

# Katana: Portable Multi-Boot Security Suite

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[www.hackfromacave.com](http://www.hackfromacave.com)

# To Many Tools!

- Finding Tools
- Cases of CDs
  - Keeping up with disks
- Tools on different devices
- Using different Operating Systems
- Indecent Response
  - Need It Now!

# Katana

- Run from USB Flash Drive
  - No partitioning necessary
- Security Tools:
  - *Katana Tool Kit*: 100s of portable Windows applications
  - *Katana Live*: A dozen Live Distributions
  - Consolidation of tools onto one medium
- User configurable list of security related tools
  - Add, Remove, Update

# CD vs USB

<u>Attribute</u>	<u>CD/DVD</u>	<u>USB Flash Drive</u>
Write Speed	~ 5 MB/s (32x) / ~ 21 MB/s (16x)	~ <b>25 MB/s</b>
Read Speed	~ 8 MB/s (52x) / ~ 26.5/s (20x)	~ <b>35 MB/s</b>
Transfer Rate	X * (150kb/s)	~ <b>60 MB/s</b>
Environment	Static	<b>Dynamic</b>
BIOS Boot Support	<b>Early 90's</b>	Early 00's
Disk Space	700MB/4.7GB	<b>128 MB–256 GB</b>
Physical Space	~ 12x12x0.1 cm	~ <b>4x1.5x0.5 cm</b>
Time To Failure	~ 1,000 writes OR 3 – 5 years	~ <b>10,000 to 100,000 writes OR 5 to 10 years</b>
Bootable Tools	<b>More</b>	Less

# Who Made The Cut?

- Security related
- Free (at least for personal use)
- Unique contribution
- Currently supported

# Katana Live

KATANA 2.0

**Backtrack**

Ultimate Boot CD

UBCD4Win

Trinity Rescue Disk

Ophcrack

CAINE

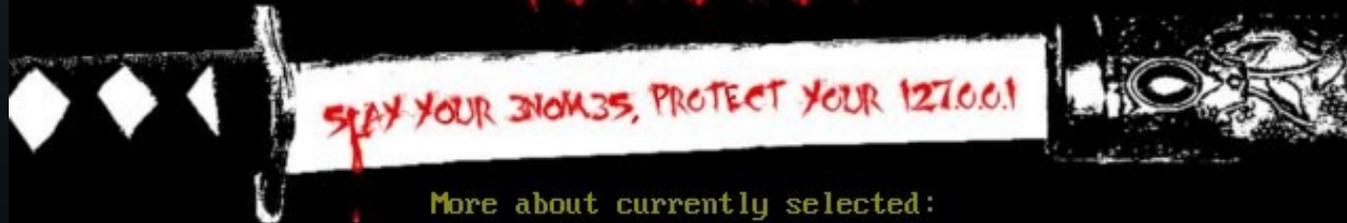
Clonezilla

Puppy

Derik's Boot and Nuke

Kon-Boot

**KATANA**



More about currently selected:

BackTrack is a penetration testing arsenal that aids security professionals in the ability to perform assessments in a purely native environment dedicated to hacking.

# Katana Included Distros

- Backtrack
- Ultimate Boot CD
- UBCD4Win
- Ophcrack
- Puppy
- CAINE
- CloneZilla
- Trinity Rescue Kit
- Derik's Boot and Nuke
- Kon-Boot

# Getting the Darn Thing to Work

- Boot loader *syslinux*
  - USB bootloader
- ~~Binary~~ Configuration file editing
  - Initd file
- Clean Up
  - Minimizing the mess of folders and files

# Add Your Own Distros

- Each distro requires different modifications
  - Often change to init file
  - Modify *cfg* menu file
  - Change file/directory names and structures

# Example: Adding Samurai 0.8

- 1) Download Samurai from:  
*samurai.inguardians.com*
- 2) Extract/Burn Samurai ISO
  - 1) Extract using 7zip, isomaster, mount
  - 2) Burn Nero, k3b
- 3) Create “samurai” directory in root of Katana USB Flash drive

# Example: Adding Samurai 0.8

- 4) Go to “/casper” directory and edit init\*.gz files
  - 1) Extract Gzip
  - 2) Edit “casper” file in “scripts” directory to point to the “samurai” directory
    - 1) Replace “\$path/casper” with “\$path/**samurai**/casper”
    - 2) Replace “\$path/.disk/casper-uuid” with “\$path/**samurai**/.disk/casper-uuid”
    - 3) Replace “\$directory/casper” with “\$directory/**samurai**/casper”
- Rezip directory

# Example: Adding Samurai 0.8

## 5) Add samurai boot menu

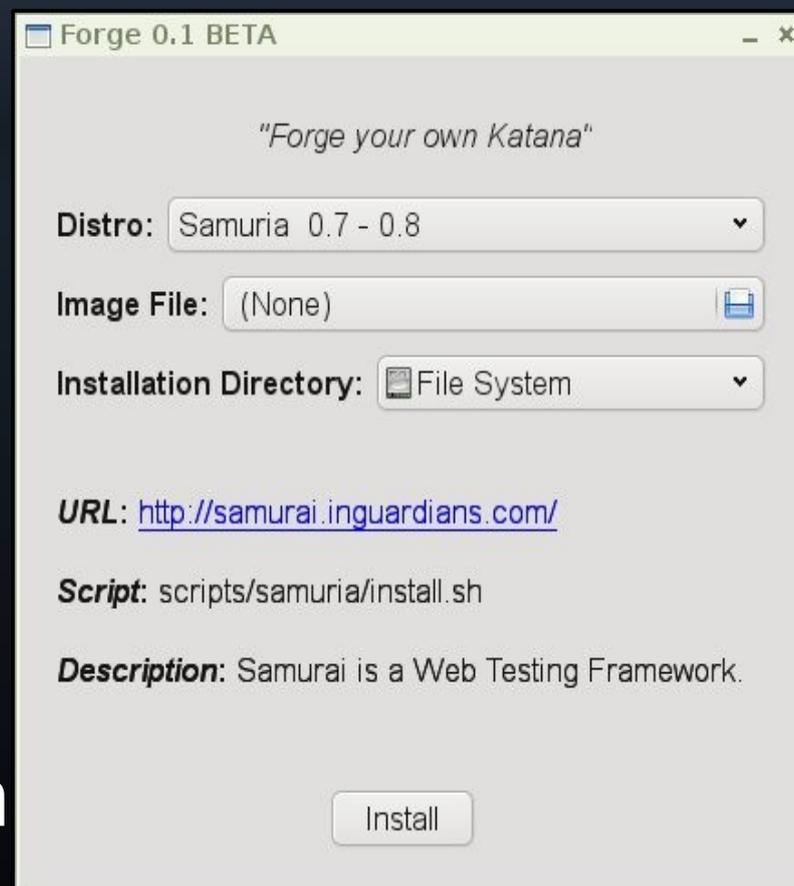
- Open samurai.cfg in “boot” directory of samurai
- Add “/samurai” in front of all strings with “/casper” and “/preseed” in them.
- Move samurai.cfg to “/boot/menus” on Flash Drive.

## 6) Edit “/boot/menus/main.conf” to add samurai

```
LABEL Samurai  
MENU LABEL Samurai  
KERNEL /boot/vesamenu.c32  
APPEND /boot/menus/samurai.cfg
```

# NEW: Forge 0.1

- Install additional distributions to Katana
- Front end for installation scripts
  - Runs *bash* and *batch* scripts for Linux and Windows
- Users can post installation scripts on [forum.hackfromacave.com](http://forum.hackfromacave.com)



# Operating Katana

- Configure host system to boot from USB
  - BIOS Configuration
  - Boot Options (F12)
- Navigation
  - Use up and down arrows to navigate
  - Use enter to make selections
  - Navigate backwards by selecting “..”
- Many tools are loaded from subfolders

# Katana Toolkit



# Katana Toolkit

- 100s of portable applications
- Portable Window Applications
  - Run natively from USB Drive on any Windows system
  - No resources installed on base system
- Run in other environments
  - Run in BartPE/UBCD4Win
  - Run under Wine on Linux
- Configurable / Updatable

# Katana Toolkit

- Anti-Virus
- Backup
- Encryption
- File System
- Forensics
- Media
- Networking
- Office
- Recovery
- Registry
- System
- Utilities

# Add Your Own Apps

- Install Windows apps into a subdirectory in */PortableApps*
  - Example: `/PortableApps/NetCat/netcat.exe`
- Add Linux apps
  - Statically compiled binaries
- Add OSX apps ???

# Getting Katana

- Free @ [www.hackfromacave.com/katana.html](http://www.hackfromacave.com/katana.html)
  - Released under GPL v2
  - Check specific tool licenses
- Size: ~ 4GB in size
- Download:
  - Torrent (preferred)
  - Direct Download
- Recommend install on 16GB+ Flash Drive, but fits on 8GB

# Tips & Tricks

- Statically compile and link binaries
- Create/add Slax modules for some of the included distros
- For portable windows applications check out
  - <http://portableapps.com/>
  - <http://www.pendriveapps.com/>
- For portable OSX applications check out
  - <http://www.freemug.org/portableapps/>
- Scripts are the bread and butter of portability

# Installing Katana

- 1) Download **katana-v2.0.rar** to local disk.
- 2) Extract **katana-v2.0.rar** to the root of the USB flash drive.
- 3) Change directory to the freshly copied "boot" directory on the USB device.
- 4) Run the following with administrative privileges. For Linux/OSX run *./boostinst.sh*, for Windows run *./boostinst.bat*.
- 5) Boot from flash drive.

All Done!

# NEW: Creating a Customized ISO

- Customize your own Katana
  - Add/Remove Distros & Apps
- Run the ISO creation script
  - *create\_iso.bat* (Windows) or *create\_iso.sh* (Linux)
    - located in /boot directory
  - Select a location for the iso

# Live Demo

# Help me Obi-Won Kanobie, Your my only Hope!

- Post installation directions for distros and portable applications on [forum.hackfromacave.com](http://forum.hackfromacave.com).
- What have you done to configure these tools?
- What live distros and portable applications do you use or would like to see added to Katana?
- Can you use these tools in your work environment?