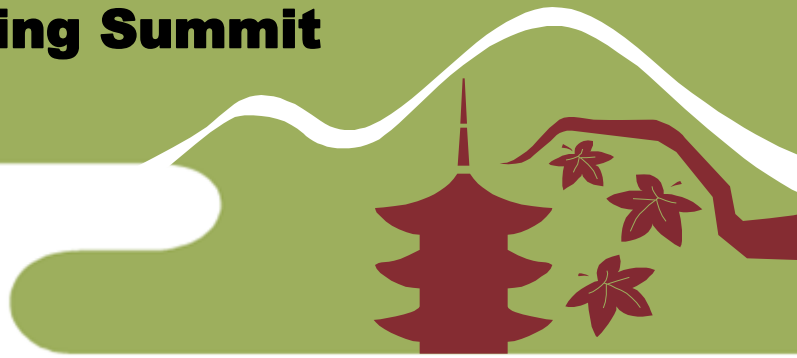


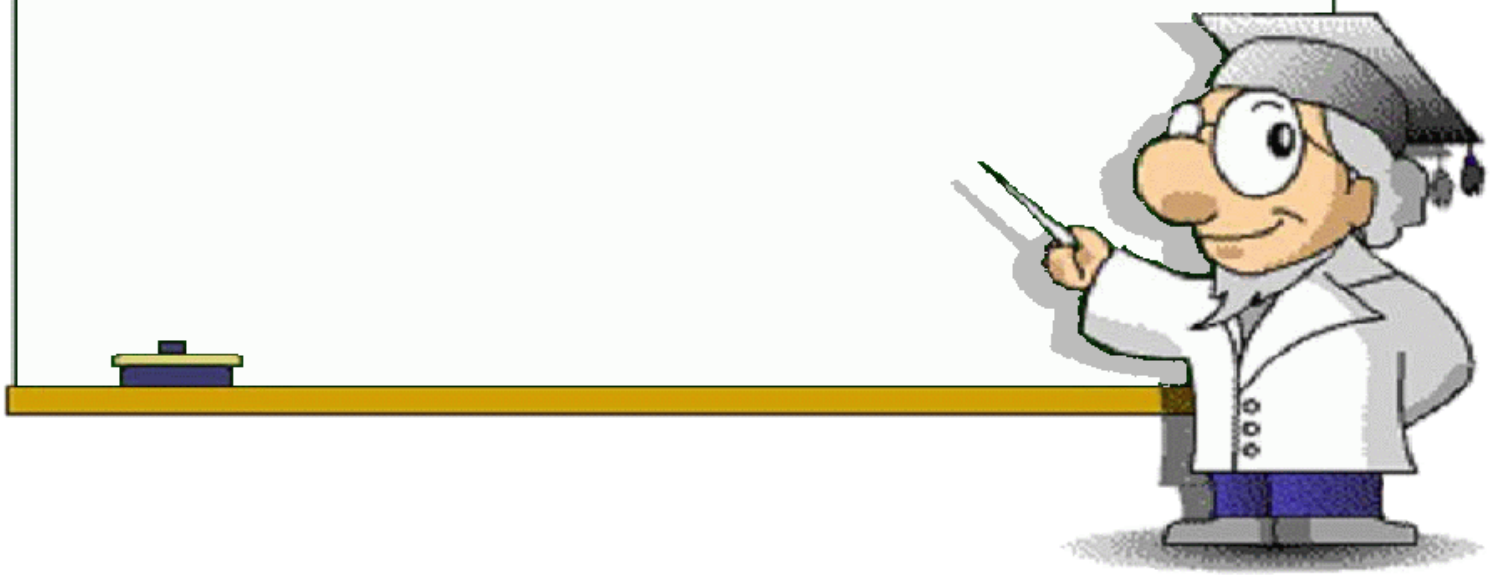
Summit Days
The Value of Global Vulnerability Reporting

Masato Terada
IT Security Center, IPA

November 13, 2012

contents.

- Vulnerability Identifier
- vulnerability identification.
- # of vulnerabilities.



vulnerability identifier.

- How many vulnerability identifiers are there in our cyberspace ?

vulnerability identifier.

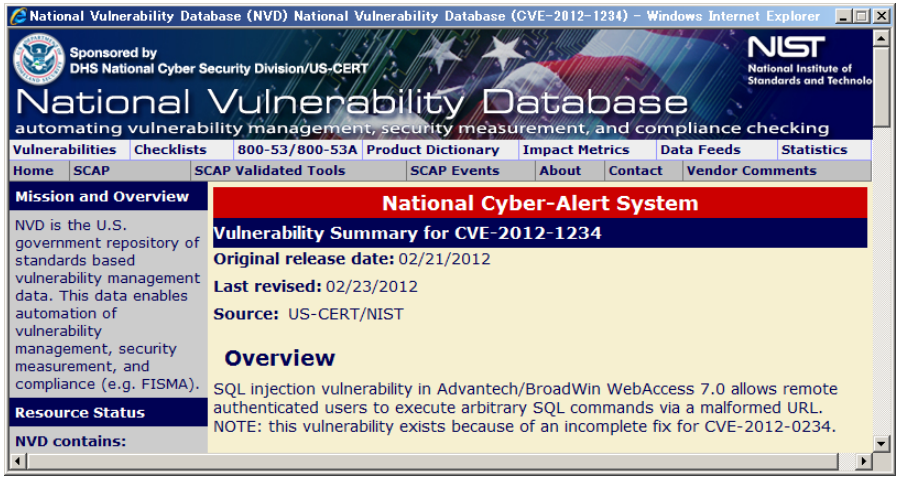
- How many vulnerability identifiers are there in our cyberspace ?

  - **Database**
    - Regional/national vulnerability databases
      NVD, JVN, CNVD etc.
    - Non-government vulnerability databases
      Secunia, SecurityFocus, OSVDB, Cisco Security Intelligence Operations, IBM ISS X-Force etc.
  - **Vendor Advisories**
    - Microsoft, Oracle, Cisco, Adobe etc.

vulnerability identifier.

http://nvd.nist.gov/

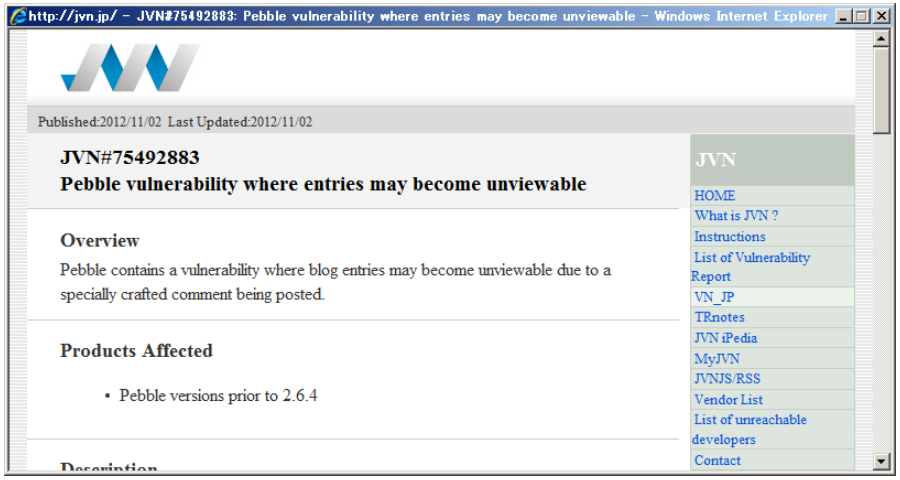
- **NVD (National Vulnerability Database)**
  - ID(4 + 4 digits): CVE-2012-1234
  - Lang: English
  - CVE mapping: one-to-one
  - URL: http://web.nvd.nist.gov/view/vuln/detail?vulnId=CVE-2012-1234



vulnerability identifier.

http://jvn.jp/

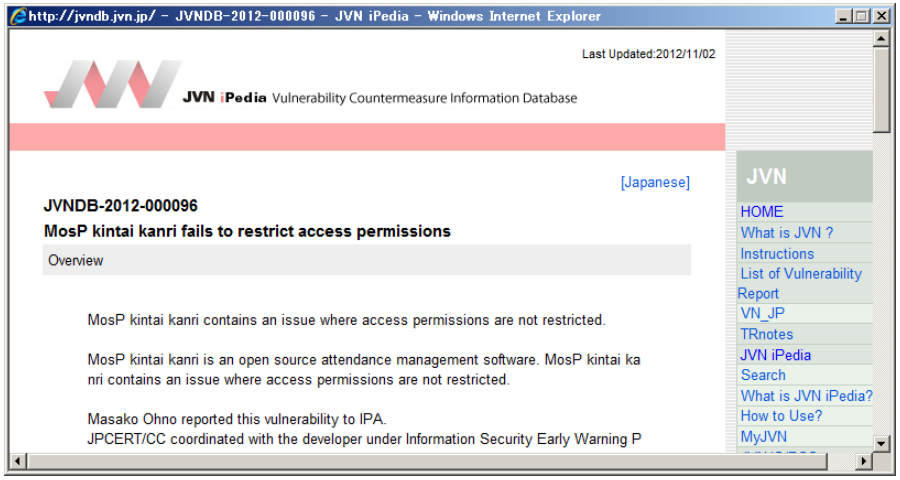
- **JVN(Japan Vulnerability Database)**
  - ID(8 digits): JVN#12345678
  - Lang: Japanese/English
  - CVE mapping: one-to-one
  - URL: http://jvn.jp/jp/JVN12345678



vulnerability identifier.

http://jvndb.jvn.jp/

- **JVN iPedia**
  - ID(4 + 6 digits): JVNDB-2012-123456
  - Lang: Japanese/English
  - CVE mapping: one-to-one
  - URL: http://jvndb.jvn.jp/jvndb/JVNDB-2012-123456



vulnerability identifier.

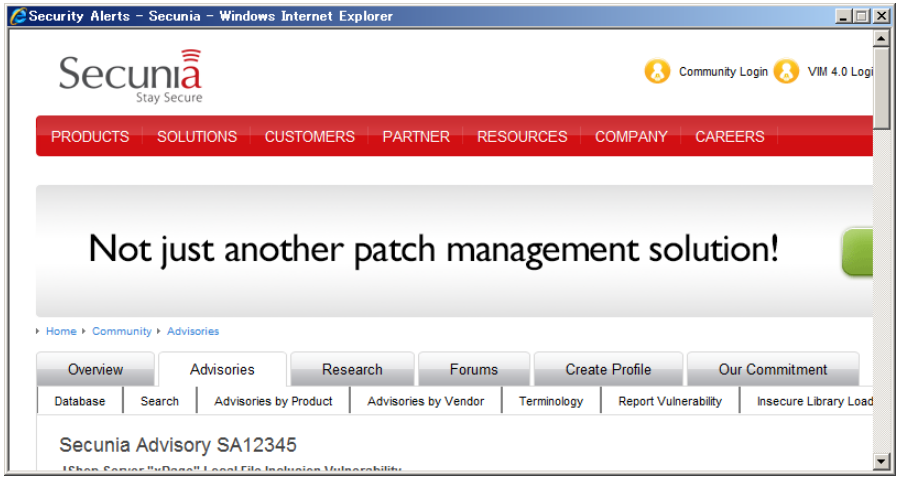
http://www.cnvd.org.cn/

- **CNVD(China National Vulnerability Database)**
  - ID(4 + 5 digits): CNVD-2012-12345
  - Lang: Chinese
  - CVE mapping: one-to-one
  - URL: http://www.cnvd.org.cn/sites/main/preview/ldgg_preview.htm?tid=61059

vulnerability identifier.

http://secunia.com/

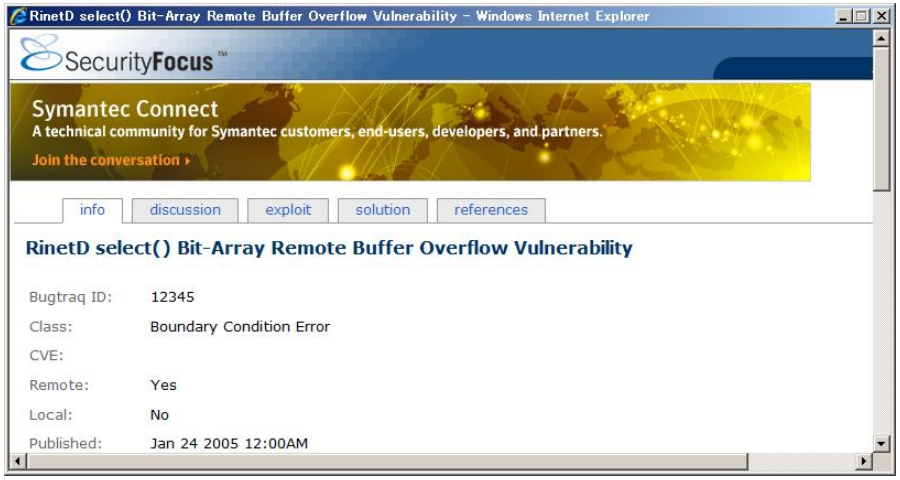
- **Secunia**
  - ID(5 digits): SA12345
  - Lang: English
  - CVE mapping: one-to-many
  - URL: http://secunia.com/advisories/12345



vulnerability identifier.

http://www.securityfocus.com/

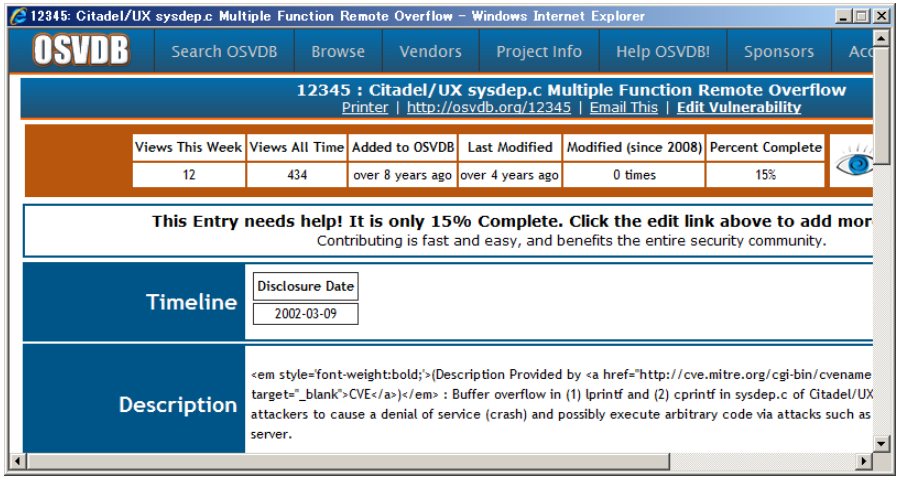
- **SecurityFocus**
  - ID(variable digits): 12345 (aka. bid12345)
  - Lang: English ^^^^^^ current longest id is 5 digits
  - CVE mapping: one-to-many
  - URL: http://www.securityfocus.com/bid/12345



vulnerability identifier.

http://osvdb.org/

- **OSVDB (The Open Source Vulnerability Database)**
  - ID(variable digits): 12345
  - Lang: English ^^^^^ current longest id is 5 digits
  - CVE mapping: one-to-many
  - URL: http://osvdb.org/show/osvdb/12345



vulnerability identifier.

http://tools.cisco.com/security/center/

- **Cisco Security Intelligence Operations**
  - ID(5 digits): 12345
  - Lang: English
  - CVE mapping: one-to-many
  - URL: http://tools.cisco.com/security/center/viewAlert.x?alertId=12345

vulnerability identifier.

http://xforce.iss.net/

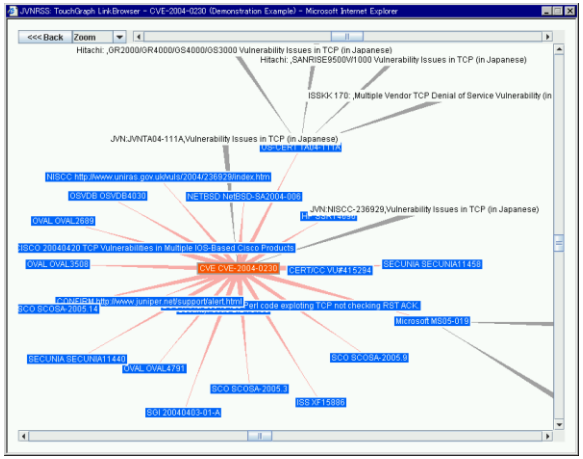
- **IBM ISS X-Force**
  - ID(short subject + variable digits): speak-freely-udp-bo (12345) <<<<< current longest id is 5 digits
  - Lang: English
  - CVE mapping: one-to-many
  - URL: http://xforce.iss.net/xforce/xfdb/12345

vulnerability identification.

- How do we make a relationship of vulnerability information ?

vulnerability identification.

- How do we make a relationship of vulnerability information ?
  - Currently, we can use Common Vulnerabilities and Exposures (CVE), which is the most well known vulnerability identification scheme.



CVE is best and unique reference ID in world wide.

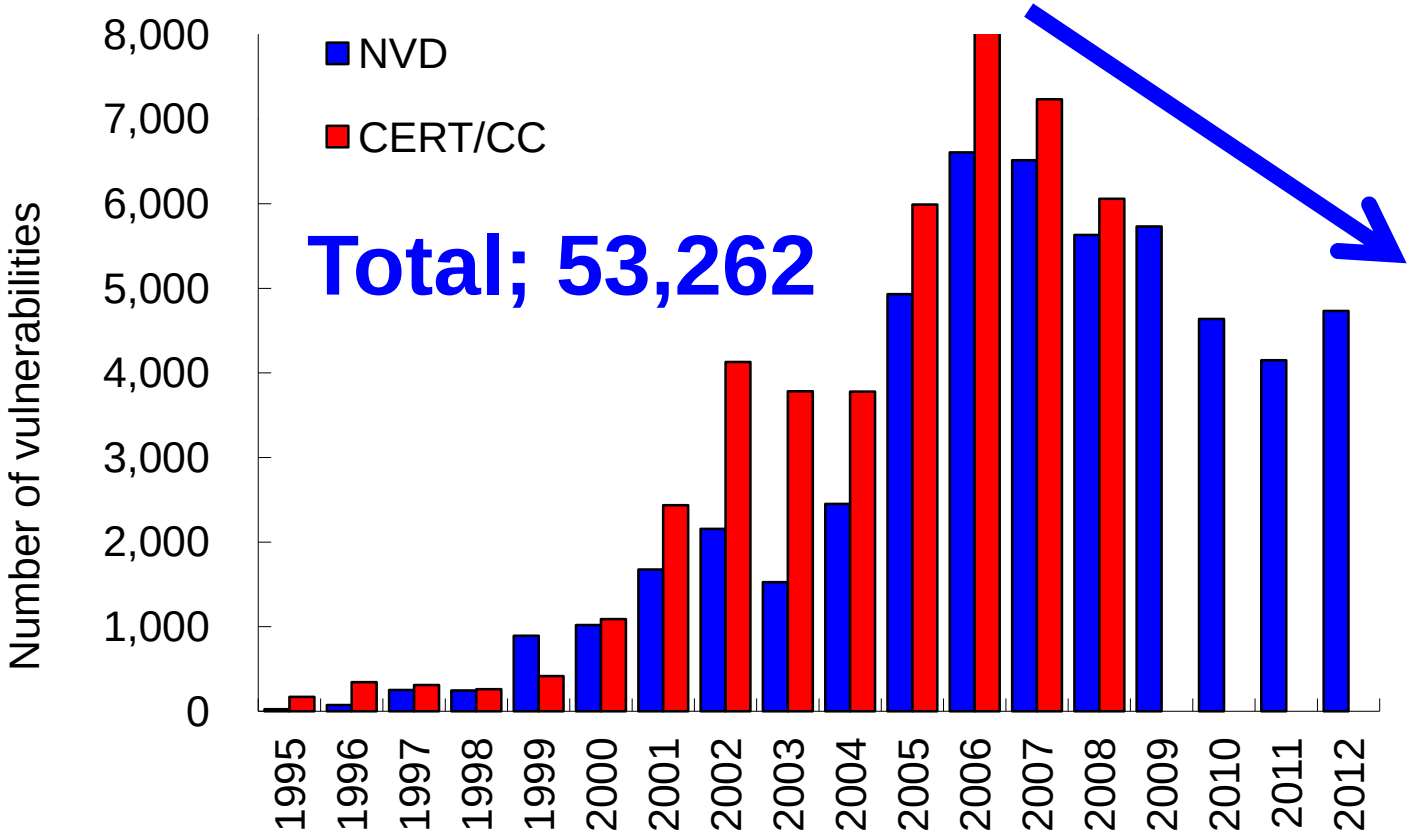
of vulnerabilities.

- How many # of vulnerabilities ?

of vulnerabilities.

http://nvd.nist.gov/

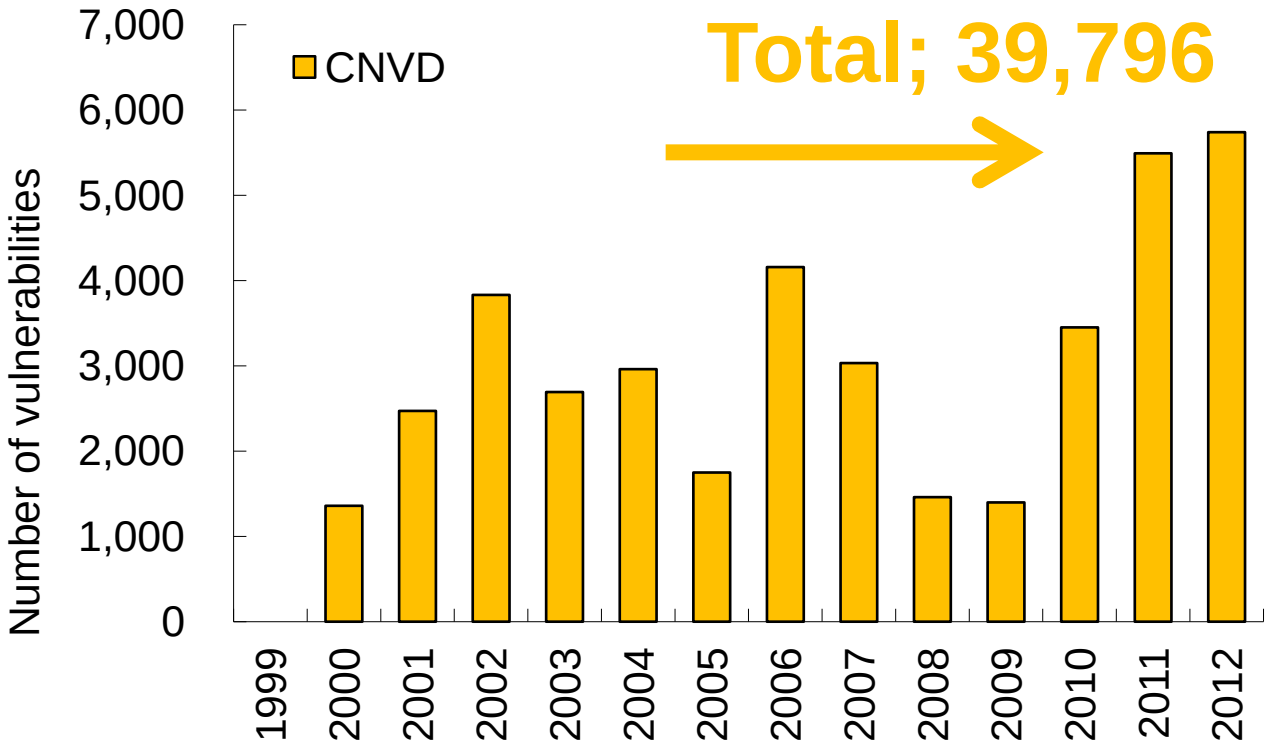
- **NVD (National Vulnerability Database)**



of vulnerabilities.

http://www.cnvd.org.cn/

- **CNVD(China National Vulnerability Database)**

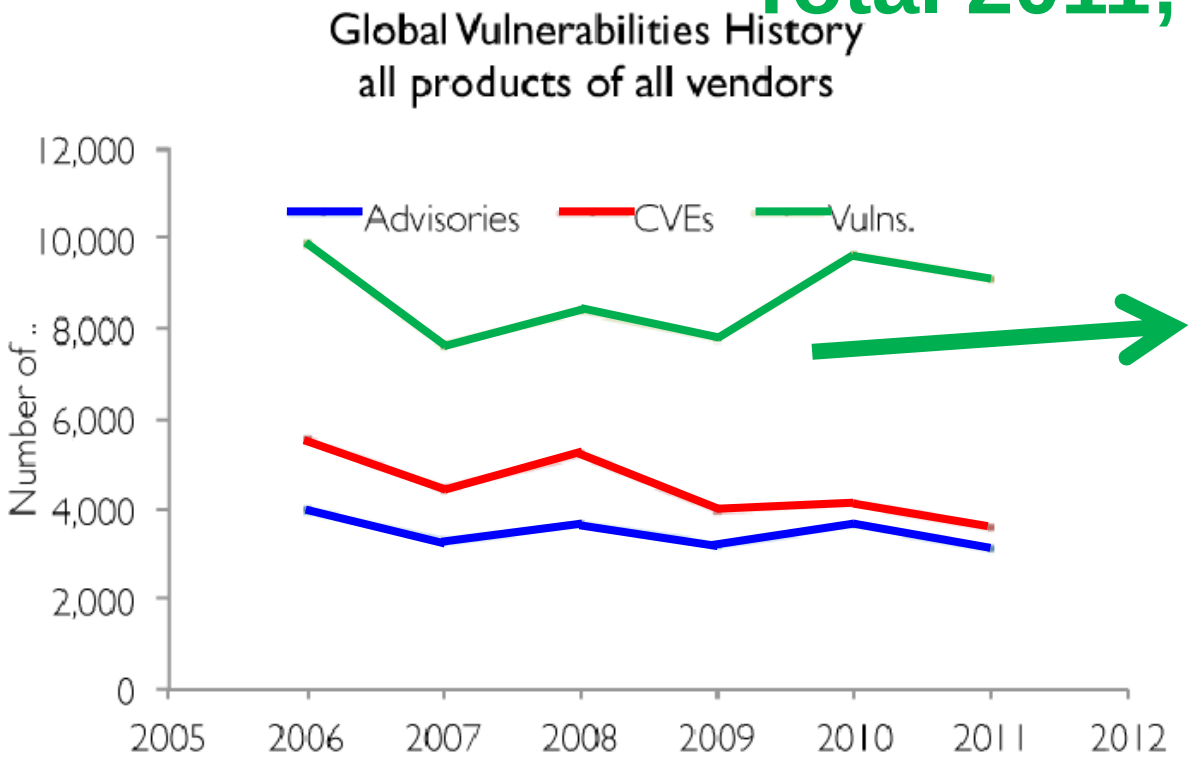


of vulnerabilities.

http://secunia.com/

- **Secunia**

Average 2006-10; 8,663
Total 2011; 9,132



ending.

Global Vulnerability Reporting will provide best solution of this questions.