

# **RFC 1984:**

#### Or why you should start worrying about encryption backdoors and mass data collection

presentation by: Esther Payne at Ubucon Europe 2019



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## About me

IT Professional with 20 years in Support. Over a decade working in Opensource at Gladserv.

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It's too late my family are all on it



It's too late my family are all on it

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Even teenagers don't care.

- It's too late my family are all on it
- Even teenagers don't care.
- Privacy is dead and we don't need it

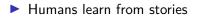
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- It's too late my family are all on it
- Even teenagers don't care.
- Privacy is dead and we don't need it
- We need to give up a little privacy for our security

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### Storytime





### Storytime

Humans learn from stories

Fables by Aseop

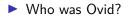
### Storytime

- Humans learn from stories
- Fables by Aseop
- and on to Greek mythology....

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Ovid and greek myths





### Ovid and greek myths

- Who was Ovid?
- What did he write?

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## Ovid and greek myths

- Who was Ovid?
- What did he write?

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▶ why....

What does this have to do with Peacocks?



▶ Well I love a peacock feather.....

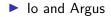


#### What does this have to do with Peacocks?

- Well I love a peacock feather.....
- So did Ovid.. which leads us on to...

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### Io and Argus





### Io and Argus

Io and Argus

Ovid updated the story

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## Io and Argus

- ► Io and Argus
- Ovid updated the story
- BY ADDING PEACOCKS!

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Branding Argus Panoptes





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Branding Argus PanoptesWe forgot IO DUH!

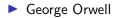
- Branding Argus Panoptes
- ► We forgot IO DUH!
- Can we use the myth, or peacocks as a symbol? Is it appropriate.

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Not ideal as a symbol!



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George Orwell

► Again people focus on the tech of opression.



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Need to focus on the why and who.

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Need to focus on the why and who.

#### RFC:1984

Brian E. Carpenter of IAB and Fred Baker of IETF wrote a co-statement on cryptographic technology and the internet.

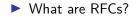
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#### RFC:1984

- Brian E. Carpenter of IAB and Fred Baker of IETF wrote a co-statement on cryptographic technology and the internet.
- They felt that there was a need to offer "All Internet Users an adequate degree of privacy"

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## RFCs



What are RFCs?

#### Can any one submit an RFC?

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### Does anyone use RFCs



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Published in 1996 during US trade embargo on Escrow.

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- They felt that there was a need to offer "All Internet Users an adequate degree of privacy"
- Published in 1996 during US trade embargo on Escrow.
- Not a new issue. Infact it's been a concern since the 1960s. Before the internet.

"The Internet Architecture Board (IAB) and the Internet Engineering Steering Group (IESG),[...] are concerned by the need for increased protection of international commercial transactions on the Internet, and by the need to offer all Internet users an adequate degree of privacy."

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The IAB and IESG are therefore disturbed to note that various governments have actual or proposed policies on access to cryptographic technology that either:

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- (b) restrict commercial and private users to weak and inadequate mechanisms such as short cryptographic keys; and/or
- (c) mandate that private decryption keys should be in the hands of the government or of some other third party; and/or
- (d) prohibit the use of cryptology entirely, or permit it only to specially authorized organizations.

 Governments looking to put a back door into tools like WhatsApp.

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Facebook, Google, advertising networks.

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- Facebook, Google, advertising networks.
- DNA testing services.

 Governments looking to put a back door into tools like WhatsApp.

- Facebook, Google, advertising networks.
- DNA testing services.
- Your family using ALL those services.

#### ► Here are a few examples in the UK.



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- David Cameron in 2015 wanted to break encryption: "In our country, do we want to allow a means of communication between people which we cannot read?"
- Draft Investigatory Powers Bill 2015.
- In late 2018 GCHQ published "Principles for a More Informed Exceptional Access Debate."

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- ► Home office destroyed Windrush data.
- UK government officials are very careless with data.

July 2019 Attorney General William Barr "Going Dark" push to require manufacturers of encrypted devices like iPhones to build in a way for law enforcement to gain access, which detractors call "back doors."

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- 2017 Electoral Data of 200 million US citizens

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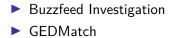
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- Public Transport Victoria (PTV) data leak of tap on tap off cards



Buzzfeed Investigation



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- Buzzfeed Investigation
- GEDMatch
- Commercial DNA testing

- Buzzfeed Investigation
- GEDMatch
- Commercial DNA testing
- Conclusion: On it's own no. But as part of a possible dataset combined with other metadata?

It's too late my family are all on it.



It's too late my family are all on it. Yes, and they are still a risk to your privacy.

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Even teenagers don't care.

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- Even teenagers don't care. Not true, teenagers are private.

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We need to give up a little privacy for our security.

"If you want total security, go to prison. There you're fed, clothed, given medical care and so on.

The only thing lacking... is freedom. "

— Dwight D. Eisenhower

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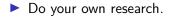
- It's too late my family are all on it. Yes, and they are still a risk to your privacy.
- Even teenagers don't care. Not true, teenagers are private.
- We need to give up a little privacy for our security. What defines our Security?

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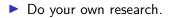
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 Privacy isn't dead. Infact I'd argue it's a feature of Civilisation.







► Follow IETF and IAB.



- ► Do your own research.
- ► Follow IETF and IAB.
- Follow privacy focused organisations and people online.



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Protect your own privacy

- Do your own research.
- Follow IETF and IAB.
- Follow privacy focused organisations and people online.

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- Protect your own privacy
- Join Decentralised networks like mastodon.

- Do your own research.
- Follow IETF and IAB.
- Follow privacy focused organisations and people online.
- Protect your own privacy
- Join Decentralised networks like mastodon.
- Look at projects like Frama and their CHATONS partners campaign to "degooglify the internet".

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Start talking to your family and friends



- Start talking to your family and friends
- Use stories to help them empathise and understand. Focus on Io, not Argus Panoptes



Use your own cultures stories where possible to help people empathise about the dangers

 Use your own cultures stories where possible to help people empathise about the dangers

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► Use the hashtag #RFC1984

- Use your own cultures stories where possible to help people empathise about the dangers
- ► Use the hashtag #RFC1984
- Read 1984 and think about the surveillance and what it means.

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Find ways for us to frame the dialogue around privacy



Find ways for us to frame the dialogue around privacy

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Human rights violations are here now.

Find ways for us to frame the dialogue around privacy

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- Human rights violations are here now.
- Perhaps we can keep using Peacocks as a symbol



 Grass root campaigns are vital to start putting pressure on governments and organisations

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Start now.



# **RFC 1984:**

#### Or why you should start worrying about encryption backdoors and mass data collection

presentation by: Esther Payne at Ubucon Europe 2019

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#### Thank you

