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INTRACOM

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Technology Shaping the Future

Emerging Security Challenges in Cloud Computing

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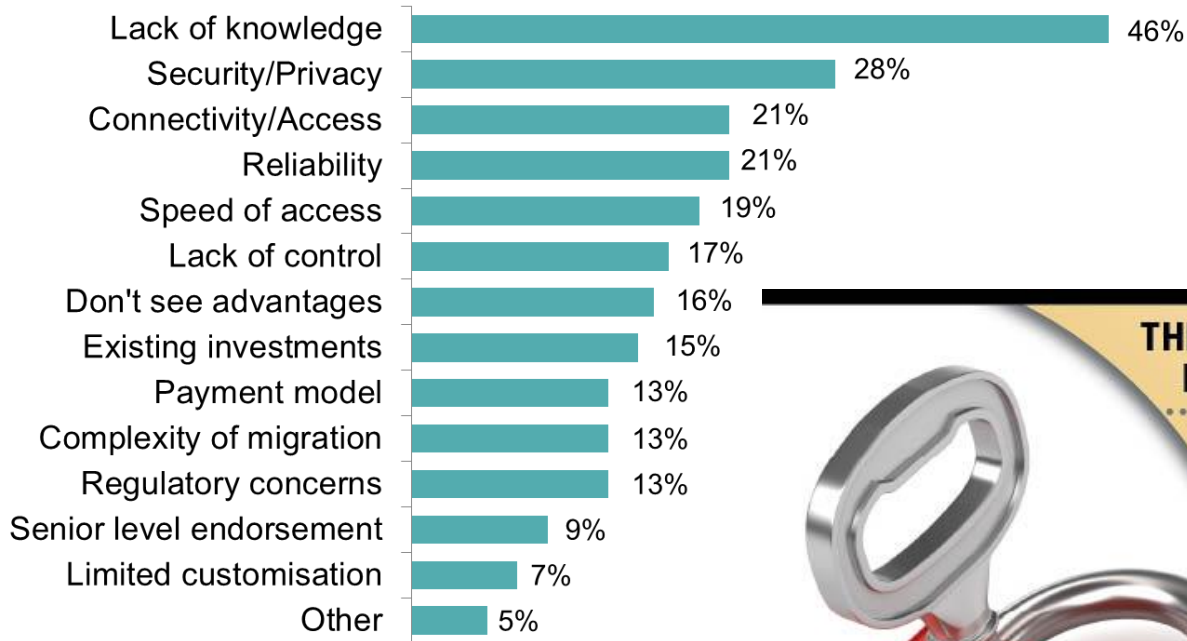

- ❖ Founded in 1995, 20th Anniversary of local experience and expertise
- ❖ Subsidiary of Intracom Telecom (100%)
- ❖ Headquarter, warehouse and 3 regional offices with 54 employees
- ❖ Broad portfolio of solutions and services for customers in the sectors of:
 - ▶ Telecommunications
 - ▶ Public
 - ▶ Enterprise & Banking
- ❖ Management Systems certified by an independent body:
 - ▶ Quality Management (ISO 9001:2008) System
 - ▶ Information Security Management (ISO 27001:2005) System
 - ▶ Complete technical infrastructure, incl. labs and vehicles
 - ▶ Experienced projects managers and engineers



- ❖ A symbol of state-of-the-art platforms, new trends in ICT technology and markets
- ❖ The strongest Multi-vendor and multi-platform expertise:
 - ▶ Vast knowledge on networks and technology convergence
 - ▶ Experience on large scale and complex projects delivery
 - ▶ International footprint
 - ▶ Vertical market's knowledge
- ❖ Experienced in delivering turn-key projects On Time, On Budget, On Quality and Beyond Expectations



Challenges to cloud transition

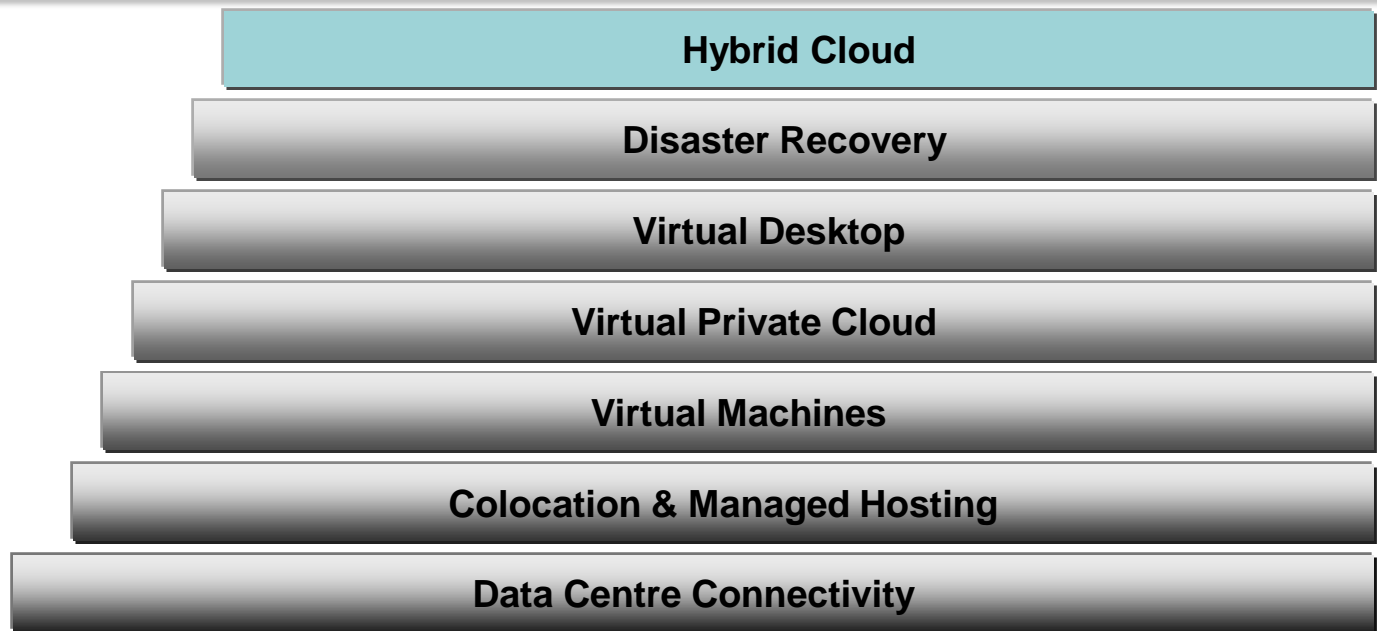
THE CLOUD MOVES AHEAD, BUT ISN'T FULLY MATURE

SECURITY: Still a Big Concern IT user respondents' objections to cloud adoption:

- security concerns 56%
- Internet downtime 44%
- integration concerns with on-premise infrastructure 40%
- data portability 39%
- total cost of ownership 37%
- lack of understanding of options/ tradeoffs in cloud 36%
- resistance to change by internal IT 31%

[ci]channelinsider

What else as a Service?

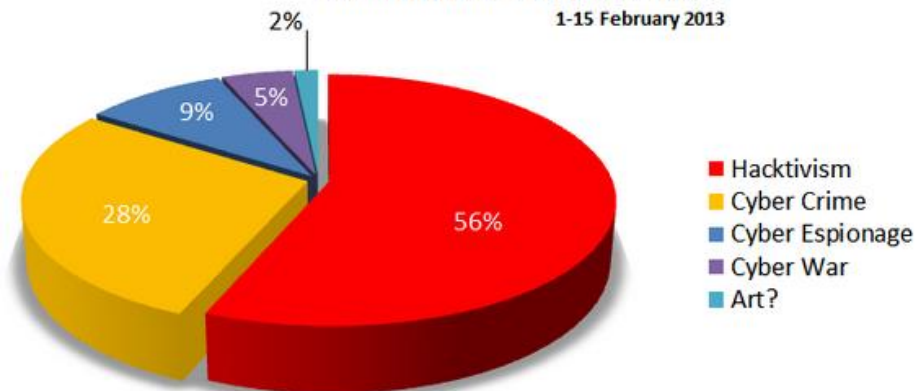


How DDoS Changed in the Last Years?

Historically

- Distributed Denial of Service attack
- Lots of small attack points
- Not very organized
- 50 Mbps to 2 Gbps throughput
- Hacktivism rather than stable income

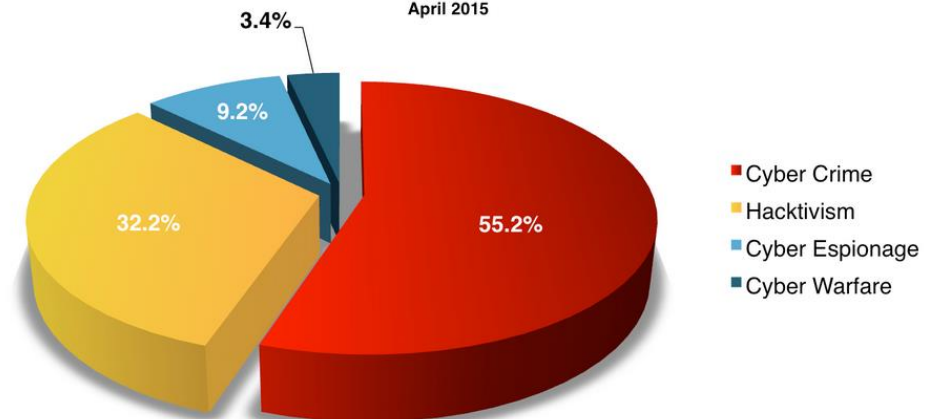
Motivations Behind Attacks
1-15 February 2013



Now



- More widely distributed
- Known good IP addresses
- Lots of large attack points.
- Larger CPU and Bandwidth consumption
- Stable income

Motivations Behind Attacks
April 2015



DDoS Attack as Easy as Never before

Anonymous : "Volunteer your PC for the Cause"

-  Volumetric Attacks – ICMP, UDP, TCP
Floods
-  Application-Layer Attacks – HTTP, DNS
and NTP



Up to Now the World used Firewalls and IPS Devices

- ❖ All network devices are in-line, vulnerable and targets of DDoS attacks.
- ❖ Affected by large flood and connection attacks
- ❖ Build to protect against known attacks
- ❖ Don't check valid (HTTP, DNS, NTP) request rather than invalid one
- ❖ All common network solutions are in customer premises



Trend 1 Volumetric Attacks are Bigger

- ❖ Cloud-Based DDoS Mitigation
- ❖ Automatic Detection

Trend 2 Sophistication of application attacks

- ❖ Visitor Identification and Risk Analysis
- ❖ Minimize Disruption to the User Experience

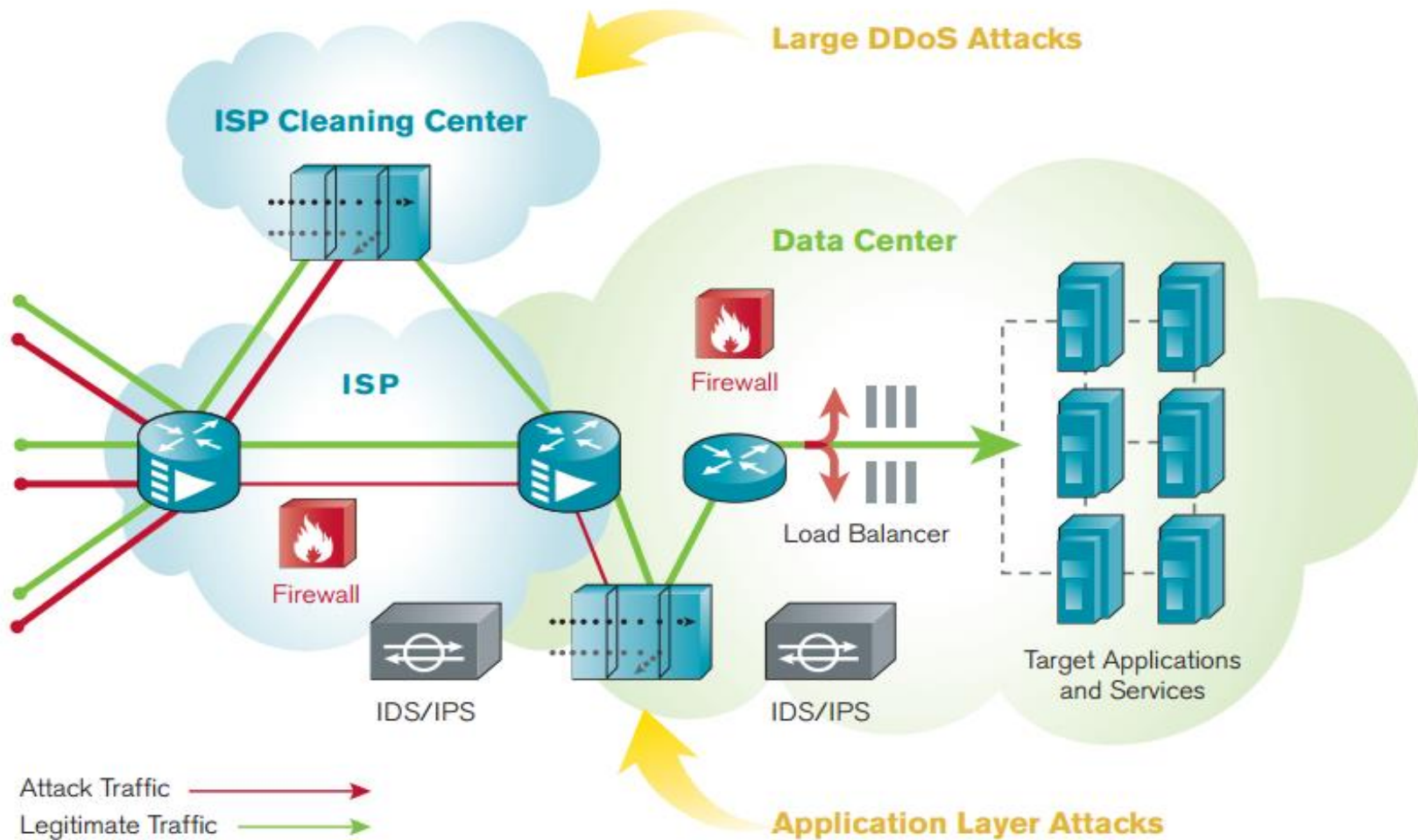
Trend 3 Low-cost attacks

- ❖ Always On DDoS protection. Keep your eyes open
- ❖ Automatic Detection & Mitigation.

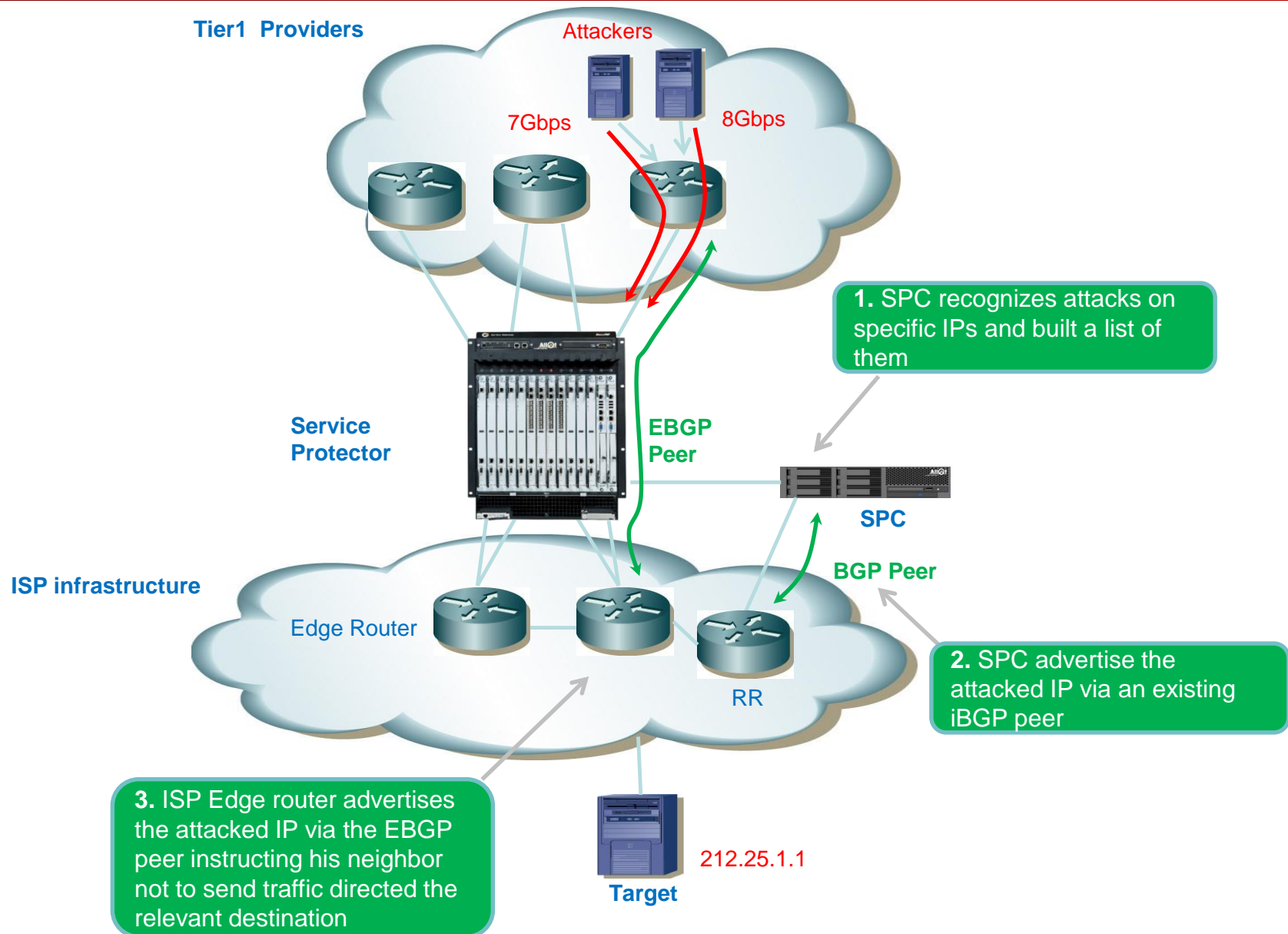
Trend 4 Multi-Vector Attacks

- ❖ Security Expertise
- ❖ 360 ° Security Approach

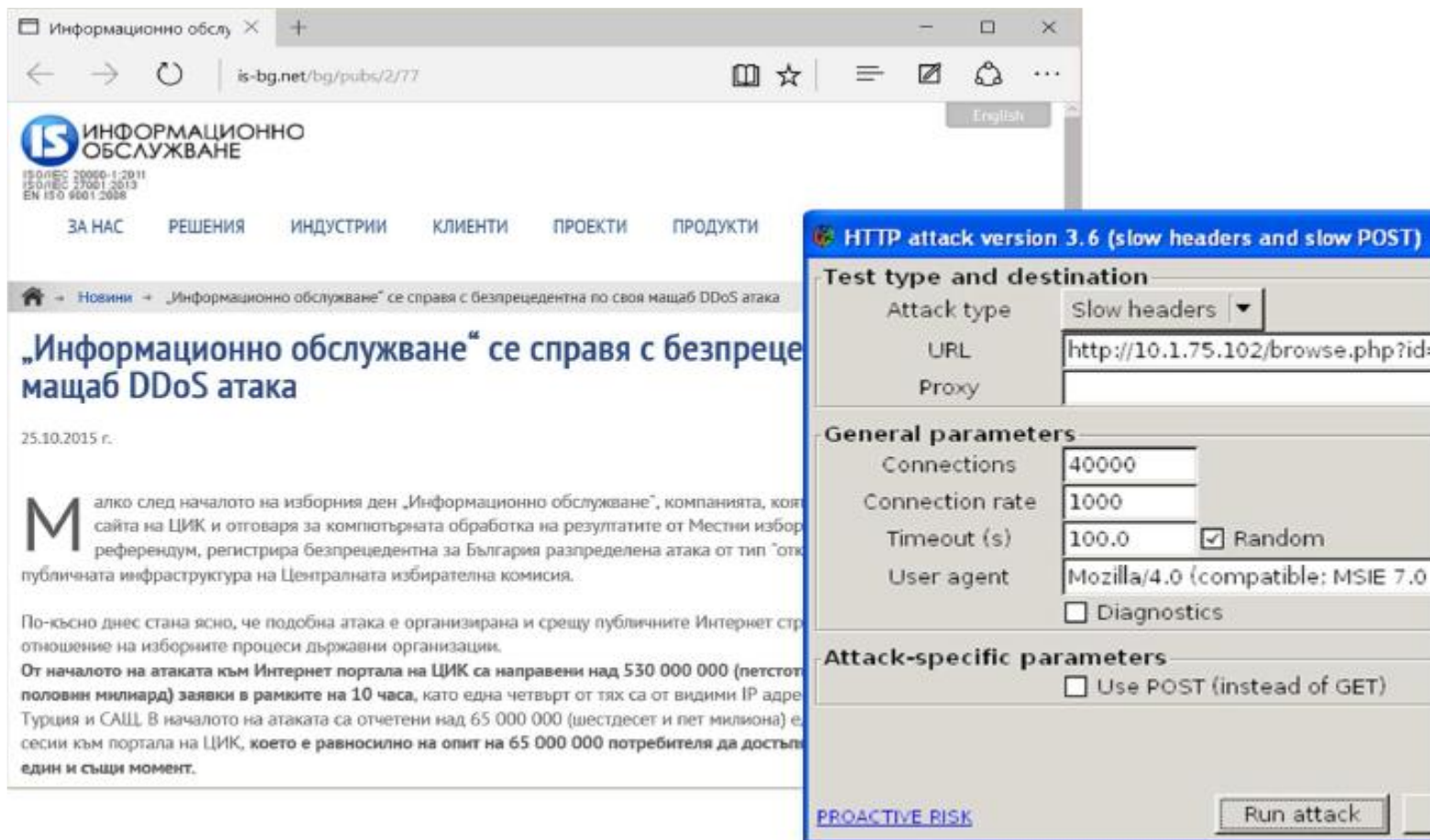
How it Works?



BGP Black Hole Mitigation



Be Aware about the Risk



The image shows a screenshot of a web browser window displaying a news article from is-bg.net. The article title is "„Информационно обслужване“ се справя с безпрецедентна по своя мащаб DDoS атака" (Information Service successfully handles a DDoS attack of unprecedented scale). The article text describes a DDoS attack on the website of the Central Election Commission (CEC) in Bulgaria. Overlaid on the right side of the browser window is a screenshot of the "HTTP attack version 3.6 (slow headers and slow POST)" tool interface. The tool is configured with the following settings:

- Attack type: Slow headers
- URL: http://10.1.75.102/browse.php?id=
- Proxy: (empty)
- General parameters:
 - Connections: 40000
 - Connection rate: 1000
 - Timeout (s): 100.0 (with a checked "Random" checkbox)
 - User agent: Mozilla/4.0 (compatible; MSIE 7.0)
 - Diagnostics
- Attack-specific parameters:
 - Use POST (instead of GET)

At the bottom of the tool interface, there is a "Run attack" button and a "PROACTIVE RISK" label.

<http://www.is-bg.net/bg/pubs/2/77>

Хакери са източили от български фирми над 3 млн. евро за седем месеца

👍 Препоръчване (33) 📧 📱 📧 📱 📧 📱 5

От Дневник

Последна промяна в 11:00 на 18 окт 2015, 9929 прочитания, 54 коментара



Фотограф: Цветелина Белутова
КАПИТАЛ

ПО ТЕМАТА

Хакери могат безумно да командват смартфони чрез Google Now и Siri - 18 окт

Руски хакери са се опитали да откраднат поверителна информация от "Дейв Джоунс" - 17 окт

Български компании са били ощетени с над 3 млн. евро от хакери само за последните седем месеца, каза днес по БНТ началникът на отдел "Трансгранична организирана престъпност" в ГДБОП Явор Колев. Той уточни, че това са измамите само чрез прийома Man in the middle.

При него по мейл се изпраща зловреден софтуер като прикачен файл, който заразява компютъра и позволява да се следи кореспонденцията между

фирмите. Колев уточни, че само последните две седмици две компании от топ 100 в България са били ощетени, като от едната са откраднати 150 000, а от другата 450 000 евро.

http://www.dnevnik.bg/biznes/finansi/2015/10/18/2631145_hakeri_sa_iztochili_ot_bulgarski_firmi_nad_3 mln_evro/

thank
you

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