Technical overview · November 2026

Aether AI Whitepaper

Model access, agent workflows for companies, and the economics of a settlement window.

Aether AI brings together a model gateway and tools for agent workflows. Customers use models through an API and a web chat. Companies can commission work with measurable outcomes, such as resolving support requests, qualifying leads, or producing content.

> **Company and participation**
>
> Aether AI is developed by PT. Aether Teknologi Inovatif (Indonesia, business number 2196334). Yield and principal recovery are not guaranteed. You may lose all contributed capital.

Models
Access, token metering, and API charges.

→

Agents
Budget, execution, review, and acceptance.

→

Settlement
Receipts, costs, reserves, and participant shares.

How to read this paper

The technical sections explain the gateway and its records. The financial sections trace collected payments through costs to a position’s share.

Product and revenue streams **03**

Gateway architecture, API, and payment processing **04–07**

Company integration and agent workflows **08–12**

Working capital, positions, and settlement windows **13–18**

Risks, spending limits, and emergency pause **19–21**

Reporting and participation terms **22–23**

Sources and reference implementation **24**

Reading the evidence

Label	Meaning
Gateway implementation	Behavior described in the documentation and checked against code. Check the workspace for service availability.
Position terms	The version accepted when a position opens governs its eligibility and settlement.
Model scenario	An illustration using hypothetical amounts, volumes, and dates.
Supporting record	A record that can be checked against a log, an invoice, or a transaction ID on the stated network.

What the customer pays for

Model access and completed agent work have different units of account, costs, and payment schedules.

Service	What the customer receives	Margin drivers
Model gateway	Text responses in web chat or through the API, charged according to the model tariff and measured usage.	Capacity prices, the mix of input and output tokens, fees, and utilization.
Agent workflows	An agreed deliverable such as a resolved case, a qualified lead, or accepted content.	Paid volume, model and tool costs, human review, rework, refunds, and collection timing.

Model gateway

The platform sources external model capacity and uses its own technology for routing, metering, and integration. Customers can compare enabled models, their published prices, and their suitability for a workload.

Agent workflows

A company agrees on volume, acceptance criteria, and the unit price. Receipts for accepted work cover expenses. When costs precede payment, working capital can cover eligible expenses within approved funding rules.

> **Accounting by service**
>
> An API top-up credits the balance used for model calls. Customer payments for agent work are reconciled against the corresponding batch and settlement window.

System boundaries

The workspace manages access, the gateway handles requests, and records link activity to its cost.

Client
Workspace session or application key.

→

Gateway
Check the request, model, and balance.

→

Model
Submit the call to a compute provider.

→

Ledger
Record charges and remaining balance.

Component	Inputs	Outputs
Workspace	Session, key action, or model selection.	Access controls and charge history.
Gateway	Bearer key, model ID, and messages.	Structured response, token counts, or error.
Payment adapter	Invoice and transfer notification.	Reconciliation status and credit for the invoice purpose.
Task ledger	Approved budget, operations, and receipts.	Recorded expenses, collections, and batch margin.

Which record supports each event

A response ID helps reconcile a model call. An invoice number connects payment to the account, and a transaction ID identifies the transfer. A receipt for agent work also needs to be matched to the customer invoice and the settlement window.

Model listings and prices refresh daily at 03:10 UTC. Studio queues supported image and video jobs after quoting and reserving API credit.

API requests

An application uses its own key, selects an enabled model, and stores the response identifiers needed for reconciliation.

1. List enabled model IDs through `GET /api/v1/models`.
2. Submit the model and messages to `POST /api/v1/chat/completions`.
3. Log the response ID, input and output token counts, and the charge.

```
POST /api/v1/chat/completions
Authorization: Bearer $AETHER_API_KEY
Content-Type: application/json

{"model":"MODEL_ID_FROM_CATALOG","messages":[
  {"role":"user","content":"Summarize this task."}
],"max_tokens":128}
```

Request

1–20 messages. Request body up to 10,000 bytes.

Response

A single JSON response. The interface allows up to 1,024 output tokens.

Files and generation

GET /api/v1/generations?models=1 lists Studio models; POST /api/v1/generations quotes and submits jobs; GET returns status. POST /api/v1/files accepts private uploads up to 2 MB. These are separate Aether AI interfaces.

Gateway responses

For an authorization error, check the key. For insufficient credit, check the available balance and request size. For an upstream failure, record the time and response ID if one was issued, then reconcile charges before retrying.

Current fields and error responses are described in the API reference.

Reserve, charge, and reconciliation

The gateway reserves estimated cost, validates the response, and bills measured usage up to the reservation.

Validate
Key, tariff, model, and payload.

→

Reserve
Temporary hold against credit.

→

Meter
Token counts and response cost.

→

Settle
Capture the charge and release the rest.

Example charge for one request

Assume a hypothetical tariff of USD 1 per million input tokens and USD 2 per million output tokens. The request uses 750 input and 250 output tokens.

Item	Calculation	USD
Input	750 ÷ 1,000,000 × 1	0.00075
Output	250 ÷ 1,000,000 × 2	0.00050
Charge	Input + output	0.00125

If the reservation was USD 0.00300, the gateway releases USD 0.00175 after billing. When a provider fails to return the metering data required for a billable response, the gateway releases the reservation under its processing rules.

> **Reconciliation fields**
>
> Response ID, UTC timestamp, model, input and output tariffs, token counts, and charge record. New chats persist in the account; owner checks protect files. Chat accepts three files of 2 MB each and uses up to 5,000 text characters per document.

See usage and balances.

Payment intake and reconciliation

An invoice connects the receiving address, network, asset, amount, and expiry to a payment purpose.

1. Select the product and network, open an invoice, and verify the payment details before sending.
2. The payment adapter verifies the processor notification signature and matches the transfer details to the invoice.
3. Wait for the required confirmations. The network, transaction ID, and transfer position help prevent duplicate credits.
4. Post the credit to the invoice’s intended account balance or position. Route ambiguous transfers for reconciliation.

Exception	Handling
Different network or asset	Keep the transfer details. Recovery depends on the payment route.
Received amount is too low	Check the fee and net amount. Send the invoice number and transaction ID to support.
Invoice has expired	Check the transfer time and the rules for late payments.
Repeated notification	Check the existing record and prevent duplicate credit for the same transfer.

> **Two checks**
>
> The explorer shows the transfer on the selected network. The workspace shows which invoice it was matched to and how the payment was credited.

API and pool funding and history have separate sections. The wallet supports eligible balance transfers; test credit cannot be withdrawn. Pool contributions and payouts use USDT.

See the payment status guide.

Starting a company integration

A pilot starts with one queue, a defined deliverable, and a way to review quality.

Choose a process
Volume, inputs, and exceptions.

→

Specify
Unit price and acceptance criteria.

→

Run a pilot
Limited sample and review.

→

Review results
Compare quality, cost, and workload.

Pilot question	What to agree on
Which tasks fit?	Example inputs and expected outputs, and cases requiring a specialist.
How is quality measured?	Sampling, acceptance rules, and how to count rework.
What can the agent do?	Approved sources and tools, permissions, and spending limits.
When is work invoiced?	Acceptance event, billable unit, timing, and dispute handling.
Who handles exceptions?	Owners for the queue, acceptance checks, and financial reconciliation.

Record current handling costs and time for a comparable set of tasks before launch. After the pilot, compare cost per accepted outcome and the share of cases handed to specialists.

Integration requests can be submitted through the business services page.

Resolving support requests

Measure a support batch by accepted resolutions, repeat contacts, and reasons for escalation.

Handling process

1. Classify the request and select an approved source for the answer.
2. Prepare a resolution and check it against the company’s current policy.
3. Escalate disputed cases to a specialist. Record the reason and the case status.
4. After review, record whether the case was accepted on first pass, accepted after rework, or not accepted.

Model sample	Cases	Treatment
Accepted on first pass	86	Counts toward the first-pass acceptance numerator.
Accepted after rework	9	Counts toward accepted volume. Rework counts toward costs.
Rejected or escalated	5	Track separately. Billing follows the batch criteria.
Total reviewed	100	First-pass acceptance is 86%. Final acceptance is 95%.

> **Model scenario**
>
> At an agreed USD 8 per accepted case, 95 accepted cases produce an invoice for USD 760. The amount enters the window margin when payment is received.

To verify a real batch, review the case outcomes, agreed price, invoice, and evidence of payment.

Qualifying leads in a CRM

A completed unit is a contact that meets company criteria and is assigned to the responsible person with the required fields.

Check	Example rule	Supporting record
Completeness	Required contact method and referral source are present.	Completed fields and reference to the original request.
Duplicate	The contact or company already has a CRM record.	Existing record and the decision on the duplicate.
Eligibility	Need, customer type, and agreed next action are recorded.	Completed criteria and acceptance status.
Assignment	The right team or employee receives the lead.	Assignment history in the CRM.

> **Model scenario**
>
> Of 200 inbound records, the customer accepts 150. Another 30 are duplicates or fail the criteria. Specialists review the remaining 20. A hypothetical USD 5 per accepted lead produces a USD 750 invoice.

Interpreting the result

An accepted lead meets the agreed criteria. Sales conversion is tracked separately after assignment. Pilot terms identify who confirms quality and the deadline for disputing a record.

Reconcile the exported statuses, qualification rules, calculation of accepted units, and invoice. Public case studies can use anonymized aggregates.

Content and quality control

Measure accuracy, conformity to the brief, and the amount of editorial work needed.

Brief
Format, sources, and requirements.
→
Draft
Content with source references.
→
Review
Facts, style, and constraints.
→
Accept
Final status and version.

Criterion	How to check
Accuracy	Match product details, figures, and claims to their sources.
Completeness	Check fields, length, language, structure, and required versions.
Rework	Distinguish minor edits from a rewrite. Link the work to the task and the reason.
Publication	Record the version approved by the responsible editor.

> **Model scenario**
>
> Of 40 items, the customer accepts 27 on first pass and eight after rework. Five are rejected. At a hypothetical USD 20 per accepted item, the invoice is USD 700. First-pass acceptance is 67.5%.

Assign review and rework costs under the project accounting rules. Compare batches using the same denominator and definition of rework.

Unit economics of accepted work

Cost per accepted unit includes the work required for all items in the batch, including rejected items.

Support batch from page 09

Item	USD	Explanation
Collected payment	760	95 accepted cases × USD 8. The invoice is paid in this example.
Models and compute	−120	Spend across all 100 cases.
Review and rework	−62	Reviewer time and repeated processing.
Fees and adjustments	−18	Payment fees and batch adjustments.
Margin before reserves	560	760 − 120 − 62 − 18.

Cost per accepted case

USD 200 in expenses ÷ 95 accepted cases ≈ USD 2.11.

Margin before reserves

USD 560 ÷ USD 760 in collected payment ≈ 73.68% in this example.

Account for changes in task mix, model costs, compute utilization, and review costs when comparing periods. A participant’s position reaches break-even under its own settlement terms.

> **Using this example**
>
> This is one hypothetical paid batch. Calculating a position’s share requires reconciliation of the full window and its participation terms.

The gap between costs and payment

Models, compute, and review incur costs during execution. Customers pay according to their invoice terms.

Day 1
Approve the task budget.

→

Days 2–18
Perform the work and record costs.

→

Day 22
Customer accepts delivery. Issue the invoice.

→

Day 30
Receive payment and reconcile it.

Dates are illustrative. Actual timing depends on acceptance and the contract. When payment is delayed, actual costs remain in the ledger and the invoice remains open until collection or adjustment.

Event	What changed
Budget approved	Spending limits and permitted cost categories are in place.
Funds reserved	A portion of the budget is committed to an open obligation.
Expense posted	The reservation is replaced by the supported expense or adjusted.
Deliverable accepted	The batch rules allow invoicing.
Payment received	The amount enters the window reconciliation alongside expenses.

> **Funding boundaries**
>
> Funding covers the approved budget and remains linked to the task. Distribution depends on collected receipts, the reserve, and position terms.

Positions and access

The public catalog describes capital ranges and access rules. The workspace displays the terms that apply when a position opens.

Position	Size, USDT	Term and return conditions
Node Spark	10–100	No fixed end date. Principal can be requested under the position terms.
Node Core	100–1,000	90 days. Early closure can be requested once break-even is confirmed.
Node Adaptive	1,000–10,000	60 days. Early closure can be requested once break-even is confirmed.
Node Frontier	10,000+	Individual terms. The public outline lists 60 days with quarterly review.

Access rules

- Core has a capacity limit. The workspace shows how many places are available.
- Adaptive opens Thursday at 20:00 UTC until Friday at 08:00 UTC, or by a dedicated access code.
- The Frontier description lists an invitation or higher Trust Score. Check the workspace for eligibility.

Position records

Opening a position links the agreed terms, invoice, amount, network, and funding status. Early closure of Core or Adaptive requires a confirmed break-even record and a closure request. At maturity, request closure in your workspace. Track the request and payout in Positions and Payouts. Your position terms specify the process and timing for returning principal.

See pool plans and terms.

From collection to distributable base

Reconcile collected receipts, attributable costs, and the reserve under the rules of the period.

```
Margin before reserves = collected payment − costs
Distributable base = max(0, margin before reserves − reserve)
Position share = allocation under the position terms
Total = margin share + applicable turnover reward
```

Component	Meaning
Collected payment	Customer receipts cleared for the period. Track unpaid invoices separately.
Costs	Models and compute, infrastructure, review, rework, fees, refunds, and related adjustments.
Reserve	Amounts held for disputes and related future costs. In the reference implementation, the reserve is limited to the positive margin.
Distributable base	Positive balance available for allocation under applicable terms.

The public calculator allocates a proportional share of capital in a model pool. The accepted position terms govern actual allocation and priority.

> **Closing a window**
>
> Record the period, applied rules, settlement calculation, and reference. Post late receipts, costs, and refunds as adjustments linked to the original entries.

See the settlement methodology and the projected share calculator.

A 1,000 USDT example

This 30-day model window uses the assumptions in the public methodology. The customer has paid for completed work.

Movement of funds	USDT	Meaning
Collected payment	1,000	Cleared payment matched to the customer invoice.
Models and infrastructure	−420	Model capacity and tools used.
Review and rework	−180	Review and correction work.
Fees and refunds	−100	Processing fees and refunds.
Margin before reserves	300	Balance after direct costs.
Reserve	−60	Amounts held for disputes and related costs.
Distributable base	240	Balance after the reserve.



Of 1,000 USDT collected, 700 covers costs, 60 is held in reserve, 120 is allocated to participants, and 120 remains with the operator.

A 500 USDT position represents 2.5% of a 20,000 USDT pool. A proportional share of a 120 USDT participant allocation equals **3 USDT**, or **0.6% for the window**. The separate turnover reward is zero in this example.

The operator share covers acceptance coordination and additional review expenses. Direct costs already deducted from margin are recorded in separate categories.

Delays, reserves, and losses

Identical costs can produce different window results. The four model scenarios below are in USDT.

Item	Higher payment	Base case	Full margin held	Partial payment delay
Collected	1,360	1,000	760	460
Costs	700	700	700	700
Margin before reserves	660	300	60	−240
Reserve held	60	60	60	0
Distributable base	600	240	0	0
Share of a 500 USDT position	7.50	3.00	0	0

The example uses 20,000 USDT of pool capital, a participant allocation of 50% of the base, and proportional distribution. The separate turnover reward is zero.

What happens to the unpaid invoice

In the delay scenario, a portion of the invoice remains open. When the remaining 540 USDT arrives, it is recognized under the period rules and linked to the original invoice. Disputed amounts and their status remain visible until the dispute is resolved.

Accounting for a negative margin

Record the loss in the window reconciliation. Position terms govern the loss order and its effect on capital. In the reference policy, Frontier absorbs losses first.

> **Projected range in this example**
>
> For a 500 USDT position, these scenarios produce 0–1.5% for the window. Actual amounts depend on final reconciliation.

Turnover reward and payout

A turnover reward is a separate component when the position terms provide for it.

Margin share

Depends on the window base and allocation rules. In the preceding example, the share is 3 USDT.

Turnover

Uses active capital and a separate rate for the agreed period.

Example rule from the reference implementation

Model position state	Active capital	Window reward
Before release	500 USDT	5.00 USDT at a hypothetical 1% for the window.
Released, still in use	500 USDT	2.50 USDT at half the example rate.
Capital fully withdrawn	0 USDT	0.00 USDT for the following window.

The calculator takes the turnover reward as a separate input with a default of zero. For display, the workspace can generate a forecast within the configured range for the date. The final amount for a position is approved with a reconciliation reference.

From payout request to confirmation

A payout is linked to an amount, network, and recipient address. When submission has an ambiguous outcome, reconcile with the processor using the original request ID. After confirmation, the record includes a transaction ID.

Batch dates are posted in the redemption register after approval. Participants can check their request status in the workspace.

Risk register

Controls apply within their operational scope. Provider failures, customer delays, and payment disruptions can affect results.

Risk	Potential impact	Control and evidence
Model provider	Unavailability, tariff changes, or invalid responses.	Availability checks, recorded costs, and error metrics.
Deliverable quality	Rework, lower accepted volume, or customer rejection.	Acceptance criteria, sampling, and reviewer decisions.
Customer nonpayment	Costs are incurred while receipts are delayed or absent.	Invoice register, exposure limits, and tracking of late payments and adjustments.
Transfers and liquidity	Wrong addresses or networks, late confirmation, or insufficient payout funds.	Invoice checks, transfer IDs, and payment balance checks.
Access and privacy	API credit spent with a leaked key or sensitive data passed upstream.	One key per integration, revocation, and data minimization.
Position capital	Zero distribution for a window or a reduction in principal.	Participation terms, loss reconciliation, reserves, and reporting.

Indicators to monitor

Track collection time, rework costs, customer concentration, and outstanding commitments. Changes in these indicators help explain the result for a window.

See risk disclosures for further detail.

Spending limits and approvals

Set a task budget, a per-operation limit, approved services, and a deadline before execution. Link each reserve to an operation.

```
Available task budget = approved budget
                      − posted expenses
                      − open commitments
```

Control	Model value, USD	Check
Approved budget	40	Overall limit for the task.
Posted expenses	18	Confirmed operations.
Open commitments	9	Reserves for operations in progress.
Available balance	13	40 − 18 − 9.
Per-operation limit	10	Compare against the proposed purchase.

> **A USD 12 request**
>
> The remaining task balance of USD 13 covers the request. The amount exceeds the per-operation limit by USD 2. Approve an exception or reduce the amount before continuing.

Decision record

Record the task and operation IDs, amount, reason, date, exception period, and the approval role (spending controller or on-call operator). A posted expense replaces the reservation. On rejection or cancellation, release the reserve under the applicable procedure.

See spend authorization for details.

Emergency pause and recovery

The proposed protocol suspends new activity in the affected area after a serious trigger is confirmed.

Detect
Threshold, UTC time, and response owner.

→

Pause
Restrict affected operations.

→

Reconcile
Check open requests and payments.

→

Resume
Restart with a limited set of operations.

Event	First action	Check before restarting
Model provider tariff change	Recalculate open task reserves at the new tariffs. If the increase exceeds the threshold, pause approval of new budgets.	Verify the tariff source and applicable threshold.
Provider or processor failure	Pause new requests on the affected route and collect statuses for accepted requests.	Reconcile responses, charges, transfers, and open reserves.
Ledger discrepancy	Isolate the affected records and pause new commitments.	Match ledger entries to supporting documents.
Suspected key exposure	Revoke the key and check charges associated with it.	Replace the key and reconcile activity before revocation.

Incident closeout

The owner records the impact period, affected operations, ambiguous states, corrections, and recovery criteria. Thresholds and the scope of automatic actions are approved for each service and network.

See the support guide for contact procedures.

How to verify a window

A verifiable report links each aggregate to a period, a definition, and supporting records.

What to disclose	How to verify
Period and batch scope	UTC start and end, included batches, currency, and report revision.
First-pass acceptance	Count accepted without rework ÷ reviewed count. Show both figures.
Collections and receivables	Match cleared payments to invoices and show unpaid amounts separately.
Costs and reserves	Reconcile models, review, fees, and refunds. Document the reason for each reserve.
Position payout	Position terms, amount, reconciliation reference, and the transaction ID after confirmation.

Example position statement

The page 16 example could show a 30-day period, 500 USDT of capital, a base of 240 USDT, a margin share of 3 USDT, no turnover reward, and a total of 3 USDT. A production statement also needs a reconciliation reference and status.

> **Public figures**
>
> Period totals and cumulative amounts answer different questions. Verify an individual payout by amount, network, and transaction ID. Reconcile the components of cumulative totals separately.

On-chain verification

Window reporting is available on the Settlement windows page. See the on-chain verification guide. Open the transfer by transaction ID in TRONSCAN or BscScan and match its network, asset, addresses, and amount to the invoice or payout request.

Obligations and access to records

Gateway terms, company work orders, and position terms govern different obligations.

Document	Scope
Gateway terms	Account access, models, keys, tariffs, and prepaid balance charges.
Company pilot terms	Deliverables, acceptance, timing, price, and treatment of disputed work.
Position terms	Term, loss treatment, settlement, and return of capital.
SLA	Availability and support targets for the agreed scope once signed.

Accounting and transfer verification

Aether AI is operated by PT. Aether Teknologi Inovatif, Indonesia; business number 2196334. Registered address: JALAN KH. HASYIM ASHARI NOMOR 3 C 2, JAKARTA PUSAT. Company profile.

The workspace records gateway and pool activity separately. An invoice or payout request identifies the transfer purpose. Verification uses the network, asset, amount and transaction ID. Funds are managed through the operator’s payment system.

Exit and opting-out rules: aetheriop.com/transparency#exit. Check the terms saved for your position.

Gateway service targets

The published draft SLA proposes 99.9% availability per UTC calendar month and a 24/7 route for critical incidents. A signed agreement governs coverage, measurement, and remedies.

See legal information, pool participation terms, and the privacy policy. Current checks are available on the service status page.

Glossary and sources

The technical documents and reference implementation show how to reproduce the formulas and review the scope of the system.

Term	Meaning
Realized margin	Collected payment less actual attributable costs and adjustments.
Distributable base	Positive margin that remains after holding the reserve.
Position break-even	Confirmation that the threshold for early return of capital under the position terms has been reached.
Request reserve	Temporary hold against the API balance until the call settles.
Window reserve	A portion of positive margin held under the period rules.

Platform documentation

- Settlement methodology and window calculator.
- API reference, task ledger, and participant share.
- Architecture overview, risk protocol, and draft SLA.

Reference implementation

Aether Protocol v0.1.0 contains a gateway prototype, ledger schema, calculators, and tests for margin, reserves, priority, and turnover rewards. The scenarios can be reproduced locally. Verify live payments and position settlements against their supporting records.

The founders are Ronaldo Cristover and Kadek Adi Setiawan. Team and biographies. Project code: @aetheriop. The code does not establish revenue or solvency.