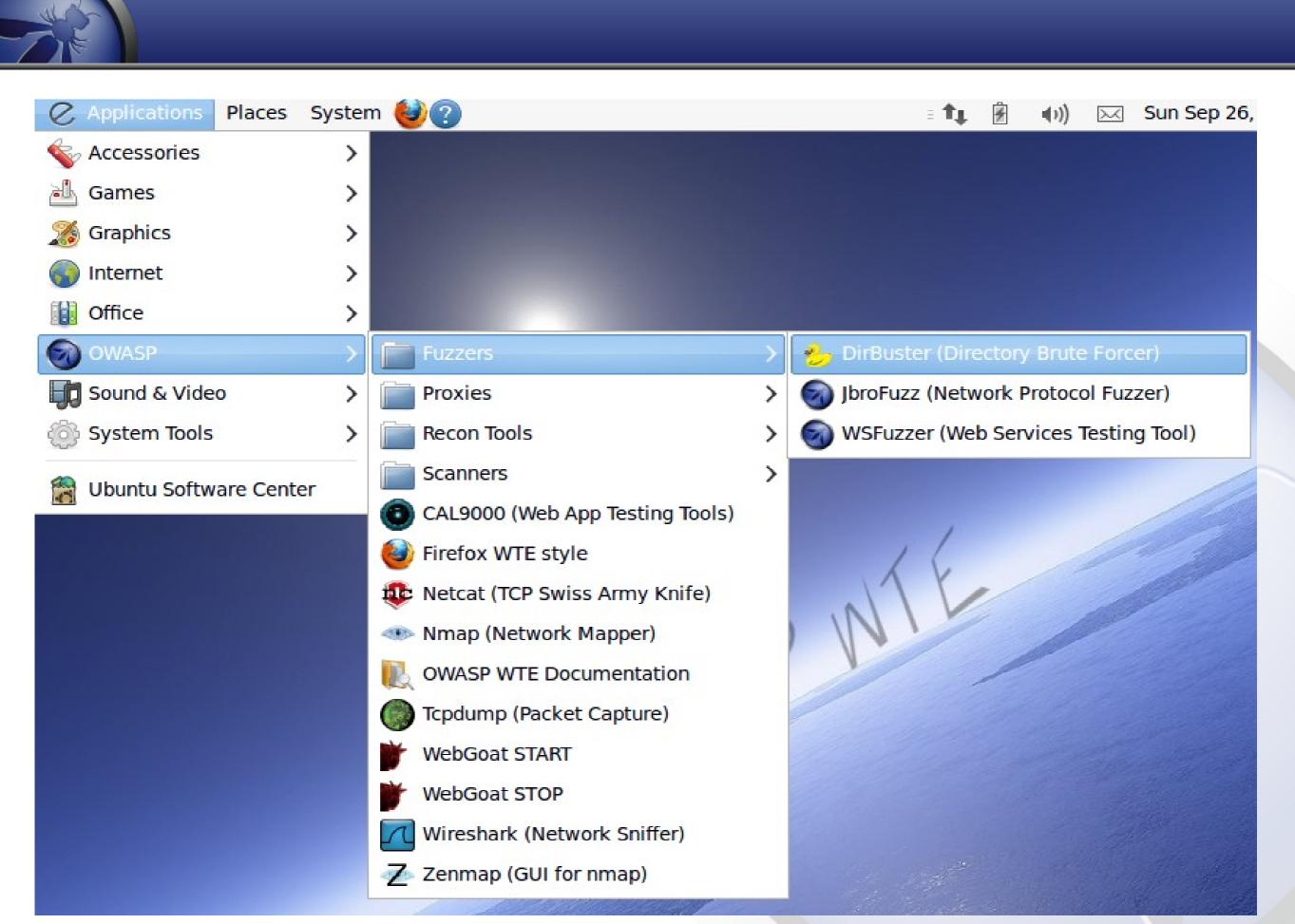
### Design goals

- Easy for users to keep updated
- Easy for project lead to keep updated
- Easy to produce releases (more on this later)
- Focused on just application security not general pen testing



## What's on WTE







### 29 "Significant" Tools Available

### **OWASP Tools:**



#### Web Scarab

a tool for performing all types of security testing on web apps and web services



#### WSFuzzer

a fuzzer with HTTP based SOAP services as its main target



### Web Goat

an online training environment for hands-on learning about app sec



#### 🕼 Wapiti

audits the security of web apps by performing "black-box" scans



#### CAL9000

a collection of web app sec testing tools especially encoding/decoding



#### JBroFuzz

a web application fuzzer for requests being made over HTTP and/or HTTPS.



#### EnDe

An amazing collection of encoding and decoding tools as well as many other utilities



#### DirBuster

a multi threaded Java app to brute force directory and file names

#### WebSlayer

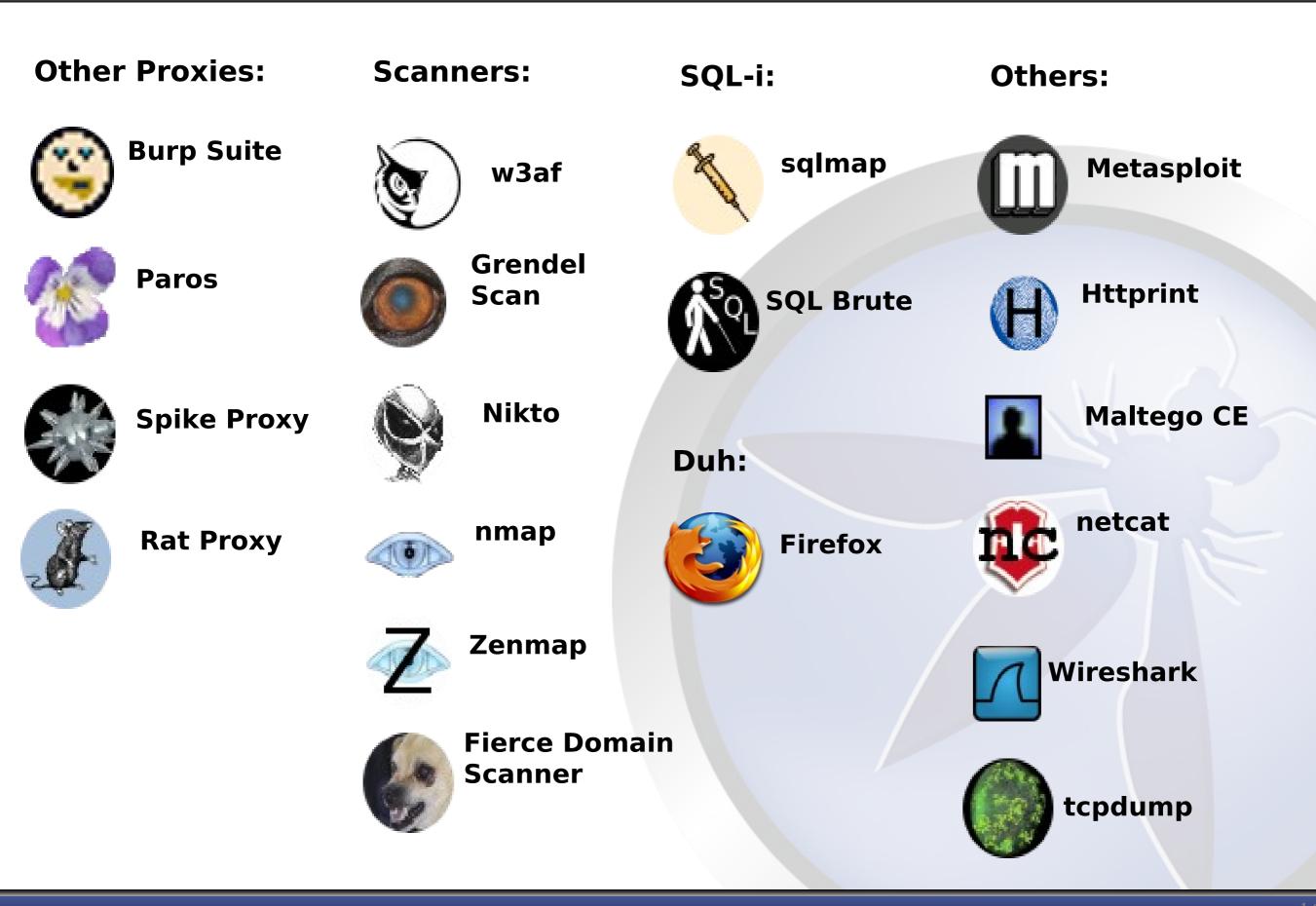
A tool designed for brute-forcing web applications such as resource discovery, GET and POST fuzzing, etc



#### ZAP Proxy

A fork of the popular but moribund Paros Proxy







# Why is it different?





#### Add N Edit Cookies 0.2.1.3

Cookie Editor that allows you add and edit se



No-Referer 1.3.1 Lets you open a tab without sending the HTTP referer information.

Control what gets sent as the HTTP Referer on a per-site basis.



CookiePie 1.0.2 Use multiple Web accounts and profiles in diff



**POW** 0.1.8

A personal Web Server

RefControl 0.8.11

refspoof 0.9.5

NoScript 1.9.2.6 Extra protection for your Firefox: NoScript allows JavaScript, Java (and other plu...



DOM Inspector 2.0.3 Inspects the structure and properties of a win



Firebug 1.3.3 Web Development Evolved.



FormFox 1.6.3



Pops up form action when submit button is at



FoxyProxy 2.9 FoxyProxy - Premier proxy management for Fi



Greasemonkey 0.8.20090123.1



HackBar 1.3.2 A toolbar that helps you find and test SQL inje-



Header Spy 1.3.3.1 Shows HTTP headers on statusbar



InspectThis 0.9.1 Inspect the current element with the DOM Ins



ISView 2.0.5 View the source code of external stylesheets



Live HTTP headers 0.14 View HTTP headers of a page and while brow



User Agent Switcher 0.6.11 Adds a menu and a toolbar button to switch the user agent of the browser.



Modify Headers 0.6.6 Add, modify and filter http request headers



Web Developer 1.1.6 Adds a menu and a toolbar with various web developer tools.



Server Switcher 0.5 Switch between your development and live servers.

Allows easy spoofing of URL referer (referrer) w/ toolbar.



SQL Injection! 1.2 Set all form fields free to test SQL Injections.



Tamper Data 10.1.0 View and modify HTTP/HTTPS headers etc. Track and time requests.



TestGen4Web - Script It All 1.0.0 Just like your VCR - for Firefox. It records what you do, stores it, and plays it bac...



UrlParams 2.2.0 Displays GET/POST parameters in the sidebar.

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### OWASP Documents

- Testing Guide v2 & v3
- CLASP and OpenSamm
- ▶ Top 10 for 2010
- Top 10 for Java Enterprise Edition
- AppSec FAQ
- Books tried to get all of them
  - CLASP, Top 10 2010, Top 10 + Testing + Legal, WebGoat and Web Scarab, Guide 2.0, Code Review

Others

WASC Threat Classification, OSTTMM 3.0 & 2.2







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### Index of /apt/stable

- Parent Directory
- Packages.gz
- <u>README</u>
- owasp-wte-burpsuite-1.3.03-1\_all.deb
- owasp-wte-cal9000-2.0-1\_all.deb
- owasp-wte-ende-1.0rc3-1\_all.deb
- <u>owasp-wte-fierce-1.0.3-1\_all.deb</u>
- owasp-wte-firefox-3.6-1\_i386.deb
- <u>owasp-wte-grendel-scan-1.0-1\_all.deb</u>
- <u>owasp-wte-httprint-301-1\_all.deb</u>
- <u>owasp-wte-jbrofuzz-2.4-1\_all.deb</u>
- <u>owasp-wte-maltego-3.0-1\_all.deb</u>
- owasp-wte-metasploit-3.5.1-1\_all.deb
- owasp-wte-netcat-0.7.1-1\_all.deb
- owasp-wte-nikto-2.1.2-1\_all.deb
- owasp-wte-nmap-5.00-1 all.deb
- owasp-wte-paros-3.2.13-1\_all.deb
- <u>owasp-wte-ratproxy-1.58-1\_all.deb</u>
- <u>owasp-wte-spikeproxy-1.4.8-1\_all.deb</u>
- owasp-wte-sqlbrute-1.0-1\_all.deb
- owasp-wte-sqlmap-0.8-1 all.deb
- <u>owasp-wte-tcpdump-4.0.0-1\_all.deb</u>
- owasp-wte-w3af-1.0~rc2svn3180-1\_all.deb
- owasp-wte-w3af-console-1.0~rc2svn3180-1\_all.deb
- owasp-wte-w3af-svn-3909-1\_all.deb

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# Index of /apt/testing Index of /apt/testing Index of /apt/testing/

### Index of /apt/testing

- · Parent Directory
- <u>Packages.gz</u>
- <u>README</u>
- owasp-wte-sqlix-1.0-1\_all.deb

Apache Server at appseclive.org Port 80



C 🍪 Reload Mark All Upg	grades	Apply Properties			Quick search
u	S	Package	Installed Version	Latest Version	Description
wasp-wte		owasp-wte-netcat		0.7.1	Netcat is a featured networking utili
		owasp-wte-nikto	2.1.2	2.1.2	Nikto is an Open Source web server
		owasp-wte-nmap		5.00	Nmap is a free and open source utili
		owasp-wte-paros		3.2.13	Paros proxy intercepts and modifies
		owasp-wte-ratproxy		1.58	A semi-automated, largely passive w
		owasp-wte-spikeproxy		1.4.8	SPIKE Proxy is a professional-grade
		owasp-wte-sqlbrute		1.0	SQLBrute is a tool for brute forcing
		owasp-wte-sqlmap		0.8	sqlmap is an open source command-
		owasp-wte-tcpdump		4.0.0	Tcpdump prints out a description of
		owasp-wte-w3af		svn-4041	w3af is a Web Application Attack an
		owasp-wte-wapiti		2.2.1	Wapiti allows you to audit the secur
		owasp-wte-webgoat		5.3-RC1	WebGoat is an online training enviro
		owasp-wte-webscarab		20090122	WebScarab: a local proxy for web ap
		owasp-wte-webslayer	svn-r4	svn-r4	WebSlayer is a tool designed for bru
		owasp-wte-wireshark		1.2.7	Wireshark is a network traffic analyz
		owasp-wte-wsfuzzer		1.9.4	WSFuzzer currently targets Web Ser
		owasp-wte-zap	1.2.0	1.2.0	The OWASP Zed Attack Proxy (ZAP)
	<u> </u>				>
<u>S</u> ections	We	bSlayer is a tool designe	ed for brute forcing	Web Applicatio	ons.
S <u>t</u> atus		et Screenshot			-

Custom Filters

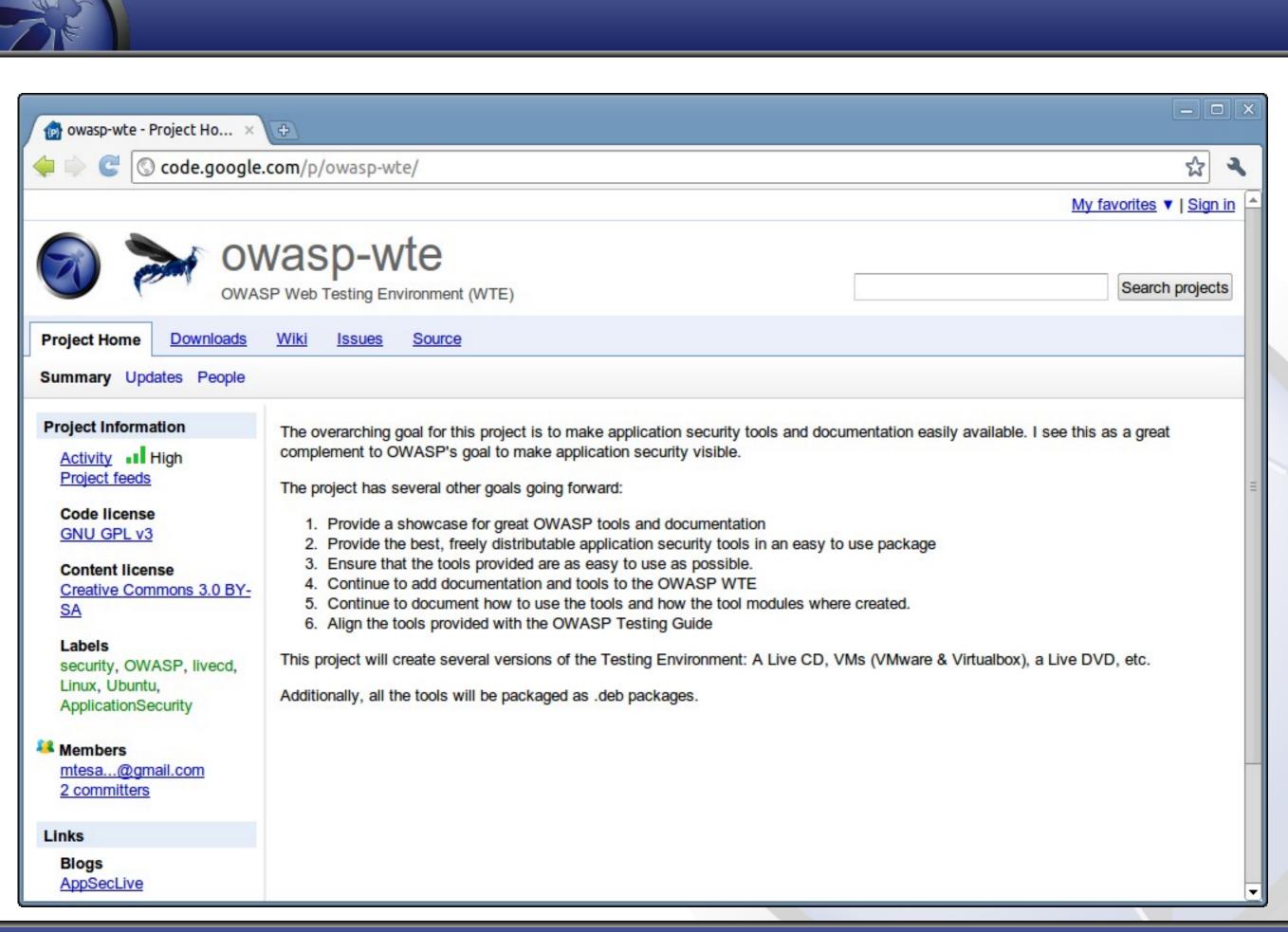
Search Results

it can be used to discover not linked resources (directories, servlets, scripts, etc), brute force GET and POST parameters, brute force forms parameters (User/Password), fuzzing, etc. The tool has a powerful payload generator and a easy and flexible results analyzer.

27 packages listed, 1695 installed, 0 broken. 0 to install/upgrade, 0 to remove



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Get Software	Get Software     Search Results	<b>९</b> owasp-wte	4
Installed Software History	The WTE version of Firefox comes packed with App Sec addons. owasp-wte-firefox		Â
	The OWASP Zed Attack Proxy (ZAP) is an easy to use integrated owasp-wte-zap		
	EnDe - Encoder, Decoder, Converter, Calculator, TU WAS DU WILLST owasp-wte-ende		
	Mmap is a free and open source utility for network exploration or security auditing.		
	Paros proxy intercepts and modifies all Hand HTTPS data between server and client. owasp-wte-paros		
	Tcpdump prints out a description of the contents of packets on a network interface. owasp-wte-tcpdump		
=	WebGoat is an online training environment for hands-on learning owasp-wte-webgoat		
	WSFuzzer currently targets Web Services. owasp-wte-wsfuzzer		
	Grendel-Scan is an open-source web appliceared at aiding manual penetration tests. owasp-wte-grendel-scan		
	JBroFuzz is a web application fuzzer for requests being made over HTTP or HTTPS. owasp-wte-jbrofuzz		
	W3af is a Web Application Attack and Audit Framework. The project's owasp-wte-w3af		
	Burp Suite is an integrated platform for atp the process of attacking an application. owasp-wte-burpsuite		
	CAL9000 is a collection of web application security testing tools owasp-wte-cal9000		
	Wireshark is a network traffic analyzer, or for Unix and Unix-like operating systems. owasp-wte-wireshark		
	27 matching items		¥





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Source path: syn/ conversion/ webscarab/ contents/ usr/ bin/ webscarab Source path: syn/ conversion/ webscarab/ contents/ usr/ bin/ webscarab # #/bin/bash # #/bin/bash # # Script vritten by Matt Tesauro ematt.tesauro@ovasp.org> # # as part of the OWASP Live CD project # # as part of the OWASP Live CD project # # this file, webscarab is part of the .deb package created for use # on the OWASP Live CD environment of the .deb package created for use # webscarab is free software: you can redistribute it and/or modify # webscarab is free software: you can redistribute it and/or modify # webscarab is free software: you can redistribute it and/or modify # webscarab is free software: you can redistribute it and/or modify # webscarab is free software: you can redistribute it and/or modify # webscarab is free software: you can redistribute it and/or modify # webscarab is free software: you can redistribute it and/or modify # webscarab is free software: you can redistribute it and/or modify # webscarab is distributed in the hope that it will be useful. # # fow General Public License for more details. # # fue, !2 Jan 2010 21:40:21 -0600 # This script vas vritten with help from: # thtp://tdo.org/JCP/Bs/Ntml/extins:.html # http://tdo.org/JCP/Bs/Ntml/extins:.html # http://tdo.org/JCP/Bs/Ntml/extins:.html # http://tdo.org/JCP/Bs/Ntml/extins:.html # Alterefate" # Set some same defaults # RAM="64" # Aute=sate" # Swt== "false" # Swt== "false" # Swt== "false" # Swt== "false"	Project Home Downloads Wiki Issues Source			-				
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<pre>25 # http://www.linuxjournal.com/article/10495 26 # http://tldp.org/LDP/abs/html/extmisc.html 27 # http://www.linuxquestions.org/questions/programming-9/bash-how-to-handle-options-4 28 # and the zenity man page 29 30 # Set some sane defaults 31 RAM="64" 32 PROMPT="false" 33 SAVE="false" 34 </pre> View raw file <pre> View raw file </pre> <pre> View raw file </pre>	<pre>2 # 3 # Script written by Matt Tesauro <matt.tesauro@owasp #="" (at="" -0600="" .deb="" 1="" 10="" 11="" 12="" 13="" 14="" 15="" 16="" 17="" 18="" 19="" 20="" 2010="" 21="" 21:40:21="" 22="" 23="" 24="" 25="" 26="" 27="" 3="" 4="" 5="" 6="" 7="" 8="" 9="" <http:="" a="" along="" any="" as="" b="" but="" c="" can="" cd="" cd.="" comparison="" copy="" details.="" distributed="" either="" even="" file,="" fitness="" for="" foundation,="" free="" from:="" general="" gnu="" have="" help="" hope="" if="" implied="" in="" is="" it="" jan="" later="" licens.="" license="" live="" merchantability="" more="" not,="" of="" on="" option)="" or="" owasp="" package="" part="" particular="" project="" public="" purpose="" received="" redistribute="" s<="" script="" see="" set="" should="" software="" software:="" t="" terms="" th="" that="" the="" this="" tue,="" under="" version="" version.="" warranty;="" was="" webscarab="" webscarab,="" webscarab.="" will="" with="" without="" written="" www.gnu="" you="" your=""><th>reated for use and/or modify e as published by he License, or e useful, warranty of . See the Public License</th><th>Change log r209 by mtesauro on Aug 29, 2010 Diff Fixed bugs in WebScarab launching script and updated postinst Go to:carab/contents/usr/bin/webscarab ▼ Project members, sign in to write a code review Older revisions ⊕ r165 by mtesauro on Mar 04, 2010 Diff ⊕ r83 by mtesauro on Jan 16, 2010 Diff ⊕ r83 by mtesauro on Jan 13, 2010 Diff All revisions of this file File info</th><th></th></matt.tesauro@owasp></pre>	reated for use and/or modify e as published by he License, or e useful, warranty of . See the Public License	Change log r209 by mtesauro on Aug 29, 2010 Diff Fixed bugs in WebScarab launching script and updated postinst Go to:carab/contents/usr/bin/webscarab ▼ Project members, sign in to write a code review Older revisions ⊕ r165 by mtesauro on Mar 04, 2010 Diff ⊕ r83 by mtesauro on Jan 16, 2010 Diff ⊕ r83 by mtesauro on Jan 13, 2010 Diff All revisions of this file File info					
35 # Setup command line option parsing	<pre>26 # http://tldp.org/LDP/abs/html/extmisc.html 27 # http://www.linuxquestions.org/questions/programming 28 # and the zenity man page 29 30 # Set some sane defaults 31 RAM="64" 32 PROMPT="false" 33 SAVE="false" 34</pre>	-9/bash-how-to-handle-options-4	<u>View raw file</u> File properties					



## What is next?





# Cloud-ifying WTE

Cloud Provider

Ubuntu / Debian Install

WTE Repository





# WTE Cloud - The12 Step Program

- Currently this is all manual
- 12 steps to get a fully-functional WTE

~30 minutes until you are logged in

# Step 1: Get a cloud account

0	н	osting - Cloud Server	rs - Mozilla Firefo	x		_ 0 ×
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🖉 råckspace cl	oud	Support: Cloud Status	Knowledge Base Fr	orums <u>Tickets Live Chat</u>	▓ 1-877-934-0407 第₩	0800-083-3012
Thome Home	Cloud Servers					
0	Cloud Servers	;				
Hosting						
Cloud Files	Please note that servers		e fees regardless of t	e Server Name column to ma heir operational status. If you		
Cloud Servers	Server Instances	My Server Images				
Load Balancers	0 Server(s)		Add Server	Delete Selected	٩	X
n	Status Server Name	RAM Amount	Primary IP	Distribution	Datacenter	
Your Account		Inerel	s currently no data to	display in this table.		
Q Support						
6 Logout						
For helpful apps and tools check	out <u>Cloud Tools</u> and the <u>Rackspace</u>	e Cloud iPhone page.			Control Panel Version 2.2.2 -	Release Notes

## Step 2: Select Ubuntu/Debian

0	Hosting - Select an image from one of the tabs below Mozilla Firefox	_ 0 ×
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	Claud Sequera	
home Home	) Cloud Servers )) Add Server	
	Select an image from one of the tabs below.	
Hosting	You will be prompted to select the RAM/disk amount for your server in the next step.	
Cloud Files	Linux Windows My Server Images	
Cloud Servers	19 Linux Images (Showing 1 to 19)	X
	OS Image	
Load Balancers		
Your Account	😳 ບຽບກຽບ Ubuntu 10.04 LTS (Lucid Lynx)	Select >
Support	<u>Aubuatu</u>	
<b>X</b> + +	υbuntu Ubuntu 10.10 (Maverick Meerkat)	Select >
Logout		
	- ບ່ອບ∩tu Ubuntu 11.04 (Natty Narwhal)	Select >
	🈳 ບຽບກຽບ Ubuntu 8.04.2 LTS (Hardy Heron)	Select >
		~
For helpful apps and tools check	out <u>Cloud Tools</u> and the <u>Rackspace Cloud iPhone page</u> . Control Panel Version	1 2.2.2 - Release Notes

# Step 3: Choose Name & RAM

	Imag	ge: Ubuntu 10.10	(Maverick Meerka	t)	
		ver Name			
-	wte	e-test			
				and hyphens are valid. Se	rver
	Nam	ie cannot start or	end with a period	or hyphen.	
	Serv	ver Size			
		RAM	Disk	Price Per Hour	
	0	256 MB	10 GB	\$0.015	
	0	512 MB	20 GB	\$0.03	
	0	1024 MB	40 GB	\$0.06	
	•	2048 MB	80 GB	\$0.12	
		4096 MB	160 GB	\$0.24	
	0	1000 1110			
	0	8192 MB	320 GB	\$0.48	

## Step 4: Start your server

0	Hosting - Overview - Mozilla Firefox	×
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tome	Cloud Servers Overview	
THE .	wte-test	
Hosting	Overview DNS Images Diagnostics	
		^
Cloud Files	Cloud Server Details	
Cloud Servers		
Load Balancers	Name & Status	
	Name: wte-test Change Name	
Your Account	Status: Active	
0	Current Action: None	
Support	Age: 0 Days	
Logout		
Lugour	Technical Details	
	RAM: 2048 MB	
	Disk Space: 80 GB	
	Bandwidth In: 0.00 GB	
	Pandwidth Out: 0.00 GP	~
For helpful apps and tools check of	out <u>Cloud Tools</u> and the <u>Rackspace Cloud iPhone page</u> . Control Panel Version 2	.2.2 - Release Notes

# Step 5: Install Desktop + WTE

° – root@wte-test: ~	0	x
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>S</u> earch <u>T</u> erminal <u>H</u> elp		
root@wte-test:~#		^
root@wte-test:~#		
root@wte-test:~#		
root@wte-test:~#		
root@wte-test:~# apt-get install ubuntu-desktop owasp-wte-burpsuite owasp-wte-		
l9000 owasp-wte-doc owasp-wte-ende owasp-wte-fierce owasp-wte-grendel-scan owa		
-wte-httprint owasp-wte-jbrofuzz owasp-wte-maltego owasp-wte-metasploit owasp-		
e-netcat owasp-wte-nikto owasp-wte-nmap owasp-wte-paros owasp-wte-ratproxy owa		
-wte-spikeproxy owasp-wte-sqlbrute owasp-wte-tcpdump owasp-wte-w3af owasp-wte-		
piti owasp-wte-webgoat owasp-wte-webscarab owasp-wte-webslayer owasp-wte-wires	sha	•
rk owasp-wte-wsfuzzer owasp-wte-zap		

## Step 6: More installs

- Add Repos & apt-get update
  - Ubuntu partners & WTE
- Add a NX Server
  - ppa:freenx-team (plus a fix)
- Add OWASP user

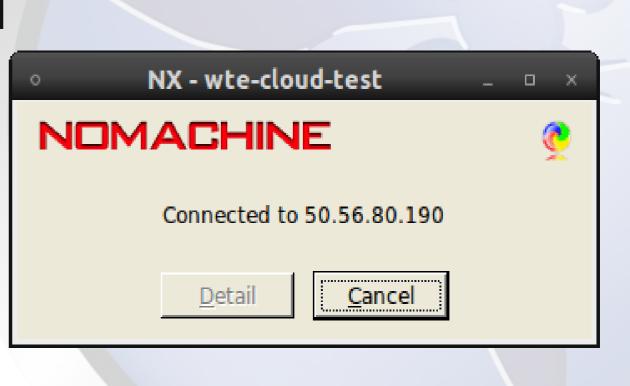
Start GDM

## Step 7: NX Client setup

• NX - wte-cloud-test _ □ ×
NOMACHINE
General Advanced Services Environment
Server
Host 50.56.80.190 Port 22
Remember my password Key
Desktop
Unix  GNOME  Settings
MODEM ISDN ADSL WAN LAN
Display
1024x768 ▼ W 800 ♣ H 600 ♣
Use custom settings Settings
<u>Settings</u>
<u>D</u> elete <u>Save</u> <u>Ok</u> <u>C</u> ancel

## Step 8: Connect to WTE

0	<b>NX</b> _ ×
NOM	ACHINE
Login	owasp
Password	
Session	wte-cloud-test
	🗌 Login as a guest user
Configure	. <u>L</u> ogin <u>C</u> lose



## Step 9: WTE ala Cloud

Image: System	📲 🕬 Thu Sep 22, 3:29 AM	_ n ×
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Ubuntu Software Center     CAL9000 (Web App Testing Tools)     A EnDe (Web App Testing Tools)		
🕸 Netcat (TCP Swiss Army Knife)		
Nmap (Network Mapper)		
OWASP WTE Documentation		
🛞 Tcpdump (Packet Capture)		
WebGoat STANT		
WebGoat STOP		
🚾 Wireshark (Network Sniffer)		
Zenmap (GUI for nmap)		
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## Step 10: Test Connectivity

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## Step 11: Test the Tools

	- owasp@wte-test:385 - wte-cloud-test _
Applications Places System	🗊 ব 🐱 Thu Sep 22, 3:41 AM 😣 owasp 🌰
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## Turn Cats into Dogs

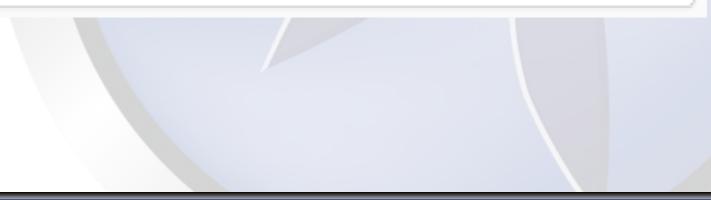
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WIKIPEDIA The Free Encyclopedia	Article Discussion Read View source DOG From Wikipedia, the free encyclopedia (Redirected from Dogs)	Log in / create account
Main page Contents Featured content Current events Random article Donate to Wikipedia Interaction Help About Wikipedia Community portal Recent changes Contact Wikipedia	For other uses, see Dog (disambiguation). The <b>domestic dog</b> ( <i>Canis lupus familiaris</i> <sup>[3]</sup> and <i>Canis lupus</i> <i>dingo</i> <sup>[1][2]</sup> ) is a domesticated form of the gray wolf, a member of the Canidae family of the order Carnivora. The term is used for both feral and pet varieties. The dog may have been the first animal to be domesticated, and has been the most widely kept working, hunting, and companion animal in human history. The word "dog" may also mean the male of a canine species, <sup>[4]</sup> as opposed to the word "bitch" for the female of the species. <sup>[5]</sup> Dogs were domesticated from gray wolves about 15,000 years ago. <sup>[6]</sup> They must have been very valuable to early human settlements, for they quickly became ubiquitous across world cultures. Dogs perform many roles for people, such as hunting, herding, pulling loads, protection, assisting police and military,	Domestic dog Temporal range: 0.015-0 Ma Precesse Cospecse (Poster) Deistocene - Recent
Print/export	companionship, and, more recently, aiding handicapped individuals.	
Done		0
🛅 🛛 🕹 Dog - Wikipedi	a, the f 📎 Untitled Session - OW	

# Step 12: Check your bill

Cloud Servers Usage Summary

Total Uptime uses the following format: Days Hours:Minutes:Seconds

1 Servers (Showing 1 to 1)		Q		X	X	
Server Name	Disk Space (GB)	Bandwidth In (GB)	Bandwidth Out (GB)	Total Uptime	Running Charges	
wte-test	80	1.13	0.02	0 Day(s) 01:53:54	\$0.23	



## Cost Estimates

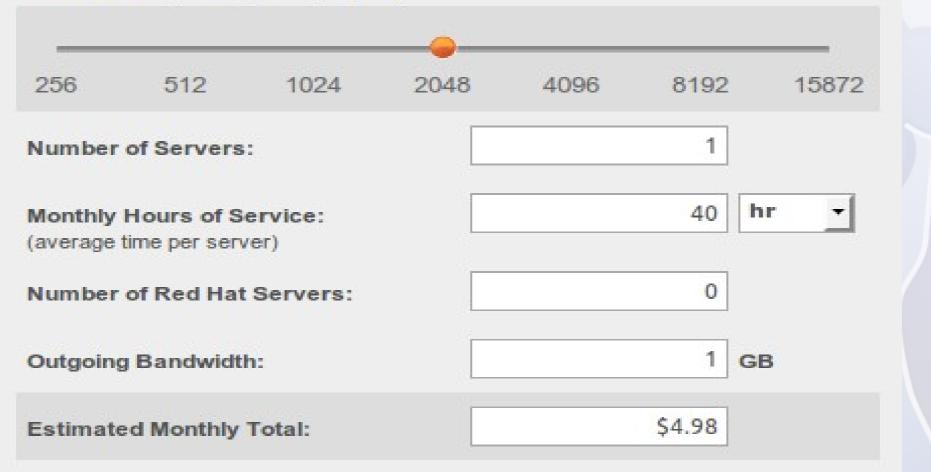
#### **Operating System:**

Linux Windows (Minimum size of 1024MB for Windows)

#### Add Managed Service Level (What is this?)

(Adds \$0.12 per hour per server plus a flat \$100/month account fee)

#### Server Size (Memory in Megabytes)





## Cost Estimates

- Estimated for 40 hours + 1 GB transfer \$4.98
- Estimated for M-F by 24 hours + 1 GB transfer = \$15.48
- Estimated 30 days by 24 hours + 4 GB transfer = \$88.32



## Now what?

## More Automation

- Create a wte-cloud package
  - Wraps up all tools into 1 package
- Make configuration steps into a script
  - Add to postinst for wte-cloud package
- Get setup down to a single step
  - Ideally all in the wte-cloud package



# Even More Automation Apache Libcloud

- Python library to abstract away differences between multiple cloud provider APIs
  - Cloud Servers
  - Cloud Storage
  - Cloud Load balancers
- Supports 24 different providers



# **More Options**

### Different desktop installs

- Minimal
- Baseline
- Instant WebGoat in the sky
- Internal Clouds
  - OpenStack, Vmware, VirtualBox (headless)

## Document, Document Document

Document and post the current manual process (next week)

Create then document the Libcloud process



Tutorials for various providers



## Problems



## **Current Issues**

- Yikes AMD64 CPU
  - sqlmap is missing a dependency
  - WTE Firefox is for i386
  - NX server is a bit tricky
- The WTE theme gets lost

## How can you get involved?

Join the OWASP mail list
 Announcements are there – low traffic

Download an ISO or VM or Cloud instance
 Complain or praise, suggest improvements
 Submit a bug to the Google Code site



## How can you get involved?

- Suggest missing doc or links
- Do a screencast of one of the tools
- Suggest some cool new tool
- Create a .deb package



#### Learn More...

#### **OWASP Site**

http://www.owasp.org/index.php/Category:OWASP\_Live\_CD\_Project

or just look on the OWASP project page (release quality)

http://www.owasp.org/index.php/Category:OWASP\_Project

#### or Google "OWASP Live CD"

### **Download & Community Site**

#### http://AppSecLive.org

Previously: http://mtesauro.com/livecd/

## Why do I do this?



#### Questions?



Sintel

Download it free at:

#### http://www.sintel.org

Independent film produced by the Blender Foundation using free and open software

