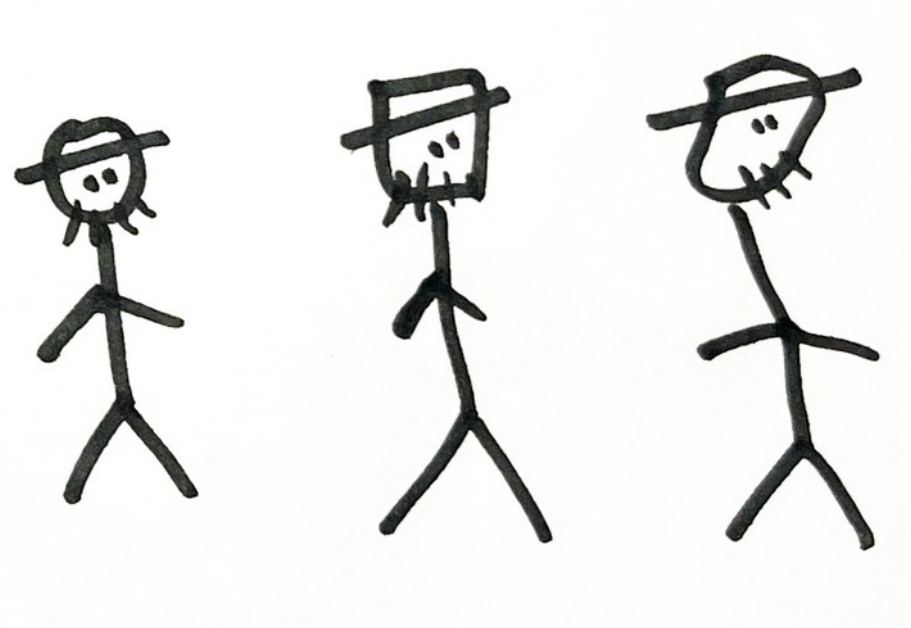
TDI Trento 2023

Vladimir Dzhuvinov
Identity Architect
connect2id

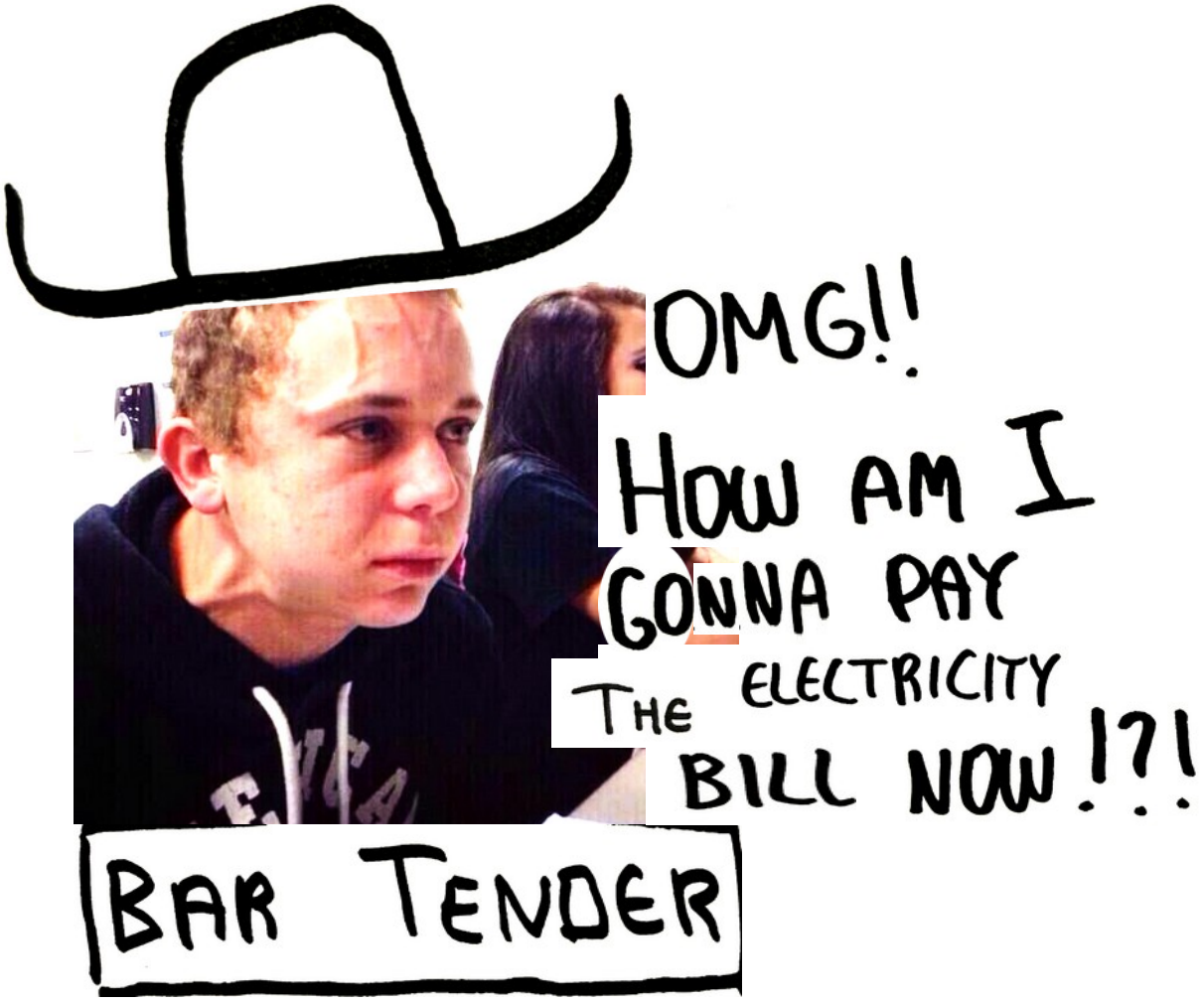
The Trust Chain, the Block Chain & the X509 Cert Chain



THE TRUST CHAIN, THE BLOCK CHAIN

& THE X509 CERT CHAIN

WALK INTO A BAR...


OMG!!
HOW AM I GONNA PAY THE ELECTRICITY BILL NOW!?!
BAR TENDER

Forbes

EDITORS' PICK

Bitcoin Mining Uses As Much Power As Ireland. Here's Why That's Not A Problem

Christopher Helman Forbes Staff

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Jan 16, 2018, 04:11pm EST

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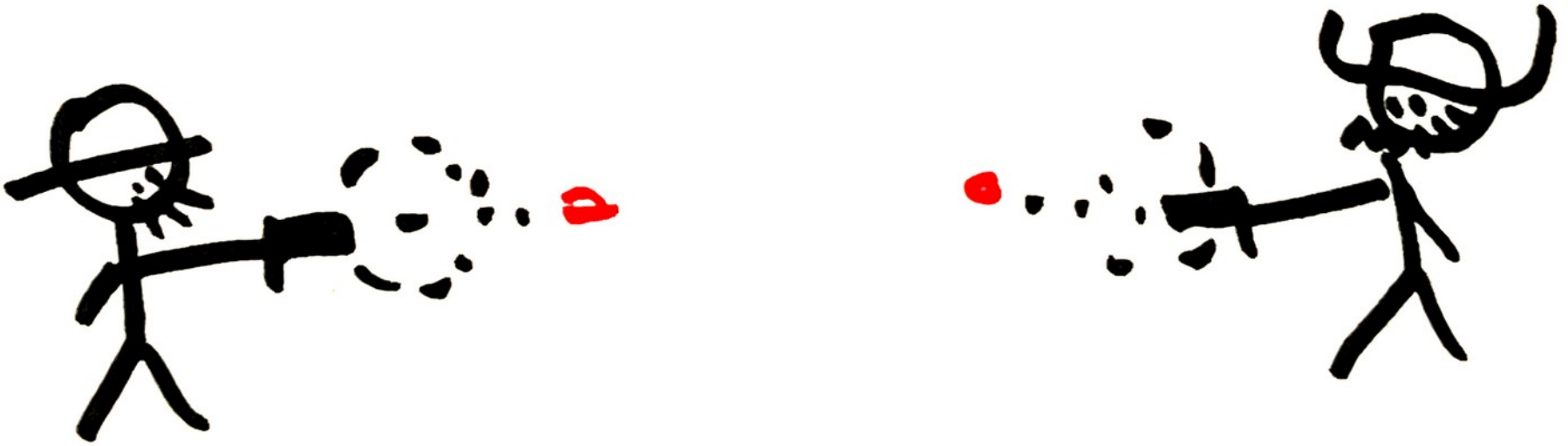
CONNECT FEDERATION 1.0!

THE OPENID TRUST CHAIN

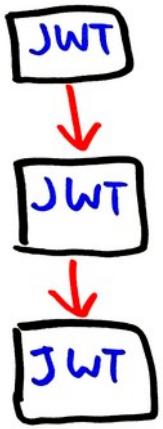
VS

THE X.509 CERT CHAIN

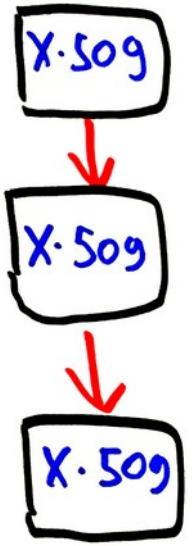


Securing Transactons

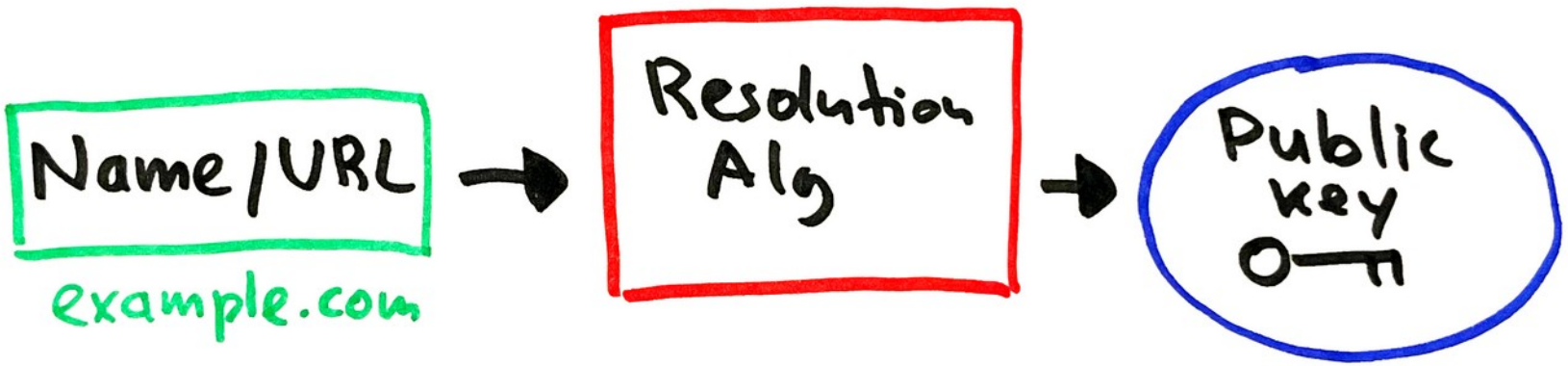
On The Internet



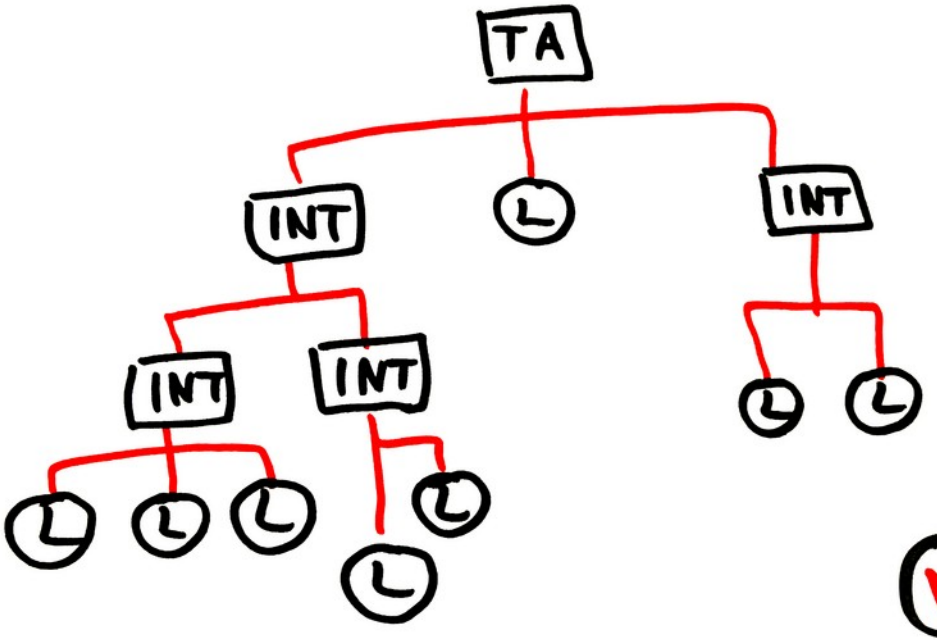
1. Public Key Attestation
2. Real World Trust Topologies
3. Metadata
4. Protocols & APIs



① Public Key Attestation



② Real World Trust Topologies

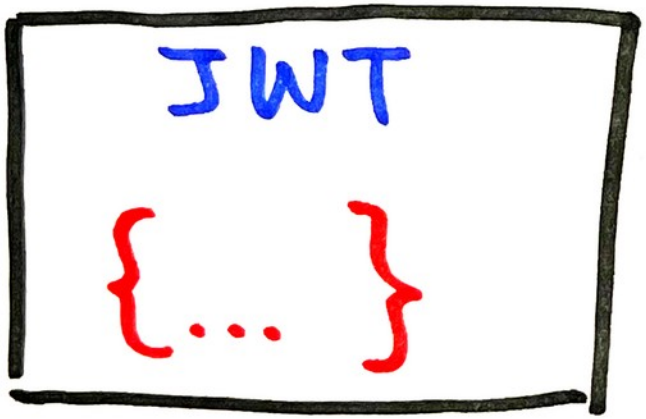


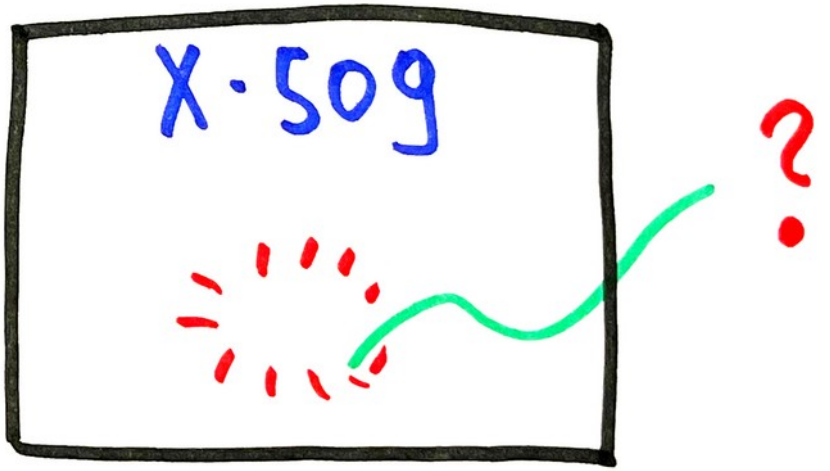
✓ Hierarchical

? Accreditations / Trust Marks

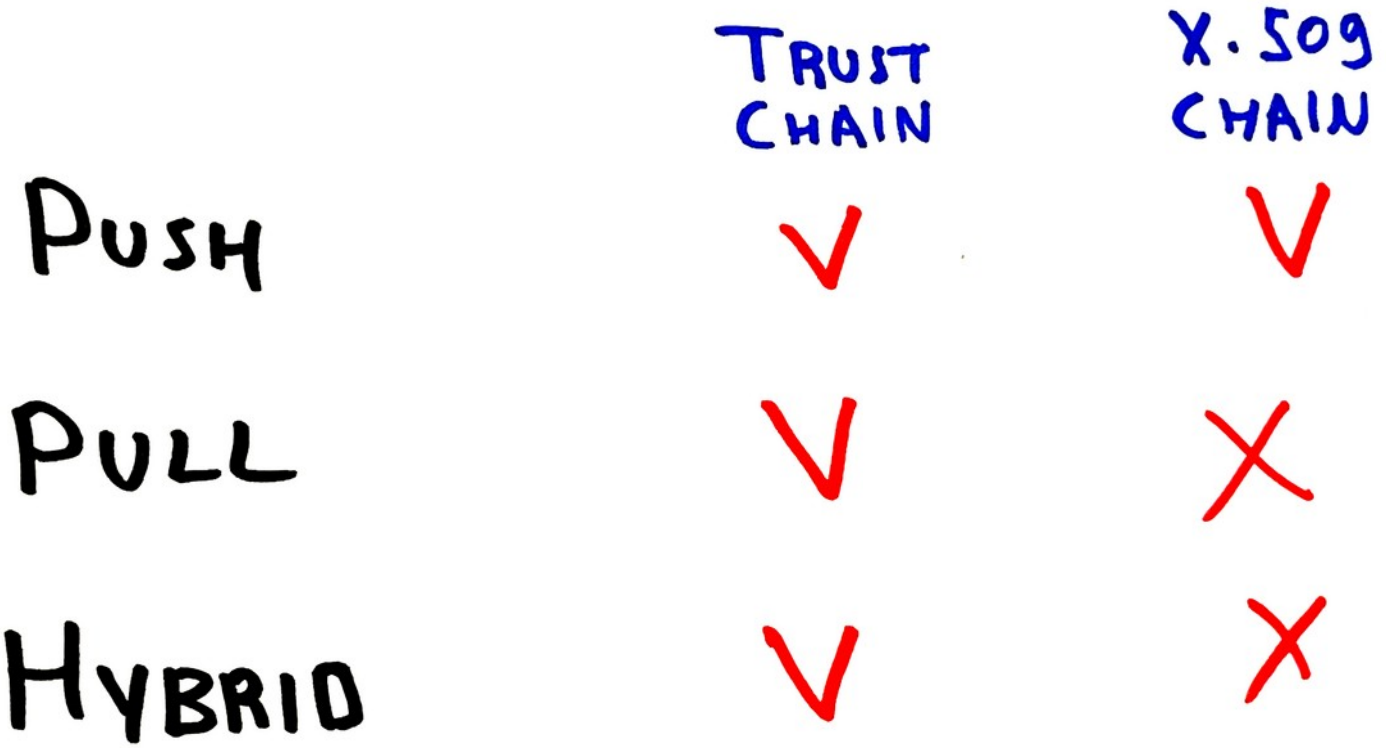
③ Metadata & Policies

For Higher-Level And Application Protocols





④ Protocols & APIs



Delivery Methods

④ Protocols & APIs

	trust chain	X.509 chain
① Well-known URL	✓	✗
② Fetch stmt from Authority	✓	✗
③ List Authority subjects	✓	✗
④ Resolution helper	✓	✗
⑤ Trust mark validation	✓	✗
⑥ Query an Authority for expired or revoked subject keys	✓	✗

THE SHOOTOUT

	trust chain	X.509 chain
① PUBLIC KEY ATTESTATION	1	1
② TRUST TOPOLOGIES	1	0.5
③ METADATA	1	0
④ PROTOCOLS & APIS	1	0
	4 :	1.5

QUESTIONS ?