

ENDRUN

SECURE DIGITAL COMMUNICATIONS FOR OUR MODERN DYSTOPIA

By Grant Gobbe and Brendan O'Connor

grant@dobbe.us

ussjoin@ussjoin.com

NOTE: DRAFT SLIDES! Please go to
<http://github.com/grantdobbe/endorun> for the most up-to-date
version.

THE TAKEAWAYS

We're making an end run around the Internet. Because someone has to.

THE TAKEAWAYS

By Any Means Necessary.

THE TAKEAWAYS

Old-School Cellular Communications

THE TAKEAWAYS

Disruption/Delay-Tolerant

THE TAKEAWAYS

Modifiable On the Fly

PREVIOUS WORK

Tor

PREVIOUS WORK

AirChat, by Anonymous

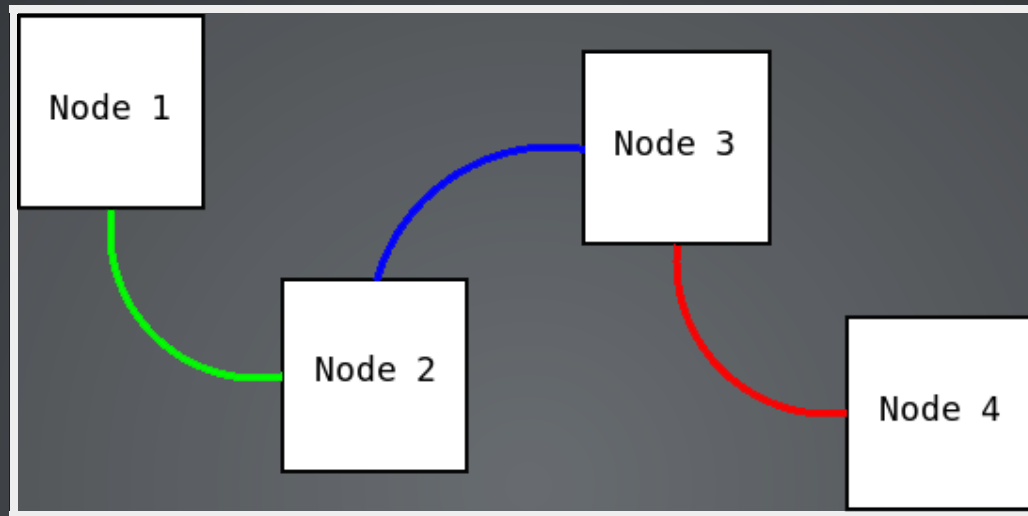
PREVIOUS WORK

Commotion Wireless / Project Byzantium

PREVIOUS WORK

Delay-Tolerant Networking

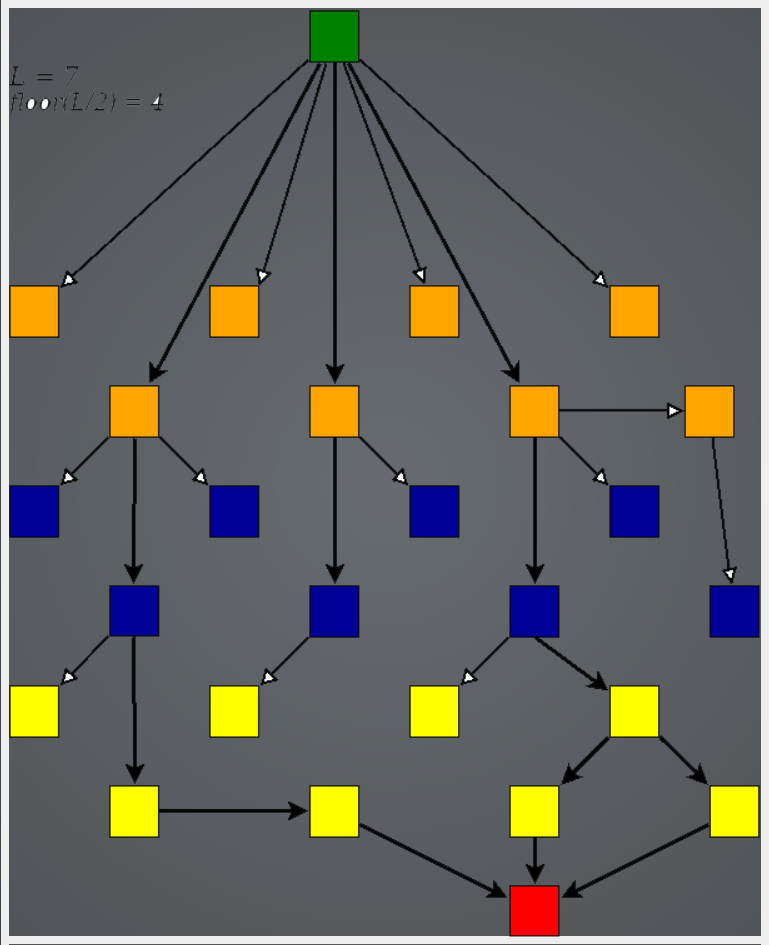
ROUTING



ROUTING

Spray and Pray Wait

ROUTING



USER SERVICES

Gollum

USER SERVICES

Gollum + GPG

USER SERVICES

Gollum + Minilock

MESSAGE FORMAT

SQUIRREL

MESSAGE FORMAT

NaCl

MESSAGE FORMAT

~~NaCl~~ LibSodium

MESSAGE FORMAT

Git Bundles

TRANSPORT

Chain of Custody

CHAIN OF CUSTODY

Receipt Table

CHAIN OF CUSTODY

Map Table

TRANSPORT OPTIONS

Sneakernet

TRANSPORT OPTIONS

XBee

TRANSPORT OPTIONS

Sneakernet+

TRANSPORT OPTIONS

Other Radio?

INTERMEDIATE ROUTING

Route all the things!

COMPLEX DATA PATHWAYS

With our apologies to Mr. Lehrer.

Tom got it from Agnes.

She got it from Jim..

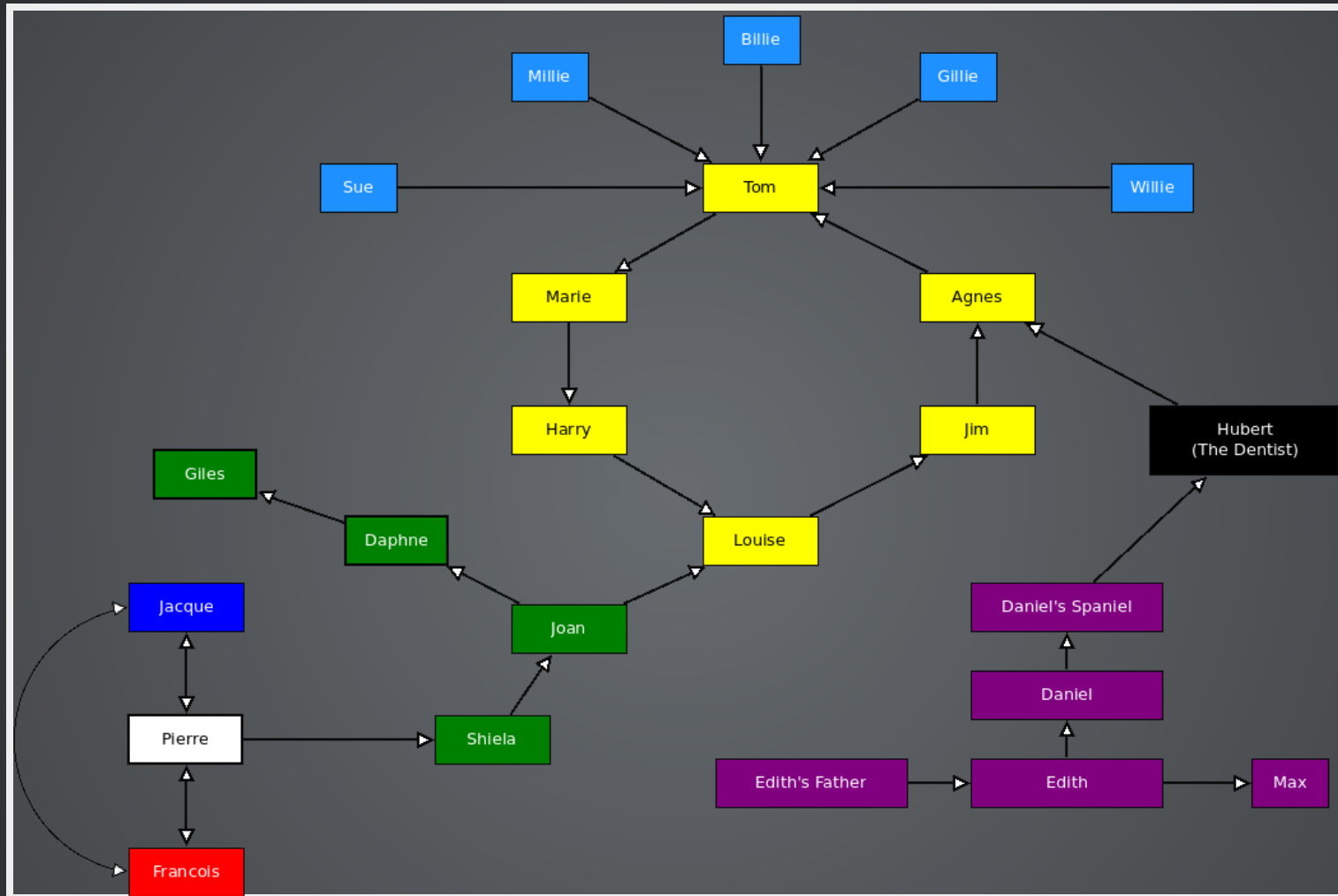
It must have been Louise who gave it to him.

She got it from Harry.

Who got it from Marie.

Everybody knows that Marie got it from Tom.

And so on.



DEMONSTRATION

Sneakernet, Sneakernet+

FUTURE WORK

Long-Distance Debt Systems

FUTURE WORK

Ultra-Large-Scale Surveillance

THANKS

Particularly to Caroline, for letting Grant come