OMNARETH

SOLUTION BRIEF

Telecom Fraud Prevention

Serve the subscriber. Not the account thief.

The challenge

A SIM swap hands over a customer's calls, texts and one-time passcodes. The ring behind it reuses agents, drop addresses and port destinations.

The solution

SIM swaps without proper ID, numbers ported out without the PIN, and financed phones shipped to drop addresses, often through one rogue agent. Omnareth checks every swap, port-out and device order against the account before it happens, and recognizes the agent or address behind it across accounts.

11
reference rules for telecom

75 ms
median fraud-checked, audited decision, lab test

8/8
reference scenario decisions correct and verified on chain

How it fits

ELEMENT	IN THIS SOLUTION	WHAT IT COVERS
The record	The account	Status, whether a SIM swap just happened, the addresses verified for the account and how many devices it may finance.
The events	Swaps, ports and orders	A SIM swap needs the PIN or photo ID, a port-out needs the port PIN, and financed devices ship only to a verified address, within the limit.
The memory	One agent, many accounts	Omnareth holds the agent, drop address and port destination responsible, never the customers, and recognizes them across accounts.

> **Evidence for auditors and regulators**
>
> Every decision stores the record, the request and the exact rules evaluated, with what was known about everyone involved, under a SHA-256 integrity hash anchored on the Omnareth chain. Edits, even covered-up ones, fail verification.

Next step: run the scenario with your team (`examples/telecom-fraud/demo.sh`, one command, every record verified), then scope a 90-day shadow-mode pilot. See the Pilot Program Guide.

© 2026 Habify Labs, Inc. All Rights Reserved. · Omnareth

What it stops

RULE	WHAT OMNARETH CHECKS	DECISION
Account Not Active	Suspended or closed accounts cannot swap SIMs, port out or order devices.	DENY
Devices Over Limit	An order may not finance more devices than the account allows.	DENY
Device Shipped to Unverified Address	Financed devices ship only to an address verified for the account.	DENY
Port-Out Soon After SIM Swap	Flag a port-out within 72 hours of a SIM swap.	FLAG
Port-Out Not Authorized	A number may be ported out only with the correct port-out PIN.	DENY
SIM Swap Without Strong Authentication	A SIM swap needs the account PIN or photo ID checked in person.	DENY
Agent or Address Across Accounts	Flag an agent, port destination or address implicated in denials on two or more other accounts in 24 hours.	FLAG
SIM Reuse	A SIM card belongs to one account; seen on another, it is likely in a fraudster's hands.	FLAG
Repeat Offender	Flag events involving an identity implicated in two or more denied events in the last 30 days.	FLAG
Blocked Identity	Identities blocked on the fraud watchlist may not take part in any subscriber event.	DENY
Watched Identity	Identities under watch may proceed only with a flag for review.	FLAG

The reference scenario

#	EVENT	DECISION	FRAUD CASES
1	Genuine SIM swap in store with photo ID	ALLOW	
2	SIM swap after "security questions" only, by a rogue agent	DENY	
3	Port-out without the PIN, same agent	DENY	Repeat offender case; agent watched
4	Five financed phones shipped to a drop address, same agent	DENY	One agent across three accounts: case opened
5	The genuine customer ports out two days after a SIM swap	FLAG	
6	Device order on a suspended account	DENY	
–	Analyst confirms the agent case	-	Agent blocked everywhere
–	A store manager verifies the drop address	-	
7	The agent orders again to the now "verified" address	DENY	
8	Genuine upgrade to the customer's own address	ALLOW	

© 2026 Habify Labs, Inc. All Rights Reserved. · Omnareth