



Inter-carrier billing system

In the entire telecom industry voice wholesale margins are under severe pressure. Prices for minutes are in decline, and the settlement process between carriers still requires an extensive amount of manual labor, making it highly prone to error as well as fraud.

Polygravity's blockchain-based inter-carrier billing system synchronizes carriers in real-time on every single minute that is routed through their respective network. As a result, manual labor for dispute management and billing is reduced to a minimum, and wholesale margins are increased significantly by saving cost, reducing risk, and increasing trust in the billing process.

Its proprietary next generation blockchain-based transaction system has no limitations to its scalability and requires no cryptocurrency to be used, making Polygravity ideal for enterprise use.

No more manual labour

Polygravity's inter-carrier billing solution effectively removes the problem of incongruent billing data between wholesale partners: As carriers are synchronized on every single minute, discrepancies in billing are detected and prevented in real-time and efforts for dispute mitigation can be reduced to a bare minimum.

Because the billing for each single minute gets legally confirmed in real-time by the wholesale partner, sending invoices to partners is no longer required.



Real-time revenue and cost confirmation

Because both carriers are synchronized in real-time, they both receive a confirmation of every minute that is routed. Like this, revenues and costs are instantly confirmed by the wholesale partner via a legally binding digital contract. This confirmation also serves to make the process to obtaining pre-financing of traffic smoother and quicker.



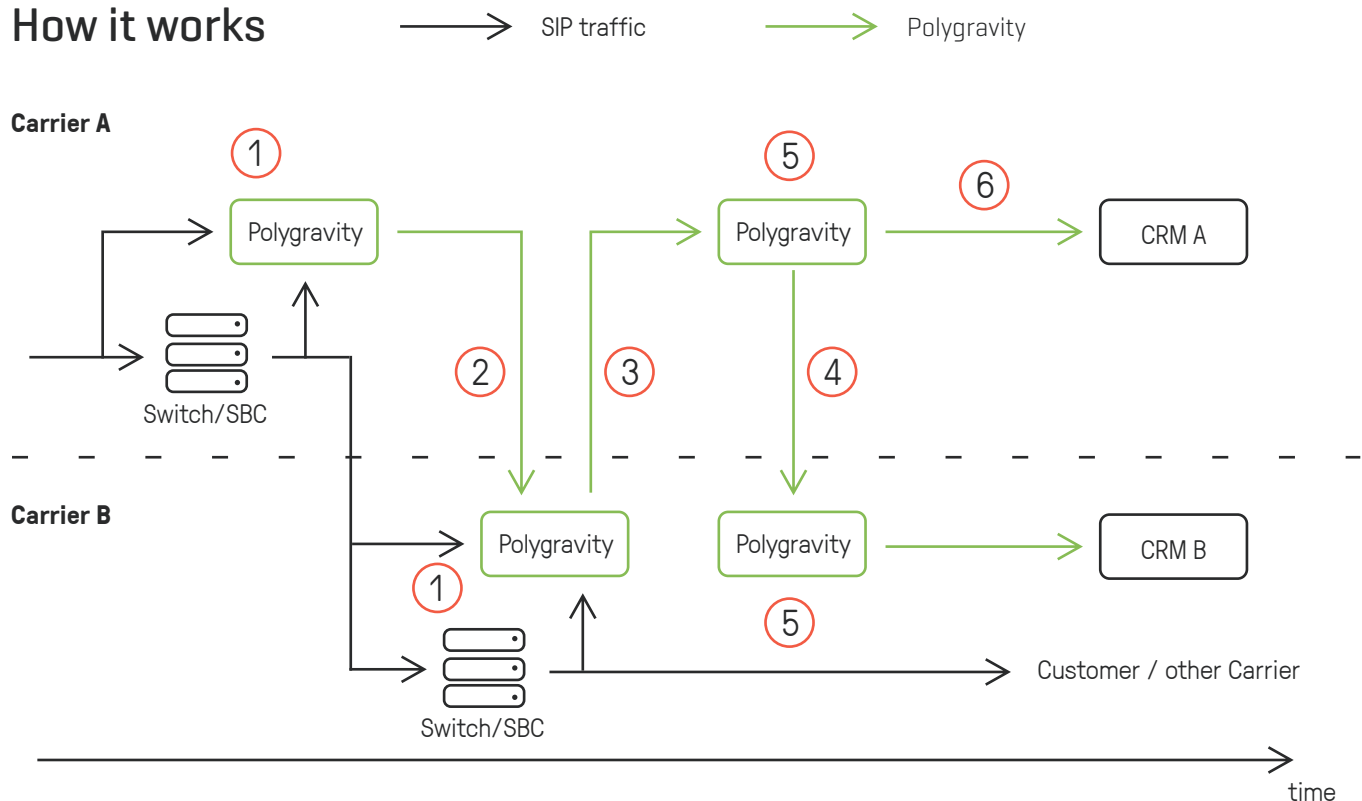
Reintroduction of trust in wholesale partners

Because billing data is stored in private, interlocked blockchains, billing data cannot be tampered with anymore. Hence, carriers are unable to claim that they did not agree to a certain rate, that they did not receive traffic, or change any information of past billing. As a result, there is no more need to trust the other wholesale partner on its honesty, should billing disputes arise.





How it works



1. SIP traffic is forked before and after the switch to a Polygravity component. Each carrier has full control over its own Polygravity component which creates its own CDRs and rates the traffic.
2. After the rating of a minute is completed, a digital contract containing the rating information of said minute is sent to the Polygravity component of carrier B.
3. If carrier B agrees to the parameters of the contract, it signs and sends it back.
4. If carrier B has agreed to the contract, carrier A will also sign it and send it back to B.
5. The counter-signed agreements are stored in a local blockchain on each carrier's side.
6. The confirmed billing data is pushed into the respective carrier's CRM.

Compatible with legacy systems

No existing systems must be replaced for Polygravity to be implemented, as our system acts as an **add-on** to infrastructure which is already deployed.

If you would like to understand how Polygravity can improve your inter-carrier settlement, feel free to reach out to our CEO at any point in time.

marc.wyss@polygravity.io | +49 (0) 176 700 660 2