

Metered Billing Implementation Checklist

Phase 1: Metric Selection & Pricing Strategy

- ☐ **Audit cost driver alignment:** Verify that your chosen usage unit directly correlates with your infrastructure costs and customer value.
- ☐ **Assess customer consumption patterns:** Analyze historical data to identify the spread between your lightest and heaviest users to ensure fair pricing tiers.
- ☐ **Determine your pricing framework:** Decide whether pure pay-as-you-go, hybrid subscription plus overage, or prepaid credit wallets fit your cash flow needs.
- ☐ **Standardize time units:** Establish standardized UTC time zones across all server logs, aggregation windows, and billing cycle dates.
- ☐ **Draft overage and cap policies:** Define explicit rules for what happens when a customer exceeds limits, such as throttling usage or applying tiered rates.

Phase 2: Technical Ingestion & Event Infrastructure

- ☐ **Design event payload structures:** Ensure every logged action includes a unique customer ID, event name, UTC timestamp, and relevant metadata.
- ☐ **Enforce idempotency keys:** Embed unique event ID strings in every payload to automatically drop duplicate network retries at the database level.
- ☐ **Set up resilient message queues:** Route raw telemetry streams through queue systems like Apache Kafka or AWS SQS to handle traffic spikes.
- ☐ **Configure dead-letter queues:** Build automated fallback mechanisms to capture, hold, and reprocess failed event payloads during outages.

- ☐ **Implement local buffer stores:** Maintain short-term storage on client applications to prevent unrecorded usage if ingestion servers go offline.

Phase 3: Aggregation & Rating Engine Setup

- ☐ **Select aggregation logic per metric:** Define whether each metric rolls up via sum totals, event counts, maximum peak values, or end-of-cycle snapshots.
- ☐ **Establish aggregation time windows:** Sync rollup intervals across daily, weekly, or monthly boundaries to match invoice generation schedules.
- ☐ **Configure rate cards:** Input base pricing, volume discount thresholds, and tier multipliers into your rating engine.
- ☐ **Test edge-case scenarios:** Simulate zero-usage cycles, sudden consumption spikes, late-arriving events, and account plan upgrades mid-cycle.
- ☐ **Run backfill dry runs:** Test replaying historical usage logs through the rating engine to verify charge calculations match expected totals.

Phase 4: Customer Experience & Transparency Tools

- ☐ **Build real-time usage dashboards:** Deploy customer-facing portals that show live consumption, remaining allowances, and projected end-of-month spend.
- ☐ **Set up automated threshold alerts:** Configure automated notifications to email users when their activity hits 50%, 80%, and 100% of plan limits.
- ☐ **Provide customer spending caps:** Allow account admins to set hard spending limits or auto-overflow toggles to give them budget control.
- ☐ **Publish clear billing documentation:** Write plain-language guides and FAQs explaining how units are measured, priced, and itemized on invoices.
- ☐ **Offer credit-wallet options:** Enable enterprise accounts to pre-purchase credit balances to accommodate strict corporate procurement processes.

Phase 5: Billing System Connection & Go-Live

- ☐ **Connect rating output to billing engines:** Link your aggregated data to platforms like PayPro Global or Stripe Billing for automated invoice generation.
- ☐ **Automate tax calculation:** Ensure localized sales tax, VAT, and GST rules apply automatically based on the customer's jurisdiction.
- ☐ **Set up dunning and payment retries:** Configure retry logic and email workflows for failed card charges on usage invoices.
- ☐ **Integrate accounting tools:** Sync rated invoice data into your core general ledger and financial systems for ASC 606 revenue recognition.
- ☐ **Establish audit reconciliation logs:** Keep immutable usage records to resolve potential customer invoice disputes with detailed event logs.