



How the RIPE NCC handled the recent security threats - Heartbleed, Shellshock, Poodle

Ivo Dijkhuis

- CVE-2014-0160
Heartbleed (OpenSSL)



- CVE-2014-6271
Shellshock (Bash)
(CVE-2014-6277, CVE-2014-6278, CVE-2014-7169,
CVE-2014-7186, CVE-2014-7187)



- CVE-2014-3566
Poodle(bleed) (SSLv3)



1. Intelligence gathering

- a) public / closed / internal mailing lists
- b) social media
- c) responsible disclosure reports

2. Risk assessment

- a) probability and impact
- b) remotely exploitable / privilege escalation?
- c) external services affected?
 - ➔ immediate mitigation!

3. Mitigate

- a) Test update, change or workaround in test environment
- b) apply software update, configuration change in production ⇒ automated configuration management

4. Test mitigation in production

- a) scanning tools, custom scripts
- b) external services (e.g. SSL Labs)

5. Inform public

- a) www.ripe.net , NCC Announce mailing list

- Impact of Heartbleed, Shellshock and Poodle?
 - no evidence of exploitation found
 - additional security measures taken
 - RIPE NCC web services now incompatibility with older software (IE6/XP 2001-2006)

- 2015 Security Activities
 - external security audits of our web services
 - increase DDoS resiliency
 - Increase involvement in Security community

