## Brazilian Academic and Research Network CSIRT CAIS/RNP

FIRST TC October 2009 Santiago - 22 October 2009



One year of RNP Fraud Catalog - Numbers, trends and next steps

**Ronaldo Castro de Vasconcellos** 





CAIS

© 2009 - RNP

#### Agenda

- Intro
- Numbers
- Trends
- Next steps





#### Intro

 2005: accounts for contribution were created and announced in CAIS Advisories (CAIS Alerta)

- artefatos@cais.rnp.br
- phishing@cais.rnp.br
- (Be our guests, Spam Bots!)
- Spontaneous collaboration
- A lot of people willing to help



3/20





CAIS

## Intro (2)



- March 2008: Public website launched
- Available at http://www.rnp.br/cais/fraudes.php
- The media liked that
  - RNP press releases (TV, radio, major newspapers)
  - Ind CAIS webpage in page views
  - users facing problems look for help in Google (Brazil, portuguese)
    - fraudes: position #4
  - significant raise in number of samples
- Simple service, unexpected reaction.



Rede Nacional de Ensino e Pesquisa

#### Intro (3)

- The visibility of the service brought us problems
- Irony frauds using the catalog image files!
  - Solution: watermark and URL in each image
- Frauds with more than one step involved
  - E-mail, Website (sometimes more than 1), Java Applet
  - Solution: More than 1 image feature
- Tags





# CAIS

## Intro (4)

- Fields
  - Kind short description
  - Date, From, Subject
  - Tag category. Each fraud can be classified with more than 1 tag
  - ASCII text, image (screenshot), malware filename (when available)
  - Comments Specific comments, malware name
    - Antivirus engines with better reputation (F-Secure, Trend)
    - Text targeted to end users, not malware analysis.



#### **Numbers**

- 932 entries (22 october)
  - we try to avoid duplicates
  - focus on Brazil
    - no Scam 419 Nigeria
    - no foreign banks
    - no foreign e-commerce sites
- At first 2 analysts
  - today 5 analysts (in shifts)







### Numbers (2)

- Average 5k messages/month
  - Spontaneous Spam
    - good and bad
    - Spam Spam e Fraud Spam
  - Triage is necessary
    - 300 messages/month after triage
    - many duplicates
    - many useless samples
      - inappropriate forwarding, mainly by end users





#### Numbers (3)

- More than 160 tags
  - chosen based on analyst opinion
- Main tag categories
  - more than 1 tag if necessary

 fotos, videos, bancos, sexo, noticias, compras, tragedias, amor, debitos, atualizacao, celular, cartaovirtual, contas

Top tags

 fotos, bancos, videos, cartaovirtual, noticias, bradesco, sexo, orkut, tragedias, compras, contas, bigbrotherbrasil, caixaeconomicafederal, amor, terra, atualizacao, debitos, globo.com, vivo, bancodobrasil





# CAIS

#### Numbers (4)

- Some special cases
  - some requests from Brazilian Federal Police (samples, more info)
  - affected companies
  - some victims desperate for help
    - unfortunately the current model can't offer individual handling



#### **Trends**

- Obvious
  - News

 Air France, Isabella Nardoni, Santa Catarina and other cases

- Cada vez mais rápido: 24 horas

 Air France plane disappearedon 1st June, first message received on 2nd June

 Messages demonstrate some previous data harvesting

No more:

Hello john\_doe@example.com!











MICHAEL JACKSON MORRE AOS 50 ANOS Rei do pop foi levado a hospital de Los Angeles nesta quinta (25). Ele foi declarado morto às 18h26, horário de Brasília.



2000-2009 globo.com Todos os direitos reservados. Política de privacidade



12/20

Rede Nacional de Ensino e Pesquisa



#### Aeronáutica e Marinha localizam dois sobreviventes do voo AF447

Os comandos da Marinha e da Aeronáutica anunciaram nesta quarta a localização de dois sobreviventes. vítimas do acidente com o voo AF447 da Air France, desaparecido desde o último domingo (31). Com isso, chega a expectativa de mais sobreviventes a serem resgatados pelas equipes de buscas, que trabalham há sete dias.

Veja Video:



Rede Nacional de Ensino e Pesquisa



CAIS







Rede Nacional de Ensino e Pesquisa







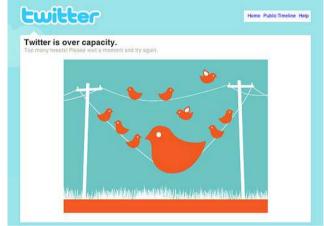
Rede Nacional de Ensino e Pesquisa

#### Rede Nacional de Ensino e Pesquisa

#### **One year of RNP Fraud Catalog**

#### Trends (2)

- Easier to recognize the behavior of the masses
  - The so called Real Time Web
    - Buzz word alert!
  - Google Zeitgeist and other stats published by search engines
  - Twitter
    - TweetTabs.com: real time data about trends in twits
  - Most read news, evey news site provide this info







#### Trends (3)



Exploiting curiosity still works!

 In 1 year, 7% of brazilians had sex with people met on web (Folha Online 18 june 2009)

Survey by Brazilian Ministry of Health

 Betrayal photos, corpses from accidents, erotic / porn videos, supposed ex-girlfriends, famous cases with no solution, famous people who "died", etc.

- More personal computers sold in Brazil in the last few years

- Every day thousands of people have their first contact with the Internet

• GREAT! My bank already knows my e-mail address! Internet is really cool!



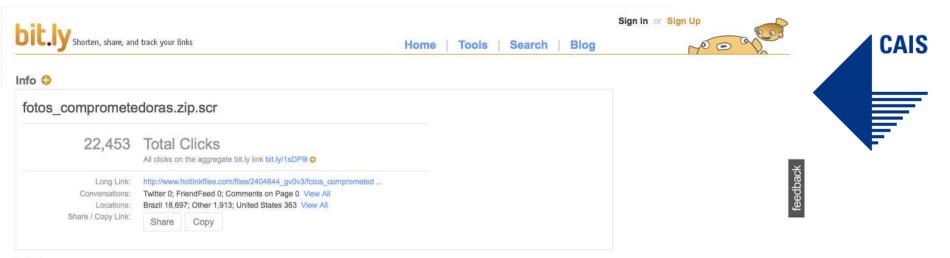
## Trends (4)

- URL shorteners are a HUGE problem!
  - Twitter and the 140 characters made things worse
  - bit.ly, TinyURL, is.gd, migre.me (Brazil)
    - A great number of providers of this kind of service
    - Malware festival
    - bit.ly, tinyurl are responsible
      - no cross-reference between shorteners
      - abuse handling, etc.
  - obscure shorteners

 URL Shorteners: Which Shortening Service Should You Use? http://searchengineland.com/analysis-which-url-shortening-service-should-you-use-17204





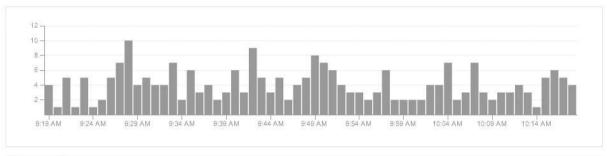


Pause

Traffic

Cli	icks Re	ferrers	Locations
Now	Past Week	Past Month	n Total

Click(s) 243 Since 9:19 AM EST



#### Conversations

and the second se	NAMES OF THE OWNERS OF THE ADDRESS OF THE OWNERS AND ADDRESS OF THE OWNERS
Twitter (0)	No Twitter conversations about this page have been found

Ĥ	FriendFeed (0)	No FriendFeed conversations about this page have been found	
---	----------------	---	--

B Comments on Page (0) No comments found on this page.

#### Metadata

Data about the source URL gathered from both the source and external services. ?

#### Aggregate bit.ly Link: http://bit.ly/1sDP9I





#### **Next steps**

- More info (FAQ)
- Estats
- Better graphic interface
- Web submissions
- Better search for samples
- RSS Feed







#### Contato



Brazilian Academic and Research Network CSIRT

cais@cais.rnp.br - http://www.rnp.br/cais/



Ronaldo Castro de Vasconcellos ronaldo@cais.rnp.br

