chaincode

Hackathon Project: NodeNamer

Repository: New Project
Groups: Multiple
Topics: Lightning, Privacy

Overview

The lightning network protocol is implemented by various different projects: LND, Core Lightning, Eclair and LDK. Each implementation has their own default values for various public pieces of information, which can be used to fingerprint them. This information can be useful for an attacker looking to exploit vulnerabilities that are specific to one implementation (or version of an implementation). This information can also be used to make informed decisions about protocol upgrades and deprecating features.

Examples of default values:

- Feature bits that are distinct to an implementation, or a version of an implementation.
- Default routing policies such as fees and cltv delta.
- Default generated node aliases or RGB colors.

Project

Write a "NodeNamer" program that accepts a public graph as input and attempts to identify the implementation that each node is running.

Input format:

- A json description of the public graph.

Output a CSV of node IDs, implementation names and version numbers:

- Node ID (string): the hex-encoded pubkey of a node in the graph.
- Implementation (string): LND, CLN, ECLR, LDK or UNKNOWN.
- Version (string): the implementation version or UNKNOWN.

Stretch goals:

- Grafana dashboard with results..
- Mainnet deployment of monitoring.