

Ignacio Boixo

Javier Mora

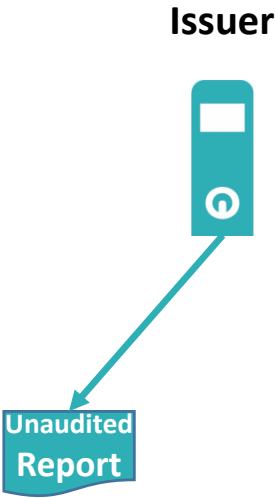
Roberto García

iXBRL report indexer with integrity & non-repudiation secured by Blockchain



*A description of the
existing mechanism for publication of*
Financial Regulatory Reports

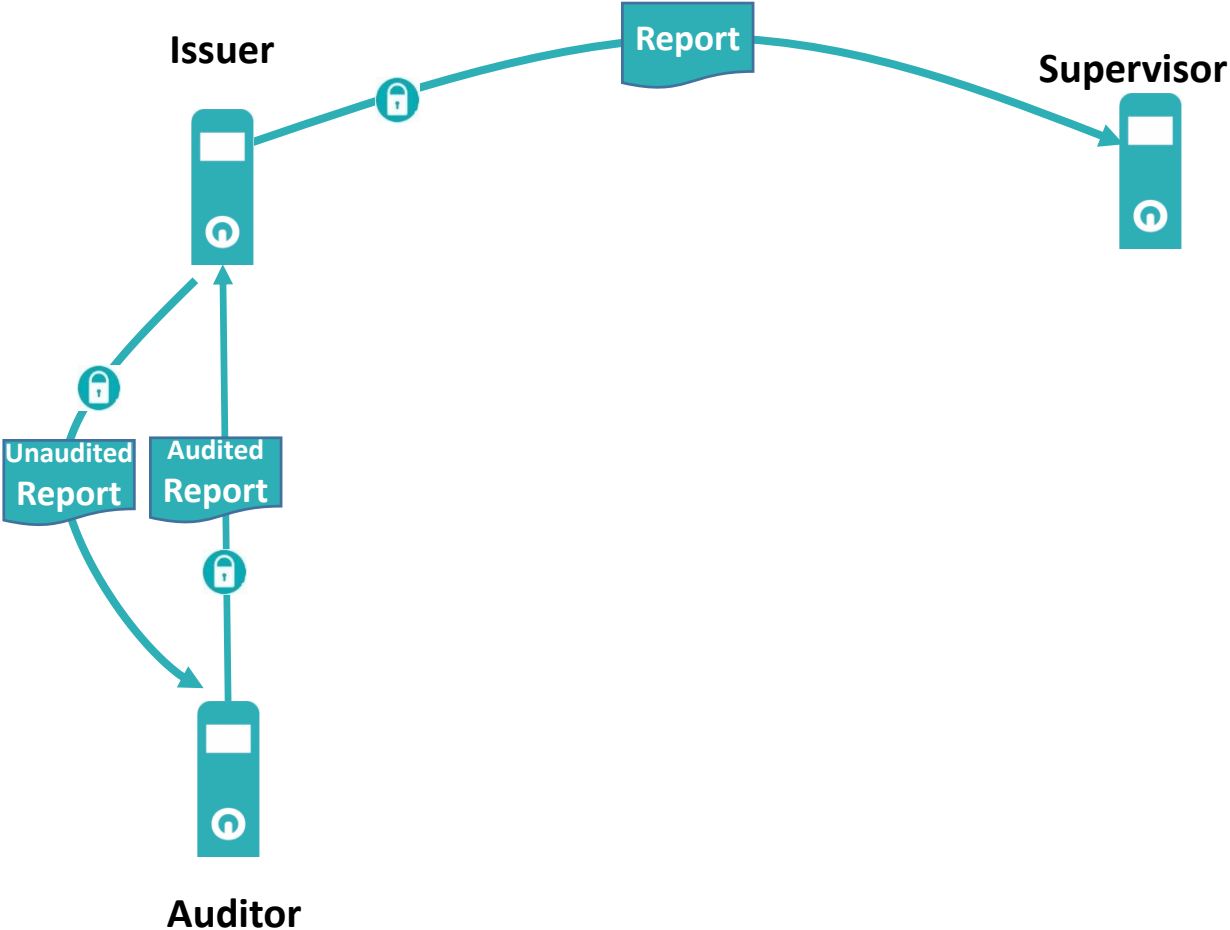
Step 1: The Issuer prepares a report.



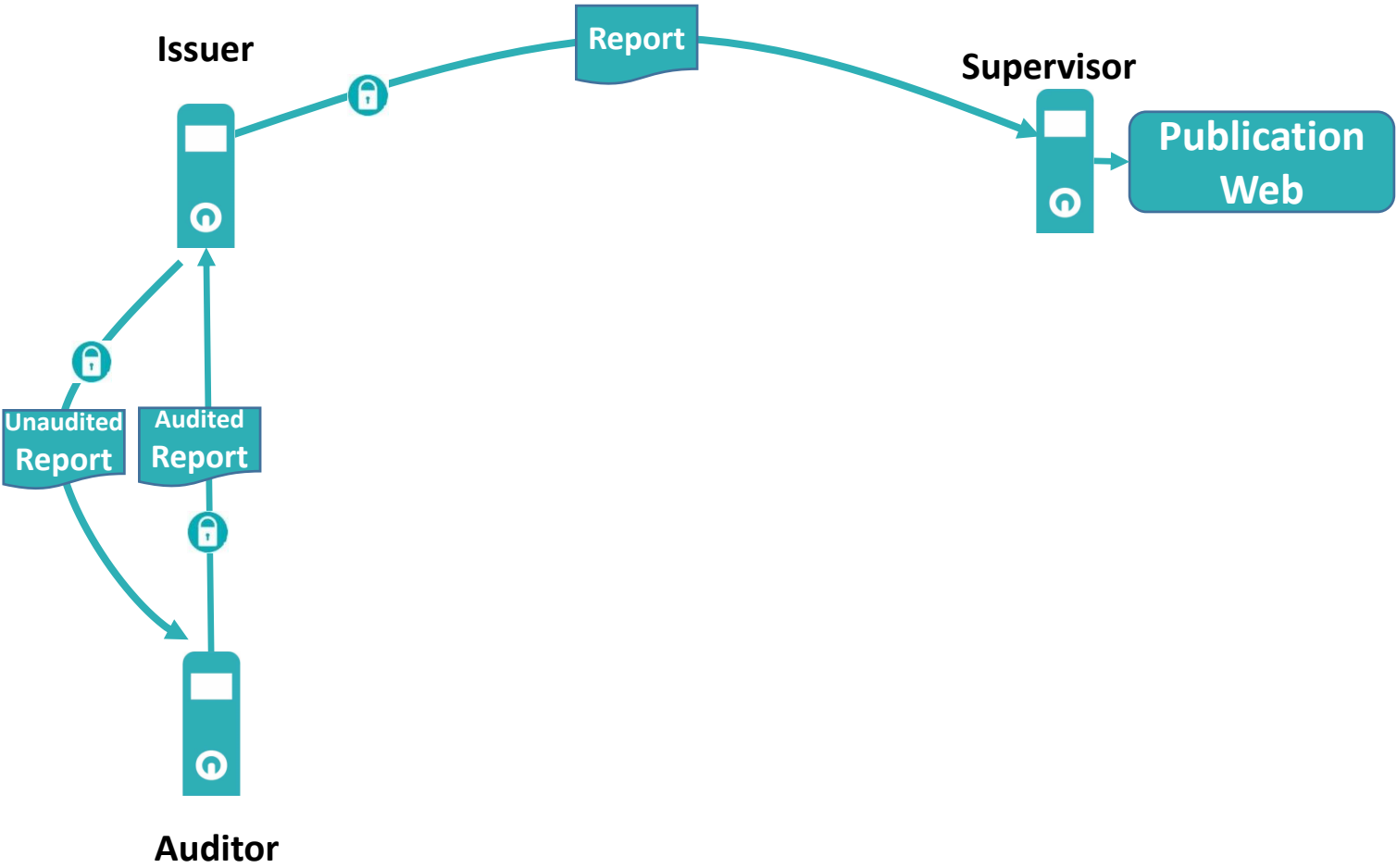
Step 2: The Auditor signs the audited report.



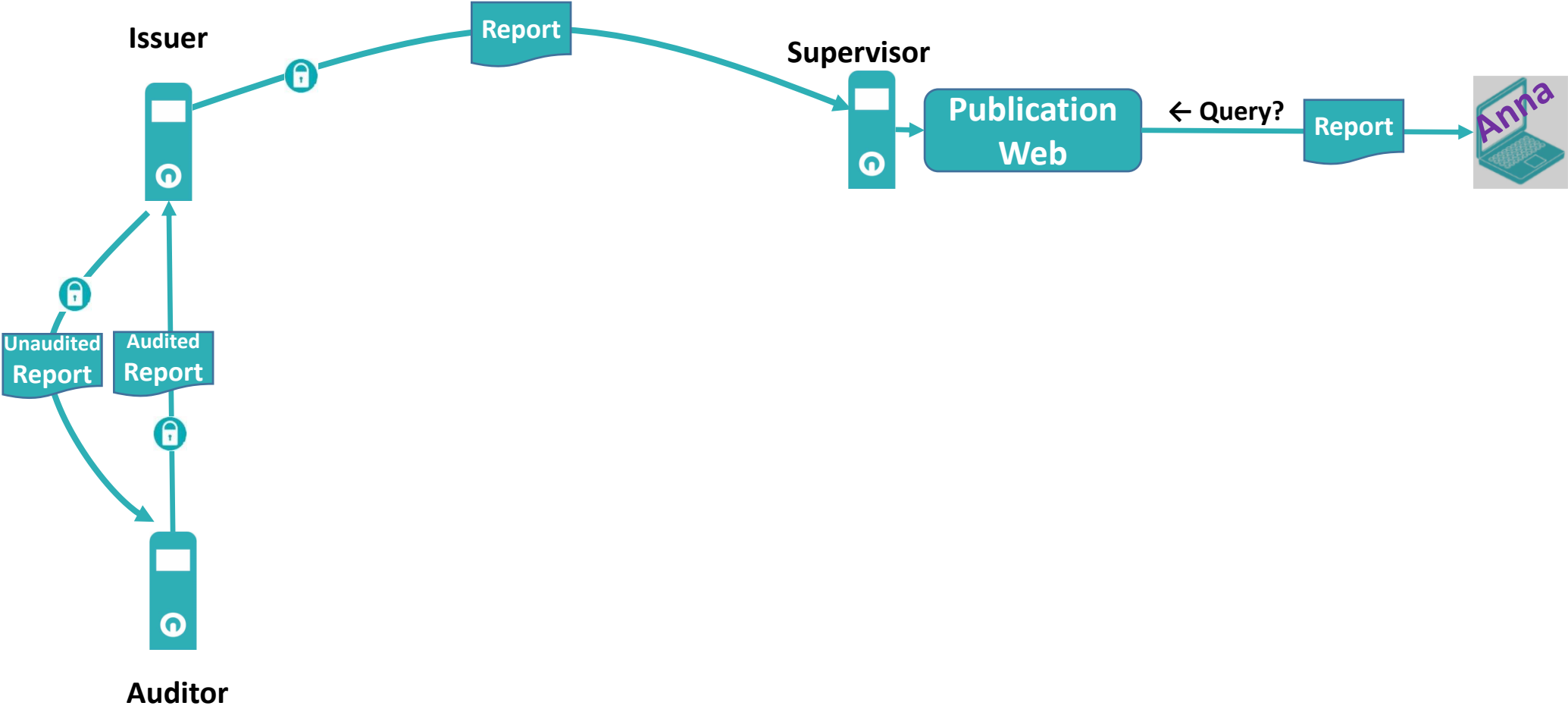
Step 3: The Issuer files the report to the Supervisor.



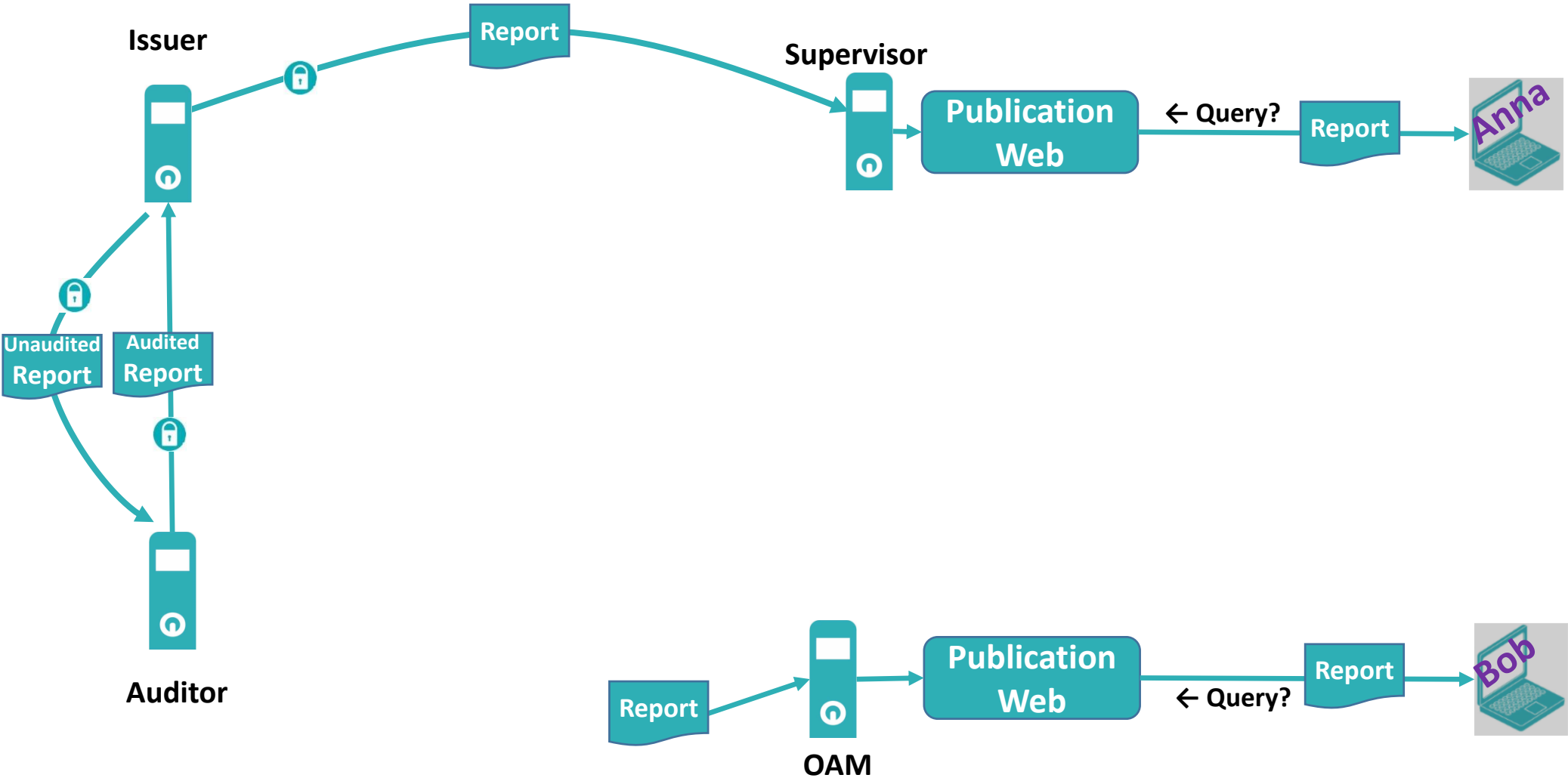
Step 4: The Supervisor made the report public to the market.



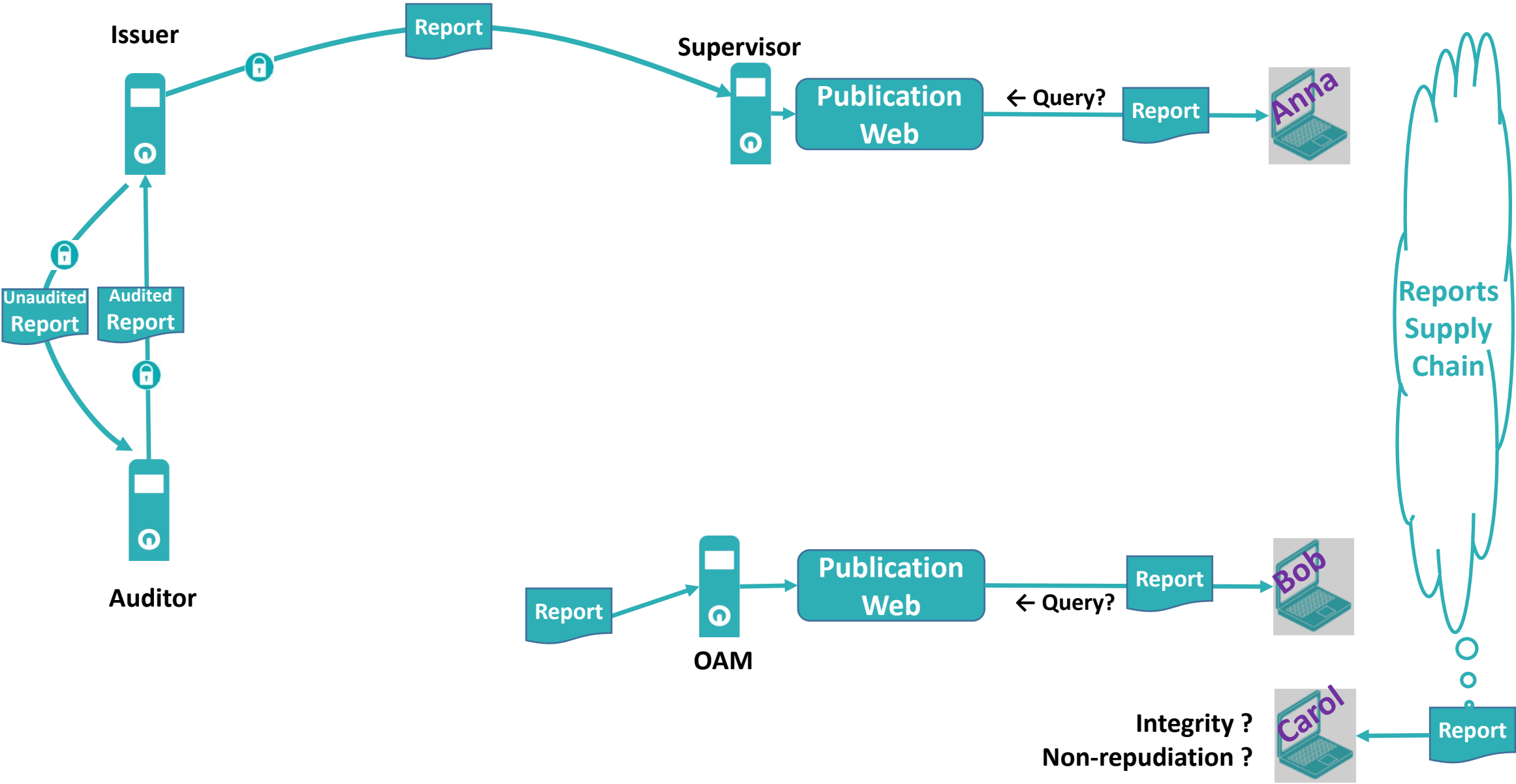
Step 5: The investor Anna finds and reads the report.



Step 6: In other Jurisdiction other issuer files another report, to be published and read by Bob.

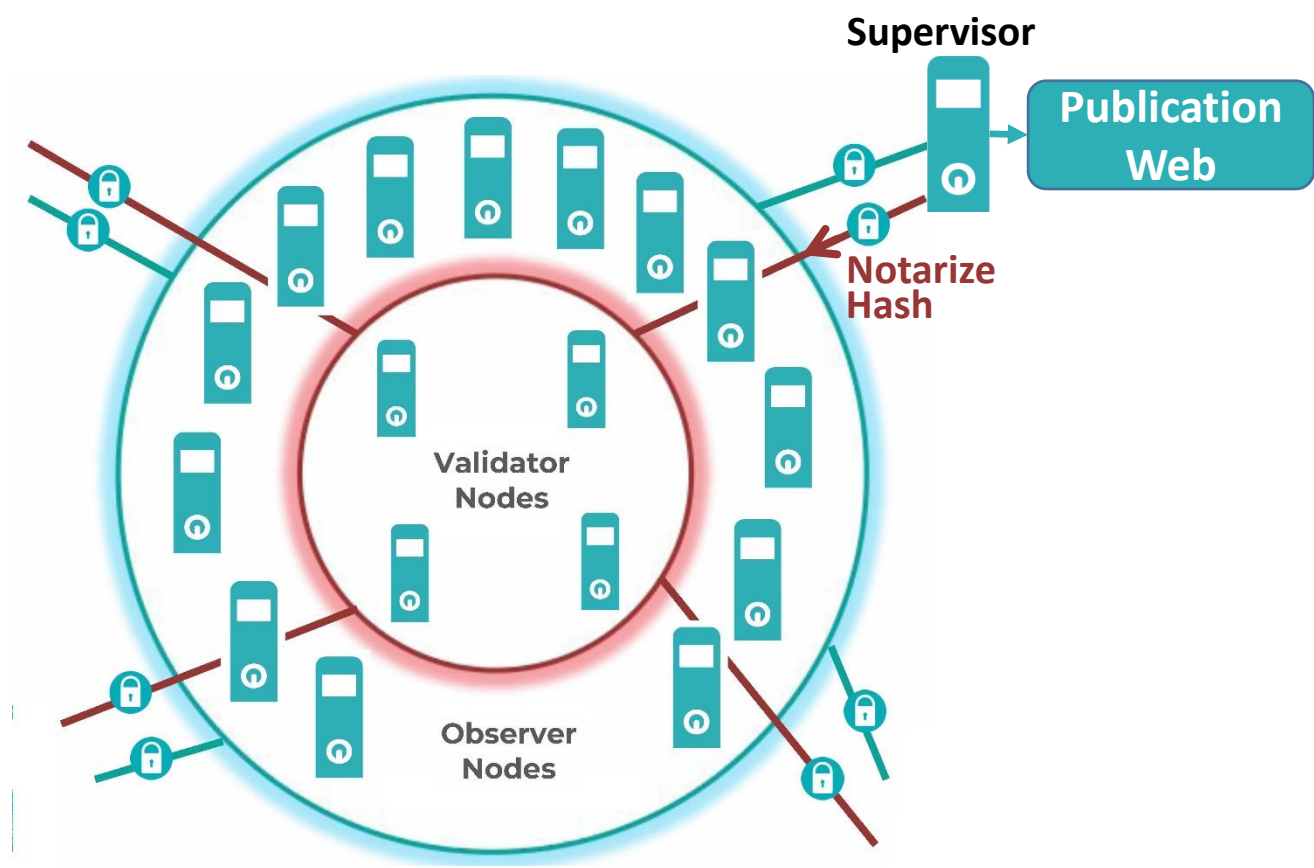


Step 7: Carol receives reports from Anna, Bob and others. What about Integrity and Non-repudiation?

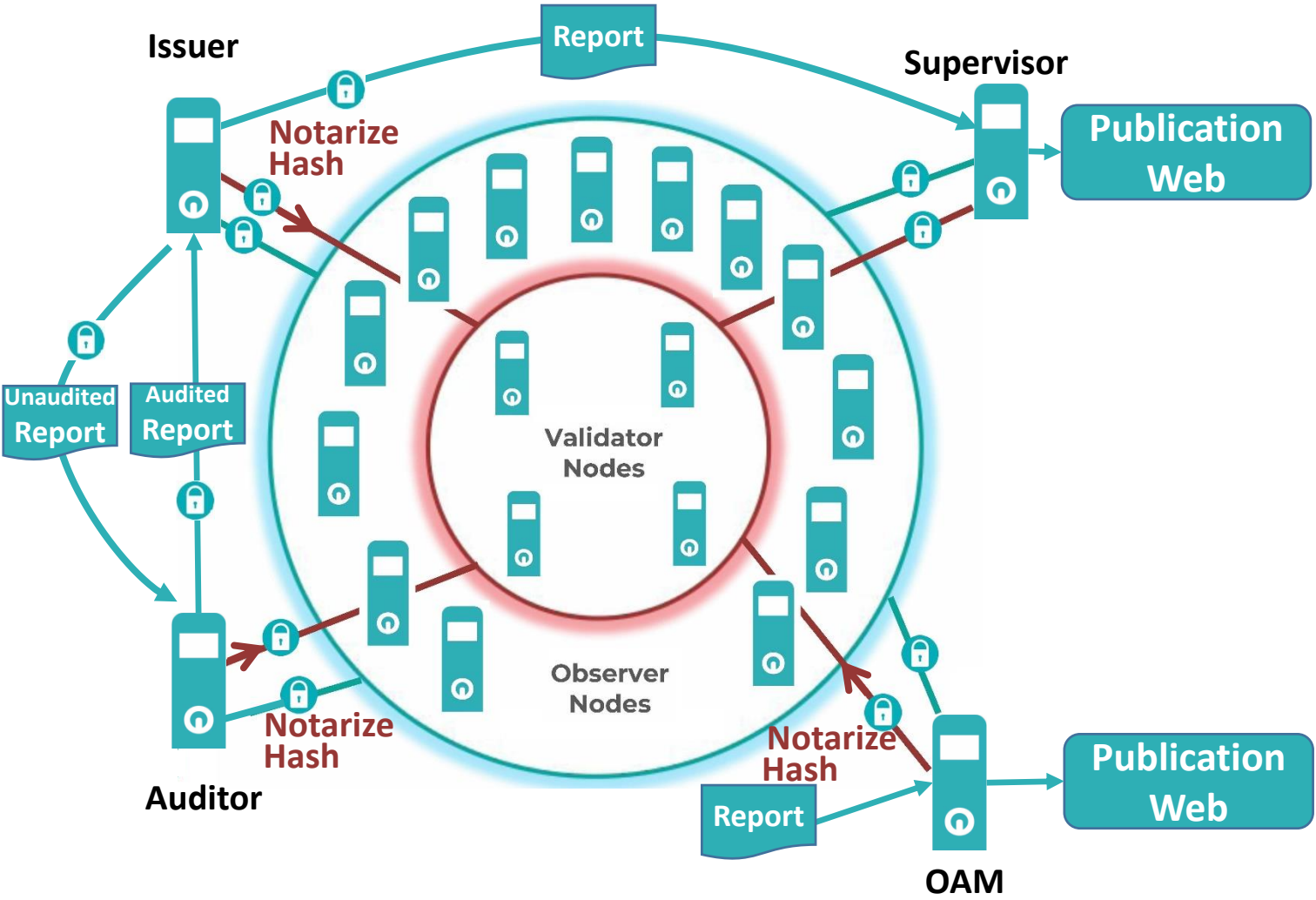


XBRLchain = XBRL secured by blockchain

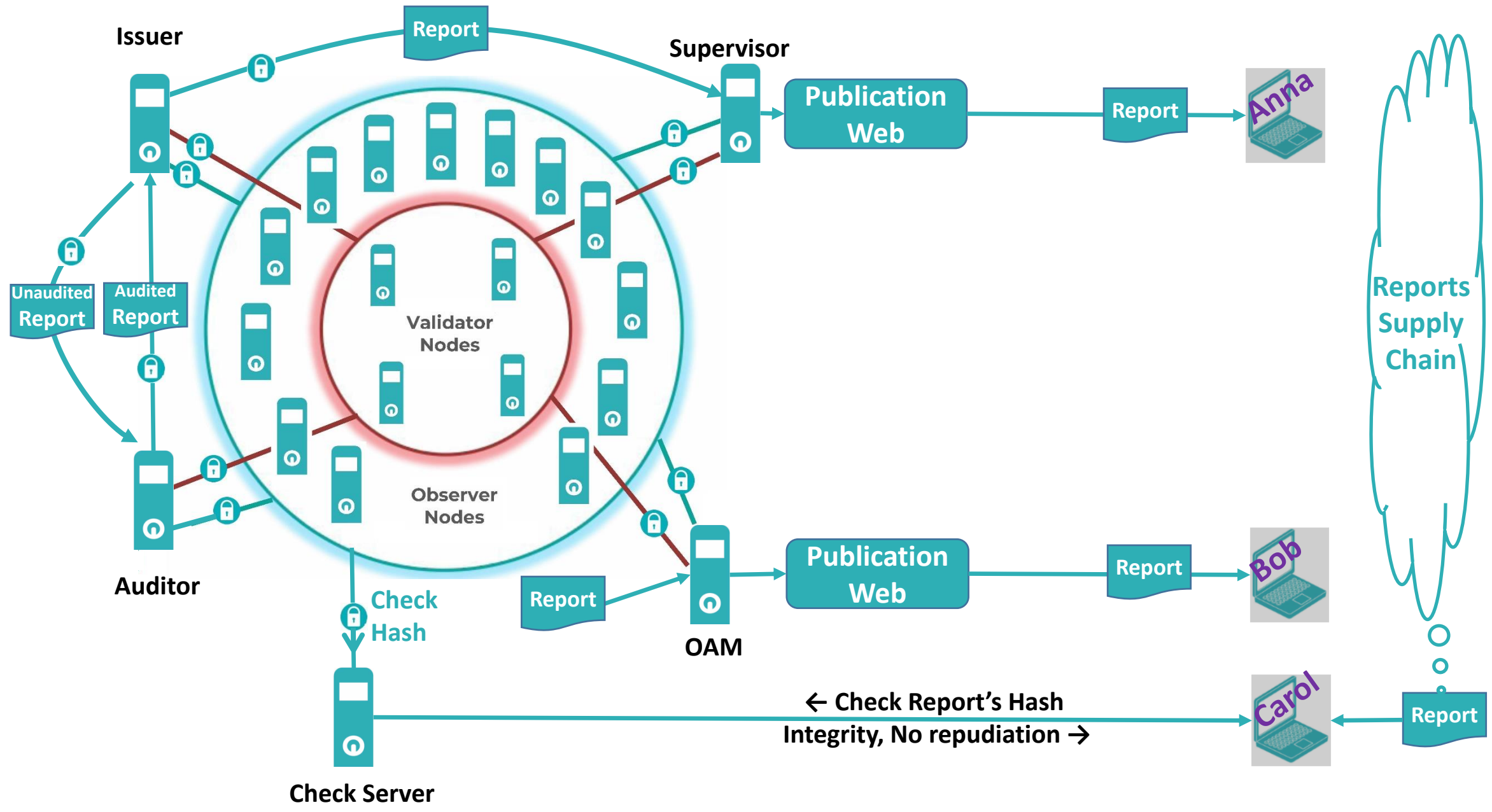
Hash 1: The Supervisor notarizes the hash code of the report when it is made public.



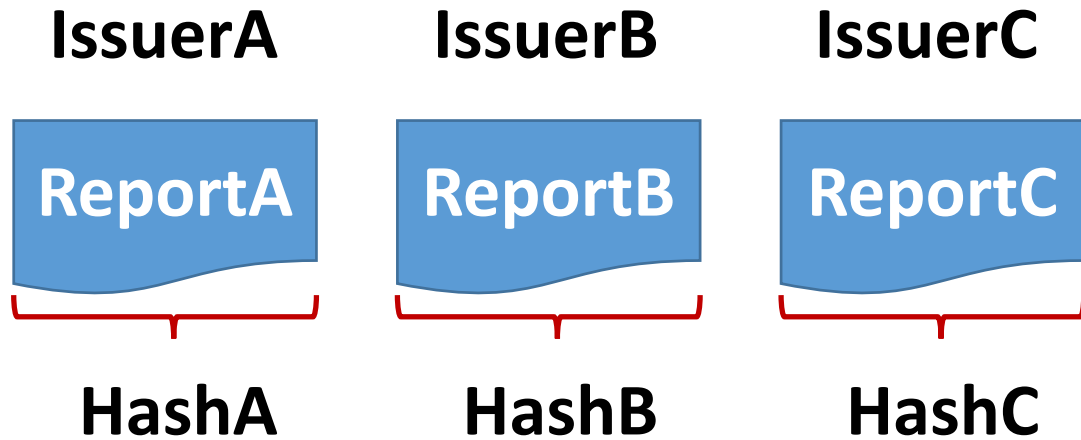
Hash 2: Other Supervisors/OAMs (and Auditors and Issuers, if allowed) can also notarize reports.



Hash 3: Carol (and Bob, Anna, OAMs and Supervisors) has now a secure check for Integrity and Non-repudiation.



XBRLchain = XBRL secured by Blockchain

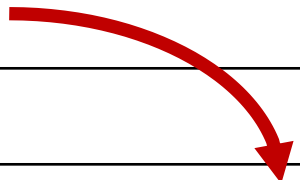


Hash footprint: Biunivocal digest of a report, unrepeatably by nature

Identities acknowledged in this Blockchain

- IssuerC
- AuditorX
- SupervisorZ

Notarize: An Identity inserts a Hash



HashC	SupervisorZ
HashB	SupervisorZ
HashC	AuditorX
HashC	IssuerC
HashB	AuditorX
HashA	SupervisorZ

Ledger: indelible and public Blockchain pile containing pairs of Hash/Identity

XBRLchain Live Demo

A modest proposal for:



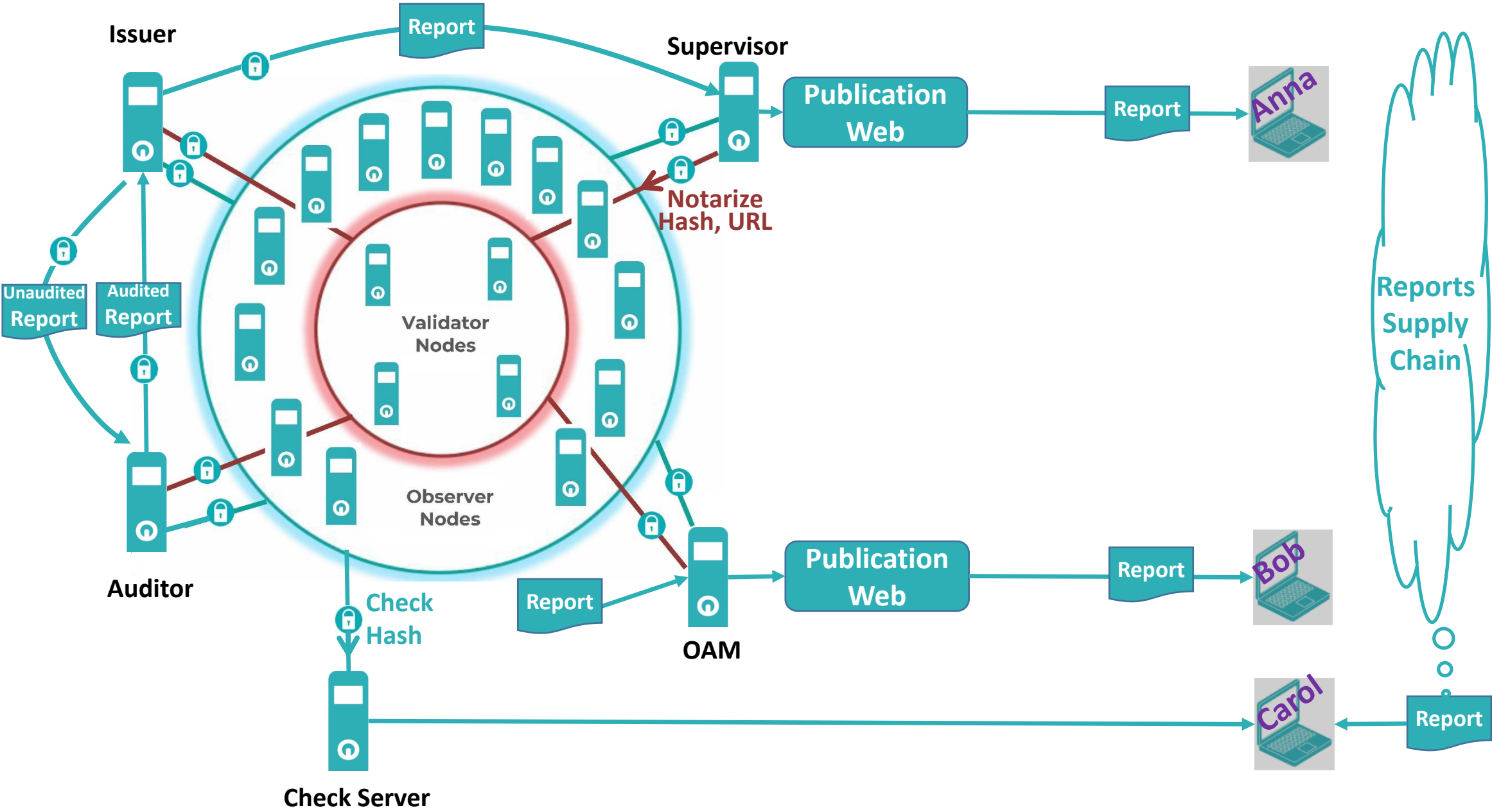
European Financial
Transparency Gateway

What is the European Financial Transparency Gateway (EFTG)?

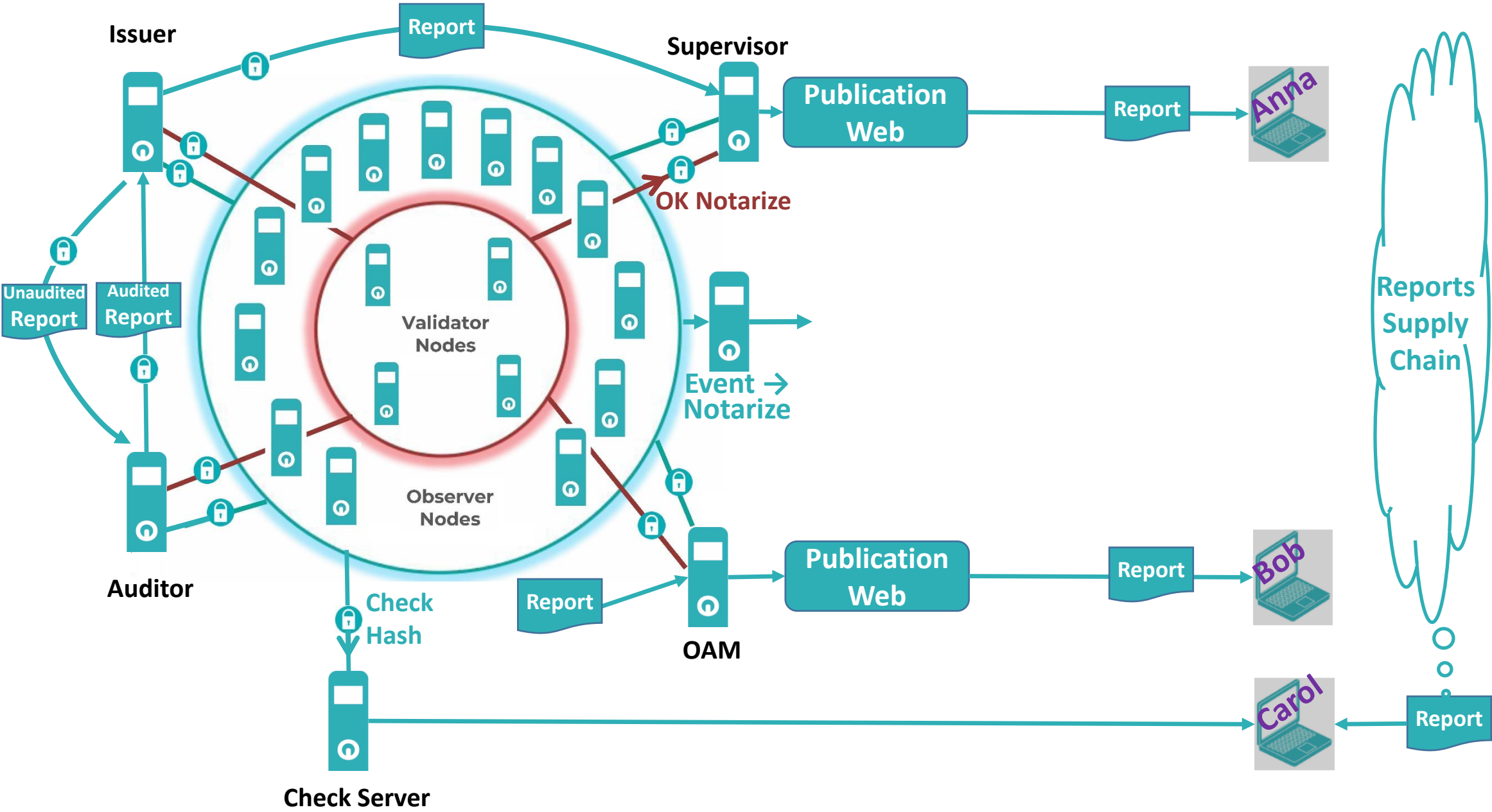
EU financial rules (**Transparency Directive**, 2004/109/EC) require companies listed on EU regulated markets to publish certain financial information, such as **annual financial reports**. This protects investors by helping them make **informed investment decisions**. However, this reporting is currently done via **national databases, which are not connected to each other** or a central platform. This makes it more **difficult for investors to assess cross-border** investment decisions.

This is the starting point of the **European Financial Transparency Gateway**, which **links existing national databases** through distributed ledger technology. This **blockchain-based gateway** is a simple and affordable way to share **information on listed companies**, fostering **cross-border investment** activity and contributes to a well-functioning **Capital Markets Union**.

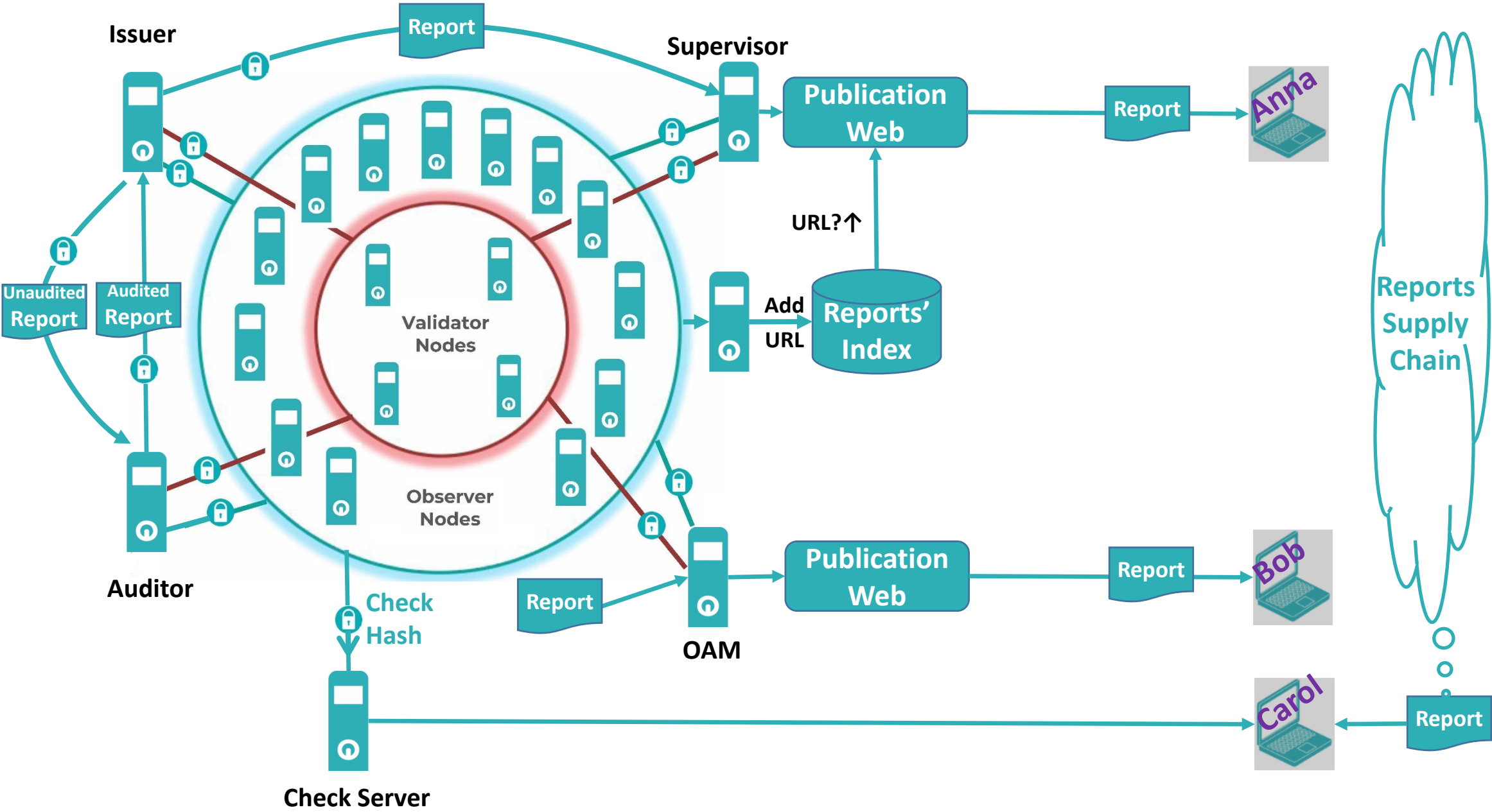
EFTG 1: The Supervisor notarizes the hash code and URL of the report when it is made public.



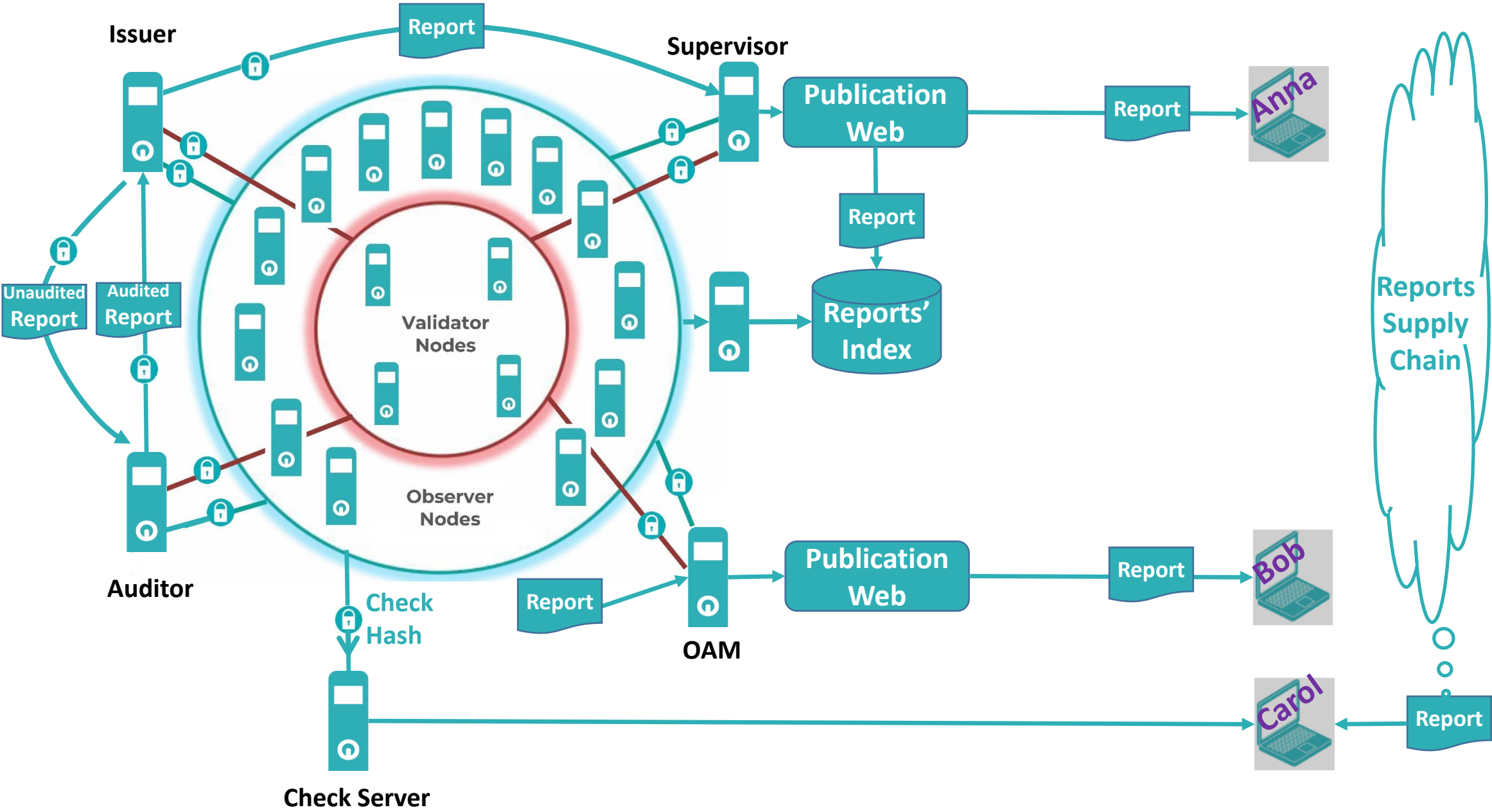
EFTG 2: An event is triggered in a Observer Node when the new block containing the notarization is propagated.



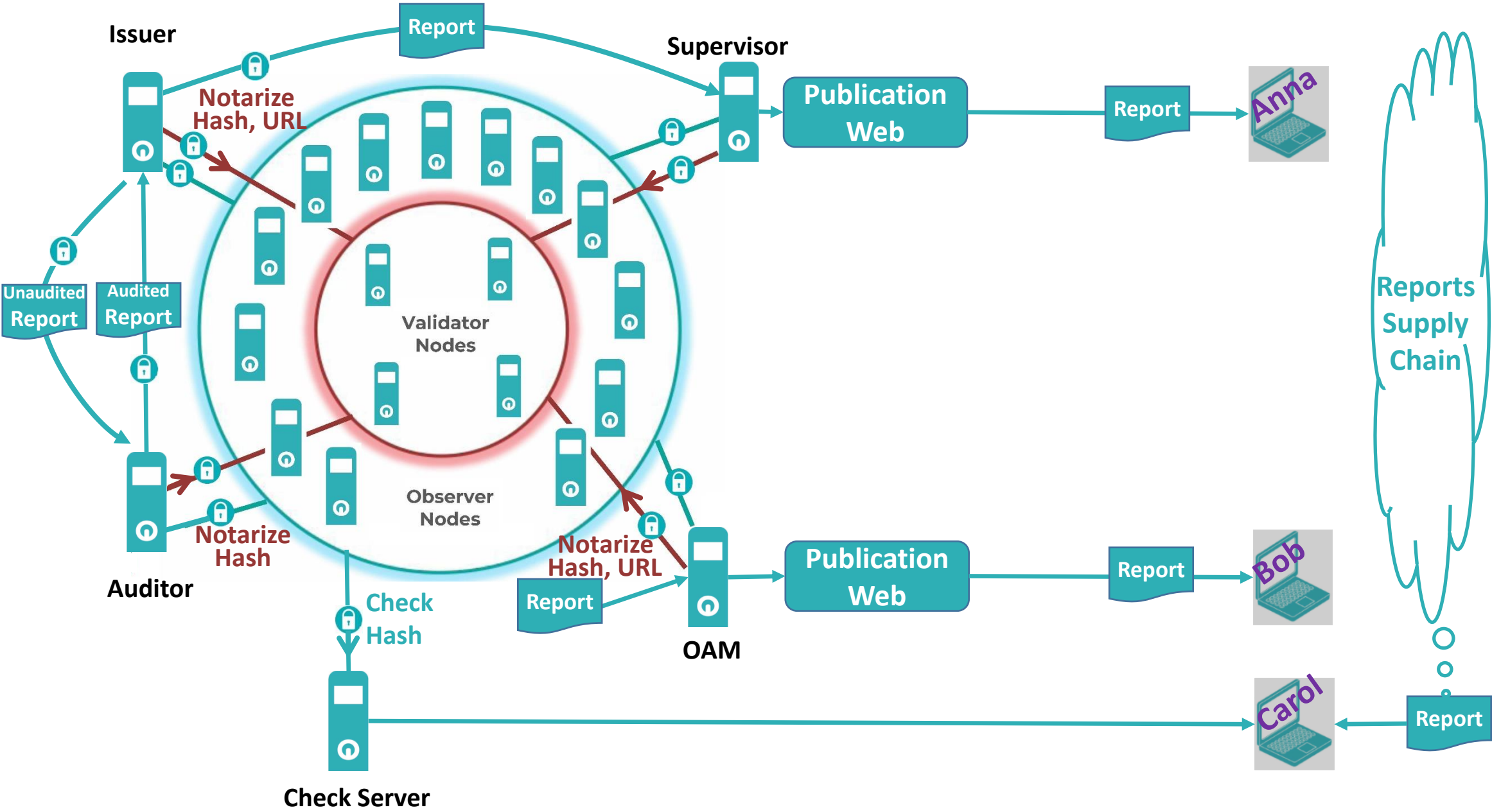
EFTG 3: The report is requested to the Supervisor using the Notarized URL



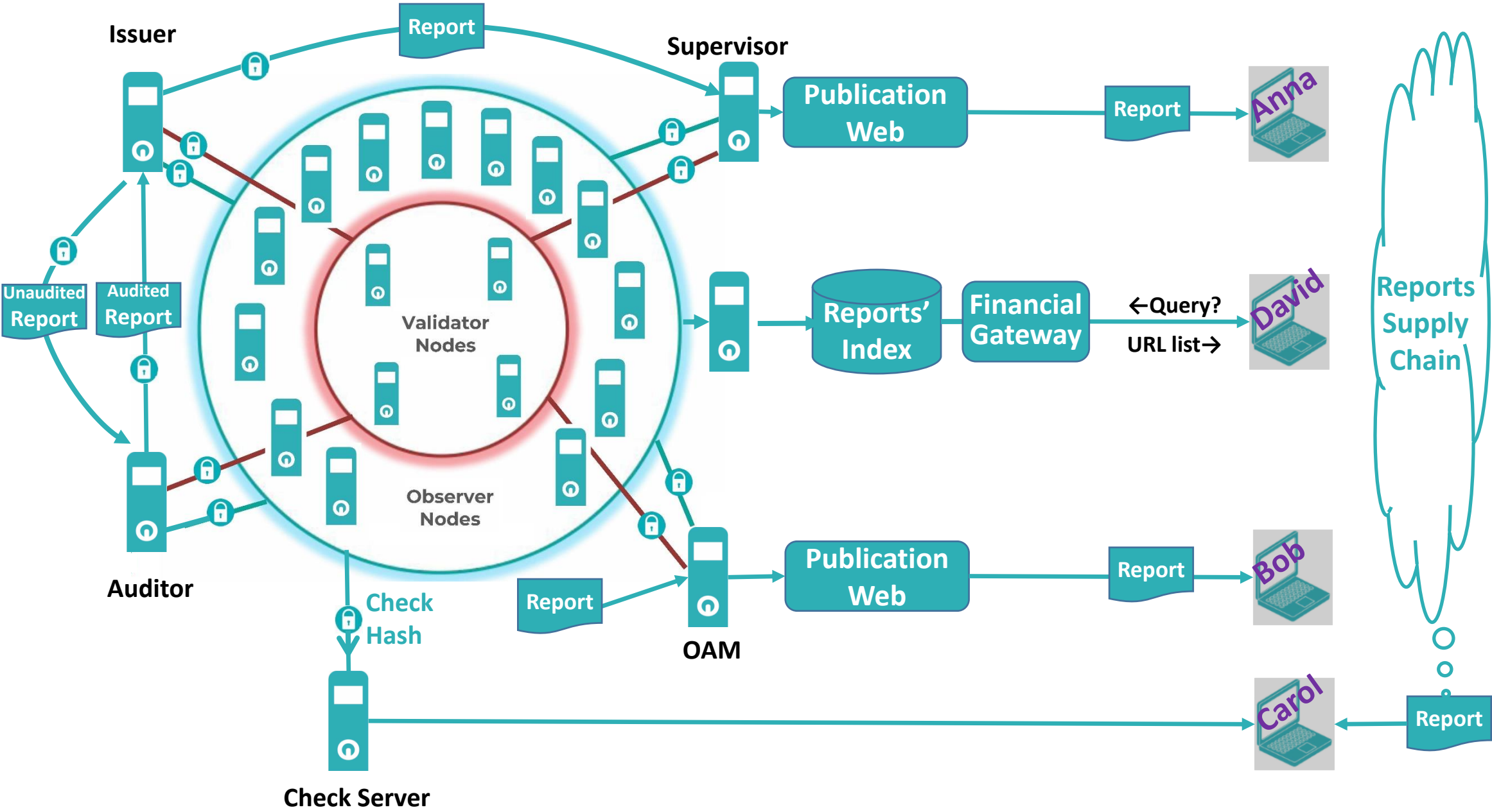
EFTG 4: The report is downloaded for the publication website and included in the Index of Reports



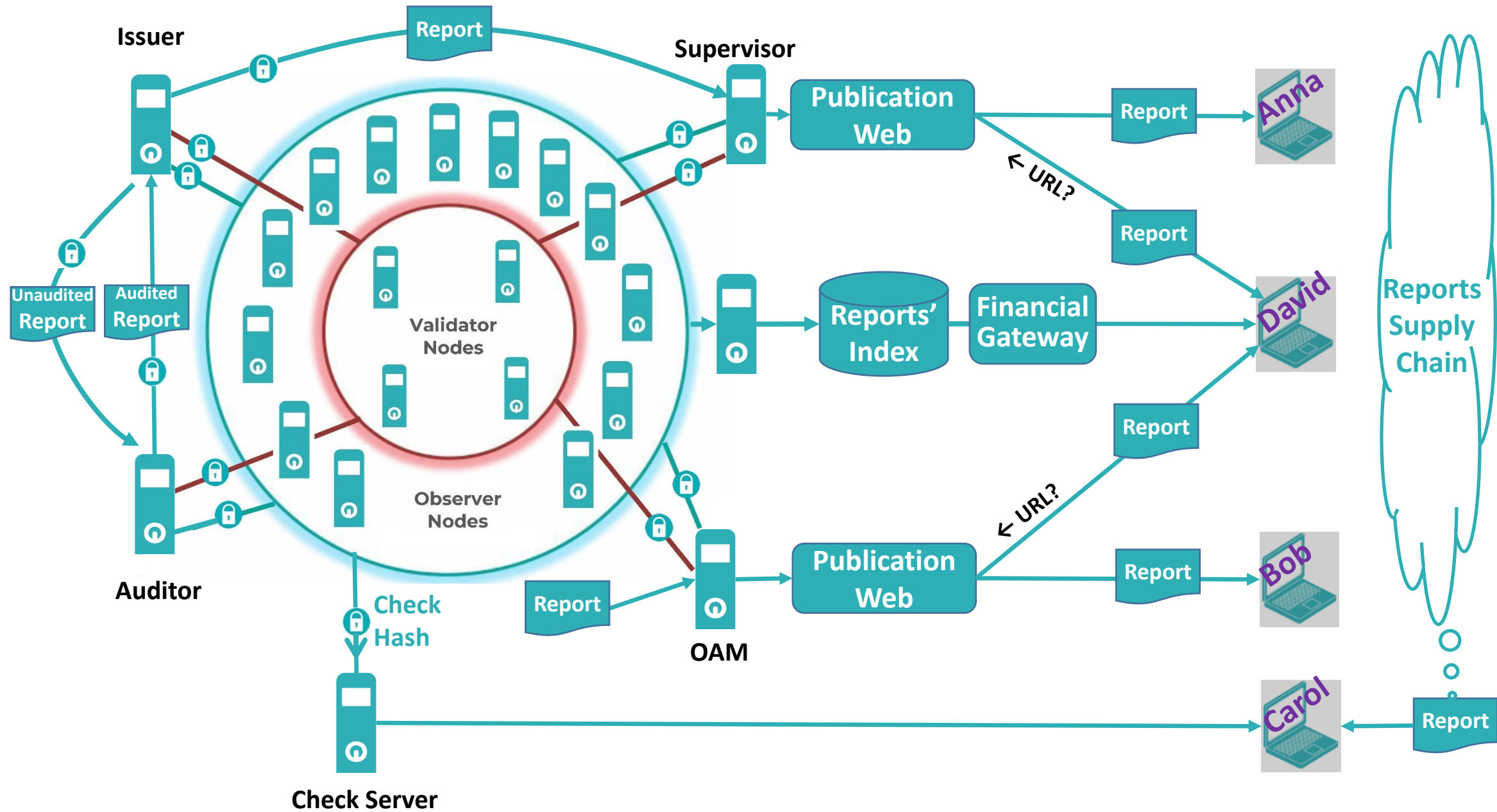
EFTG 5: Other OAM (or Auditor or Issuer as well) can also notarize other reports when published



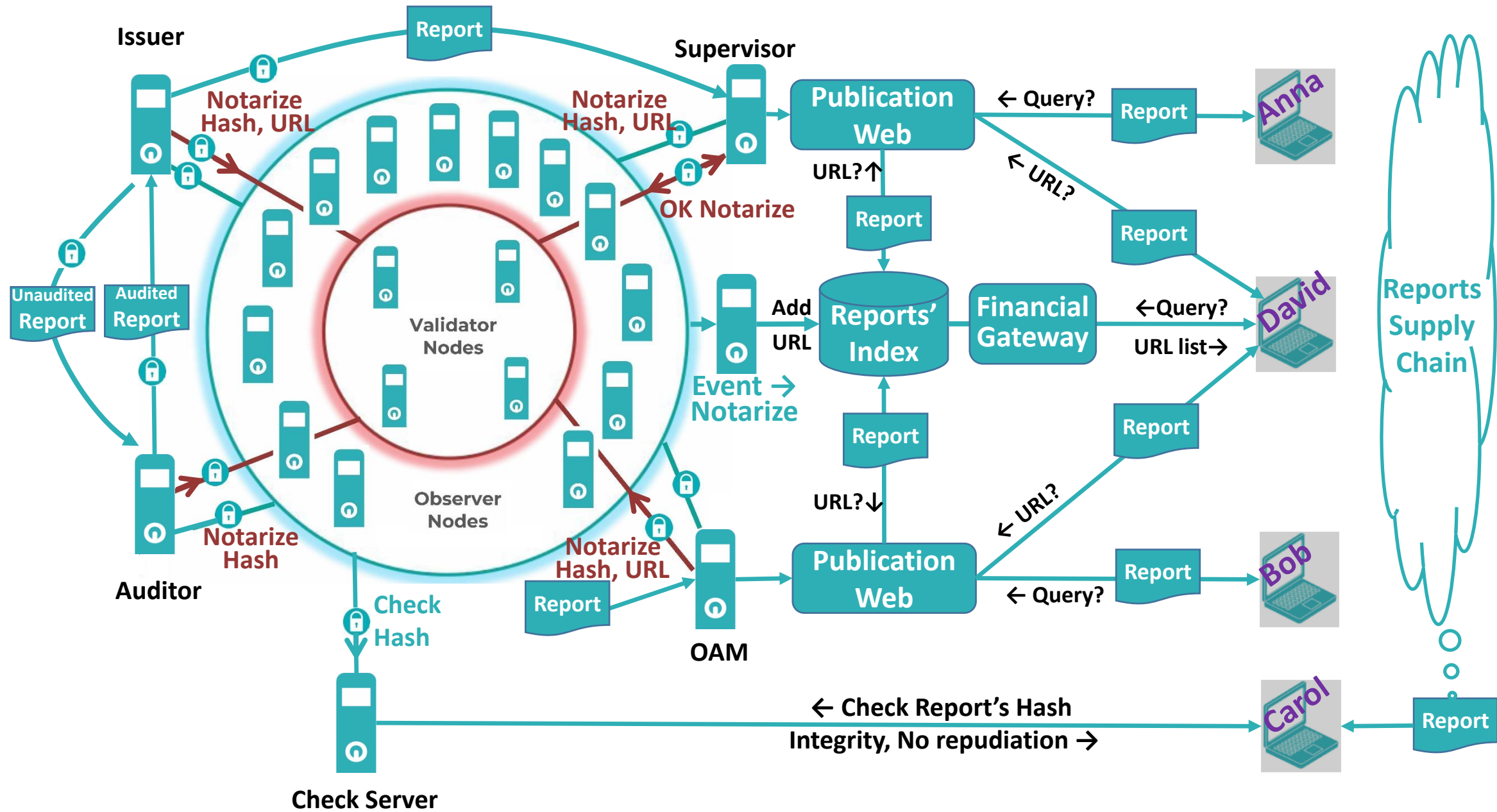
EFTG 7: A query to the Financial Gateway gets a list of URLs of the indexed reports matching the criteria.



EFTG 8: David retrieves the selected Reports using the URLs of their respective Publication websites



EFTG 9: Full overview of functions needed for the European Financial Transparency Gateway.



Insider Trading: SEC Describes \$4.1 Million Hacking Scheme

Ukrainian Hacker Charged With Stealing Nonpublic 'Test Files' for 8 Traders

Mathew J. Schwartz ([@euroinfosec](#)) · January 16, 2019



Credit Eligible

[Get Permission](#)

SEC v. Ieremenko, et al.: Summary of Defendants' Trading Profits

Initial Trader	Profit
Spirit Trade Ltd.	\$496,740

California Traders	Profit
<u>Sungjin Cho</u>	\$679,862
David Kwon	\$404,243
TOTAL	\$1,084,105

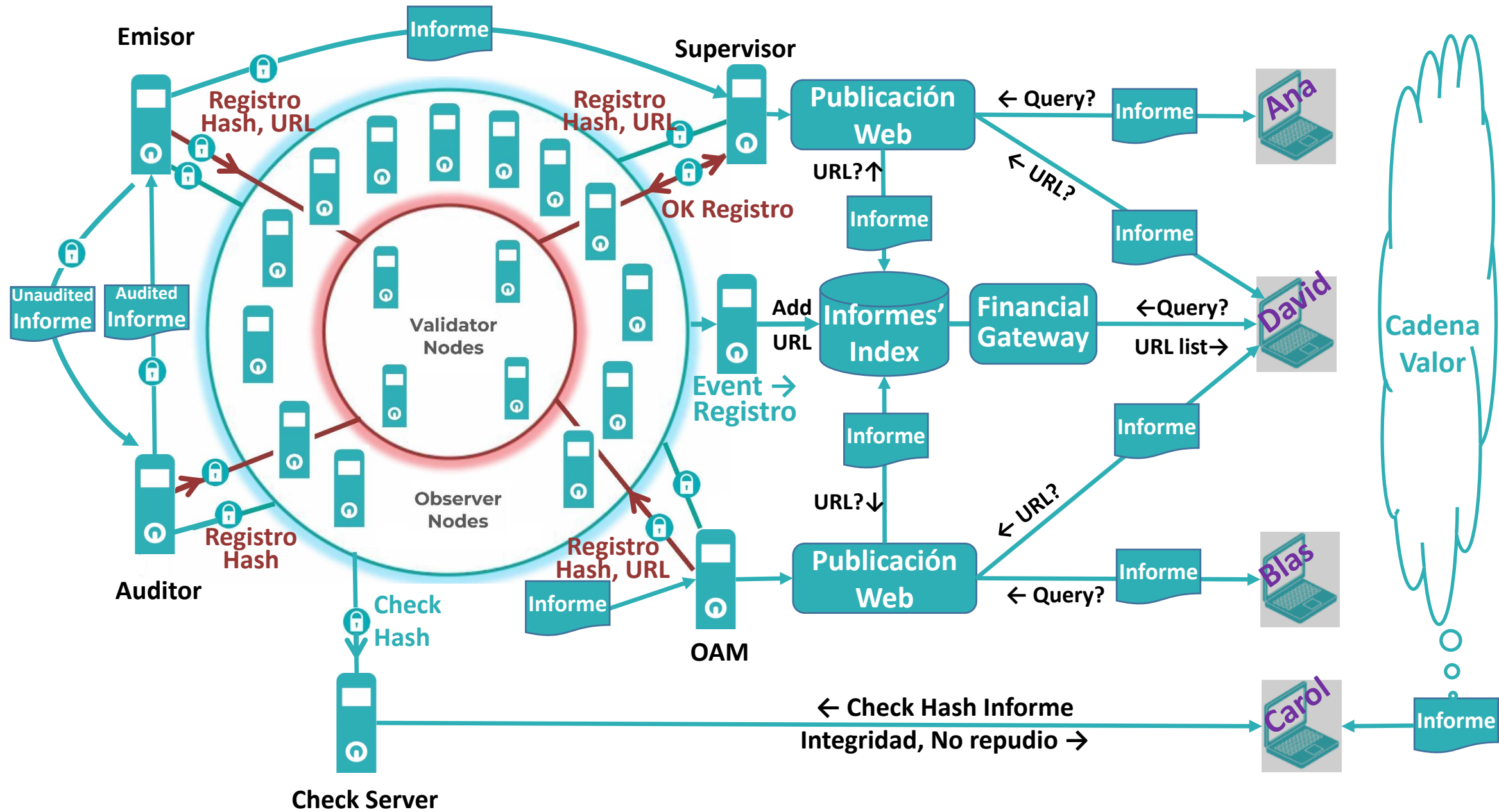
Total Profit:
\$4,135,015

Russian Trader	Profit
Andrey <u>Sarafanov</u>	\$1,094,435

Ukrainian Traders	Profit
Igor <u>Sabodakha</u>	\$69,120
Victoria <u>Vorochek</u>	\$108,637
Ivan <u>Olefir</u>	\$449,010
<u>Capyield</u>	\$832,967
TOTAL	\$1,459,734



EFTG 10: Blockchain spreads/broadcast simultaneously in ALL nodes: No insider trading by privileged access





ALASTRIA

XBRL | **ES**



Questions?

Read more at www.openfiling.info