

How to cross the chasm between research and product

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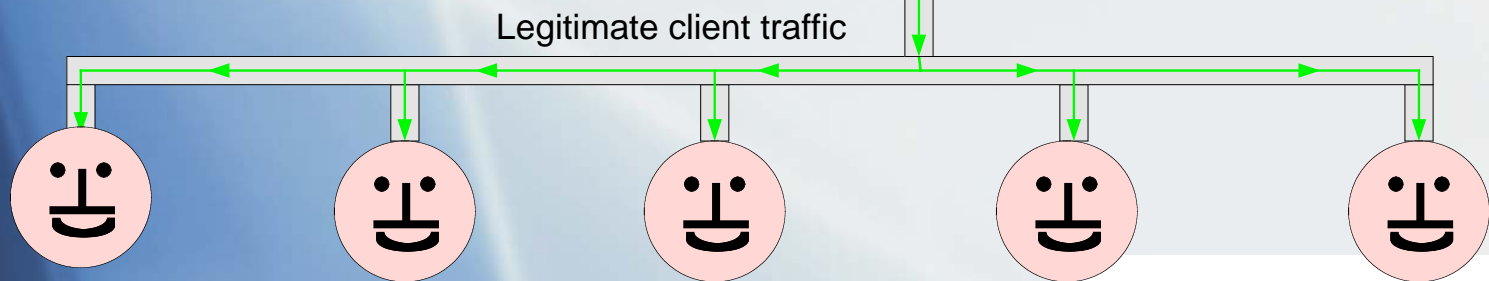
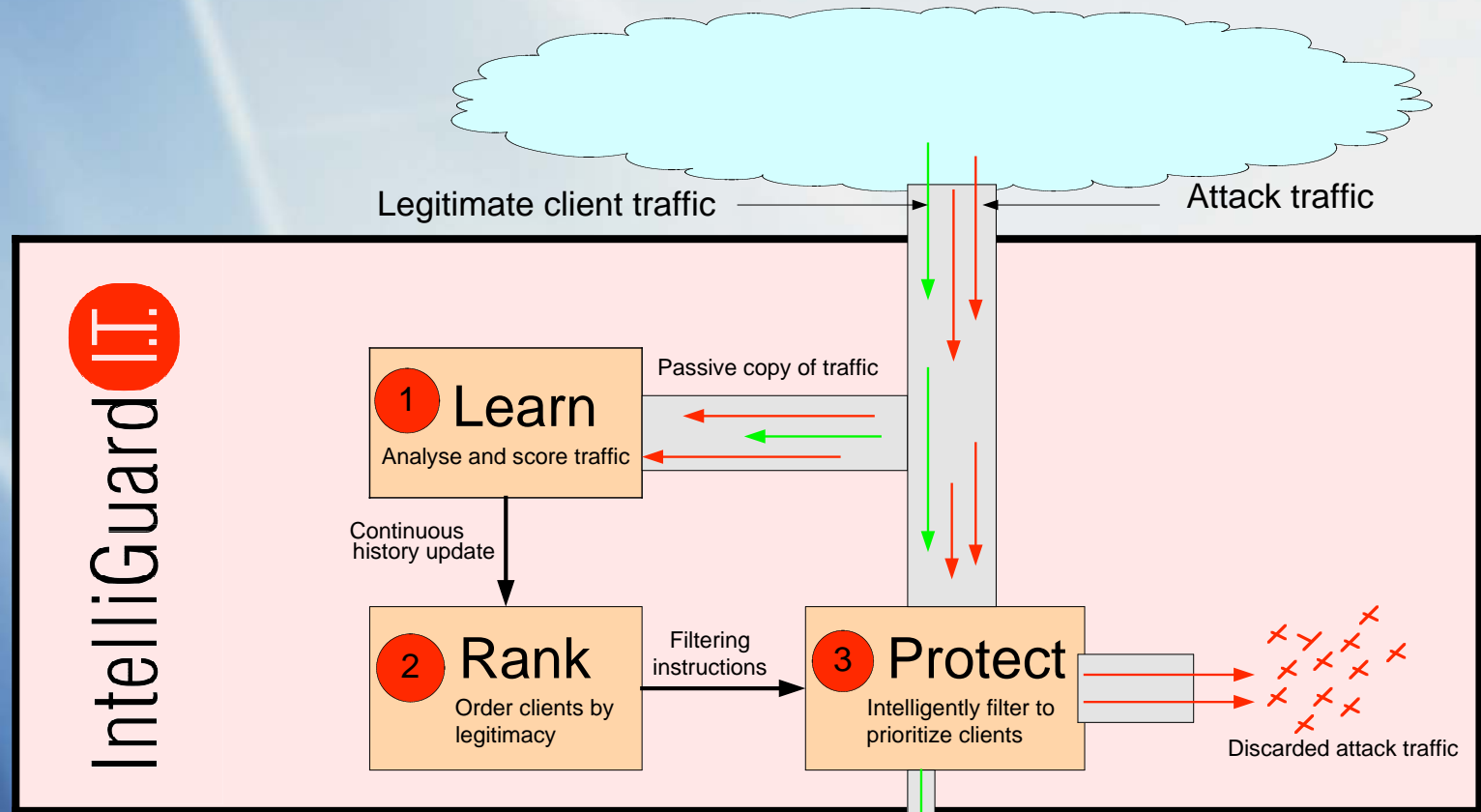
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Outline

- What is IntelliGuard doing?
- History of IntelliGuard
- Path from research to product
- Crossing the chasm between research and product

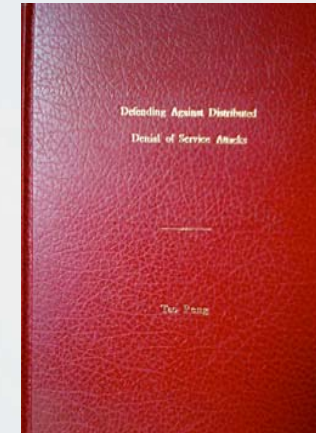


About IntelliGuard



History of IntelliGuard

- Jan. 2004 - Start to commercialize DDoS defense algorithms from my Ph.D project in the University of Melbourne
- Nov. 2004 - 1st Prize winner of HP Entrepreneurs' Challenge (MUEC) Award



History of IntelliGuard (cont.)

- Nov. 2005 - \$AUD1.5 M investment from two VCs
- May. 2006 - \$AUD 1 M commercial ready grant from Australian Federal Government
- Feb. 2007 - DPS 2000 release



History of IntelliGuard (cont.)

- August. 2007 - Set up a regional office in Beijing, China
- Oct. 2007 - Sales in South Korea



Advanced DDoS Protection

㈜유진시스템은 DDoS 방어 전문 장비 개발 업체인 인텔리การ์ด(Intelliguard I.T)사의 국내 총판입니다.

인텔리가드아이티에서 출시한 DDoS 방어 전문 장비는 현재 2G 비트 (In/Out) 처리 용량의 DPS2000가 출시되어 있고 연내 4G비트 처리가 가능한 모델을 출시할 예정입니다.



DPS2000

내년 1Q,ATCA 플랫폼의 캐리어급의 10G 장비가 출시됩니다.

제품 특징

- 시그니처에 기반하여 공격을 탐지하는 IPS 제품과는 달리, 트래픽 특성을 모니터링하여 DDoS 공격을 방어하도록 설계된 제품으로, 공격 특성이 알려지지 않은 DDoS 공격에 대해서도 제로데이 공격(Zero-day-attack)에 대한 방어가 가능합니다.
- DPS2000은 다른 경쟁사의 DDoS 방어 제품과는 달리 공격 소스 IP 주소를 기반으로 천6백만개 이상의 세션 모니터링을 통해 계산된 등급을 기반으로하여 DDoS 공격을 판단하게 되어, 공격이 있을 시 3초 이내에 방어 동작을 수행하게 되어, 알려지지 않은 방식의 DDoS 공격에 대해서도 즉각적인 대응이 가능합니다.

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Path from research to product

Stage 1: Ideas and simulation

```
tpeng@smartbox: ~  
The programs included with the Debian GNU/Linux system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent  
permitted by applicable law.  
No mail.  
Last login: Sun Nov 18 11:47:58 2007 from 60-242-38-174.static.tpgi.com.au  
tpeng@officeserver:~$ ssh smartbox  
tpeng@smartbox's password:  
Linux smartbox 2.6.17 #1 SMP Fri Oct 27 23:52:36 EST 2006 x86_64  
  
The programs included with the Debian GNU/Linux system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent  
permitted by applicable law.  
Last login: Sun Nov 18 08:43:42 2007 from intelliguard.cs.mu.oz.au  
tpeng@smartbox:~$ ls /traces/  
1.dat 2004 2006 2006_new functiontests nfs_mount.sh test20040601-0602_data  
tpeng@smartbox:~$ ls /traces/2006  
2006-10-25.dump.gz 2006-11-04.dump.gz 2006-11-14.dump.gz 2006-11-24.dump.gz 2006-12-04.dump.gz  
2006-10-26.dump.gz 2006-11-05.dump.gz 2006-11-15.dump.gz 2006-11-25.dump.gz 2006-12-05.dump.gz  
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20040608.tdo.gz 20040616.tdo.gz 20040625.tdo.gz 20040705.tdo.gz functiontests  
test.data  
tpeng@smartbox:~$
```



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Path from research to product (cont.)

Stage 2: Prototype

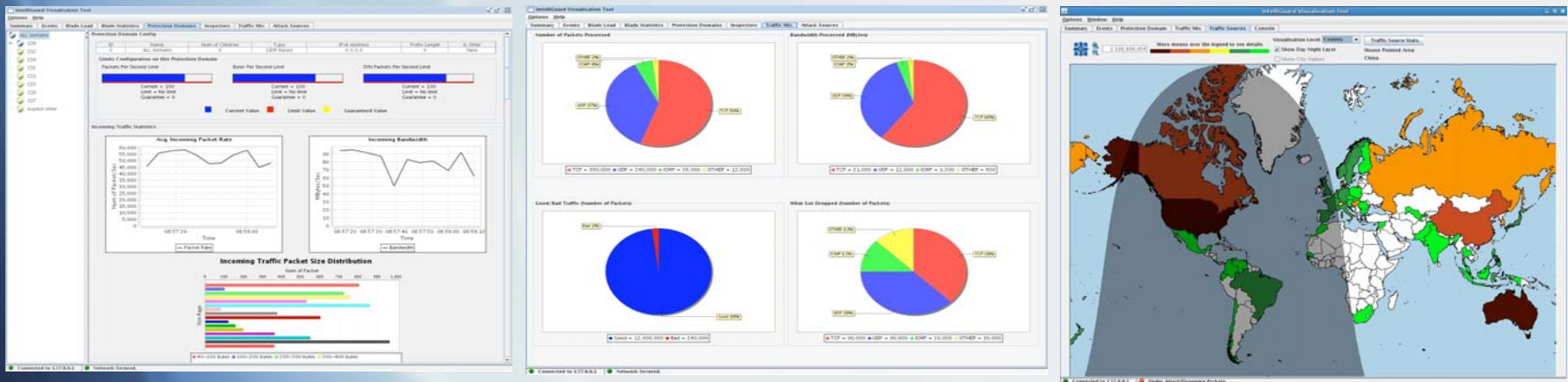


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Path from research to product (cont.)

Stage 3: Commercial launch

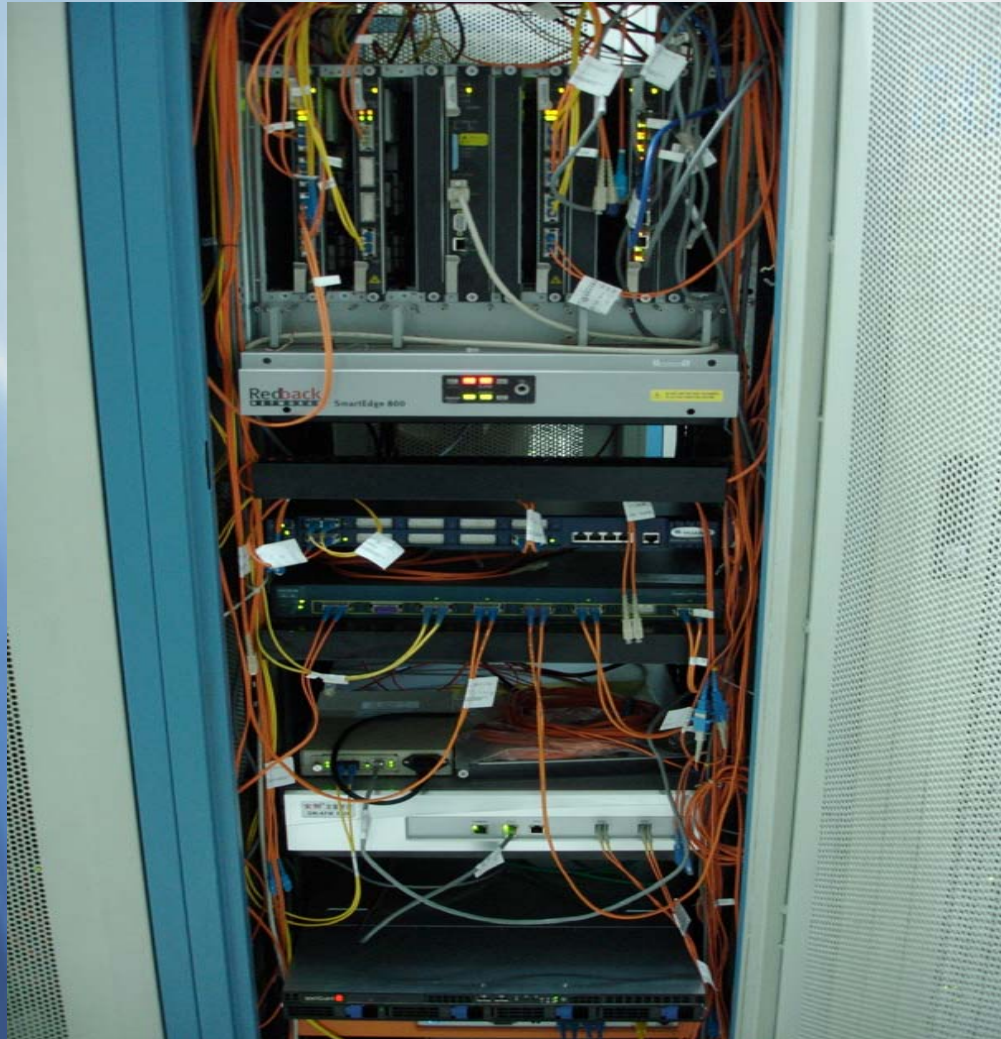


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Path from research to product (cont.)

Stage 4 : Final Sales



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Difference between research and product - A personal view

- Research
 - emphasizes on novelty
 - lots of assumptions
- Product
 - how to meet customers' requirements
 - lots of constraints



Why they are different?

- User Interface (UI) as an example

- Typically it is overlooked by researchers
- BUT extremely important to end customers

Based my experiences in Chinese market

- UI is the front face of a product, sometime customers even think **UI = Product**.
- Buy a product to impress their customers
- To impress their boss to justify their annual budget



How to cross the chasm between research and product?

- How to collect customers' requirements
- A: Need to talk to your potential customers
- How to categorize collected requirements
- A: Based on the sales cycle of each customer
- How to prioritize these requirements
- A: Resources invested VS profits made



How to cross the chasm between research and product

- How to communicate with developers
 - People with high talents in engineering generally loathe marketing stuff
 - They have to be convinced to be motivated
- Suggestions
 - Let them talk to customers to hear direct feedback.
 - Explain the reasons behind the customers' feature requests




Thank you!

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