

MCP SERVER

NO CODE

CLOUD HOSTED

# Bandwidth MCP for AI Agents

Manage cloud communications and audit call logs via natural language queries

Bandwidth lets your AI client manage complex, enterprise-grade communications—from sending SMS alerts to auditing global voice calls. Your agent instantly lists all phone numbers in service, tracks message delivery status, and pulls detailed call logs without you ever touching a technical dashboard.

**A+** Quality Score 100/100

cloud-communications

telecom

sms-api

call-logs

messaging-infrastructure



# The connectivity layer between AI and the world's software.



Vinkius sits between AI and every application. All communication passes through Vinkius Cloud via the Model Context Protocol (MCP) — with governance, observability, and security at every layer.

# Your AI Connections Run Through Vinkius Cloud

The world's largest  
managed MCP catalog

Vinkius is the connectivity layer where AI connects to the software your business already runs. We handle the hosting, the security, the credentials, the uptime — you get agents that actually do things.

We operate the world's largest managed MCP catalog. Major SaaS platforms, CRMs, databases, and cloud providers — running, monitored, production-ready. This MCP server is hosted and maintained by the Vinkius Cloud for AI Agents.

*The agent doesn't manage credentials, doesn't manage uptime, doesn't manage security. Vinkius does.*

— Architecture principle

---

## Four Pillars of the Vinkius Runtime

### 01 — Security by design

Credentials stay encrypted at rest via AES-256. The AI agent never touches raw keys — they're injected into a sandboxed V8 isolate at runtime. Actions are logged, and connections have an emergency kill switch.

### 03 — Deterministic observability

Eight immutable metrics per endpoint: request volume, p95 latency, error rate, active connections, cost attribution. A live payload feed logs every tool call with mutation detection.

### 02 — Built on MCP Fusion

This MCP server was built with **MCP Fusion**, the open-source framework (Apache 2.0) that powers the entire Vinkius catalog. Schema-as-firewall strips undeclared fields, compiled PII redaction runs at zero overhead, and cryptographic lockfiles produce git-diffable audit trails.

### 04 — Autonomous operations

Servers are deployed, monitored, and patched autonomously. New capabilities and security patches ship weekly. Zero-downtime deployments ensure continuous availability across all managed MCP servers.

**AES-256**

Encryption at rest

**Ed25519**

PKI vault signatures

**24h TTL**

Ephemeral session keys

**V8 Isolate**

Sandboxed execution

---

## One Token. Instant Access.

Every MCP server on Vinkius is accessed through a **Connection Token**. Tokens are generated in the cloud dashboard and produce a unique MCP endpoint URL. Paste this URL into any MCP-compatible client — no SDK required.

A single token can serve **multiple AI clients simultaneously**, or you can issue separate tokens per client for granular access control. Each token tracks its own request count, last activity timestamp, and can be individually enabled or revoked.

MCP ENDPOINT

`https://edge.vinkius.com/{token}/mcp`

Claude



Cursor



VS Code



Windsurf



Grok



Gemini

---

## Security Is the Architecture

Security in Vinkius is not a feature — it's the foundation of the runtime. The gateway enforces multiple independent protection layers between AI agents and third-party APIs.

### 01 — Ed25519 PKI Vault

Every workspace has an Ed25519 Master Key. Session keys are generated ephemerally (24h TTL) and signed by the Master Key. Credentials never leave the vault boundary.

### 02 — V8 Isolate Sandboxing

Tool code runs inside isolated-vm V8 isolates with 64 MB memory caps and per-request timeouts. No filesystem access, no network access except through the SSRF-guarded fetch bridge.

**03 — SSRF Guard**

All outbound HTTP requests are DNS-resolved and validated before execution. Private IP ranges (10.x, 172.16-31.x, 192.168.x, AWS metadata 169.254.x) are blocked at the network layer.

**05 — Cryptographic Audit Trail**

Every request is signed into a SHA-256 hash chain with Ed25519 signatures. Events form a tamper-proof, SIEM-exportable forensic record.

**04 — DLP & PII Redaction**

A ResponseGuard pipeline intercepts every tool response. Configurable redaction patterns strip sensitive fields (emails, SSNs, card numbers) before data reaches the AI agent.

**06 — Honeypot Trap System**

Phantom credentials are injected into isolated environments. If a honeypot is used outside Vinkius infrastructure, the server is quarantined instantly.

## Emergency Kill Switch

EU AI Act Art. 14(1)  
Compliant

The kill switch is an **emergency halt** mechanism — not a simple toggle. When triggered, it executes three actions atomically:

**01 — Server deactivated**

The MCP server is immediately taken offline across the entire cluster.

**02 — All tokens revoked**

Every connection token is invalidated. Total lockout — reconnection blocked until new tokens are issued.

**03 — WebSocket connections killed**

Active connections terminated via Redis pubsub broadcast. Propagates to every runtime node in the cluster.

## Full Visibility. Zero Guesswork.

The Vinkius cloud dashboard includes a full MCP Governance suite — real-time analytics and security controls for production AI operations.

**Control Plane**

KPI dashboard with request volume, latency, success rate, token consumption, and AI-generated operational briefings.

**FinOps**

Cost tracking per tool, payload compression savings, budget optimization signals, and consumption trends.

**Firewall & DLP**

PII redaction activity, sensitive data protection counters, and security event timeline.

**Agent Activity**

Which AI clients are connecting, how often, and what they're doing — real-time session tracking.

**Tool Health**

Slowest and most error-prone tools, with actionable root-cause insights and performance baselines.

**Incident Log**

Error trends, failure rates, status-code breakdowns, and forensic audit trail access.

Get started at [cloud.vinkius.com](https://cloud.vinkius.com) — connect your AI agent in under 60 seconds.

# Bandwidth MCP

9 tools available

Cloud-hosted on Vinkius

Need to handle cloud communications but hate the dashboards? This MCP gives your AI client direct access to Bandwidth's entire communication infrastructure. Instead of clicking through multiple tabs just to audit a single call or check if an SMS went through, you talk to your agent. It acts like a real-time telecom operator for your workflow.

Whether you run secure alert systems or manage global voice lines, your agent can pull everything together. You'll instantly see all active phone numbers and get detailed reports on message history. Need to know what happened with that call last week? Your agent pulls the full call log right up front. This puts complex telecom management into a natural conversation flow. Connect this MCP through Vinkius, and you give your AI client immediate oversight of every part of your messaging and voice service.

---

## Core Capabilities

### 01 — Manage account details

Retrieve core information about the Bandwidth account to verify credentials and general usage parameters.

### 03 — Monitor phone line inventory

List all currently active phone numbers in service across the entire account for number oversight.

### 05 — List communication assets

Get inventories of configured applications or list recent activity like calls and messages for quick auditing.

### 02 — Audit message delivery and history

Check recent SMS activity, view detailed message statuses, and retrieve full communication records.

### 04 — Manage voice calls and conferences

Start outbound voice calls, monitor active conference sessions, and retrieve detailed state information on specific call attempts.

# One Click on Vinkius — From Prompt to Execution

Available at [vinkius.com/mcp/bandwidth-alternative](https://vinkius.com/mcp/bandwidth-alternative) — connect your AI agent in three steps.

- 01 Subscribe to this MCP in Vinkius.
- 02 Enter your Bandwidth Account ID, Username, and API Token into your client configuration.
- 03 Your AI agent uses the credentials to access communication data through any compatible client.

The bottom line is that you connect your existing cloud communications platform using simple tokens, letting your AI agent do the heavy lifting of querying all your telecom data.

---

## Built For

This MCP is essential for Ops Managers who are tired of jumping between complex dashboards just to send a quick alert. Customer Success Teams need reliable ways to verify message delivery and audit call logs without needing manual dashboard logins. Developers rely on it to rapidly test messaging pipelines, while Business Owners gain the ability to automate entire telecom queries.

### Operations Manager

Uses this MCP to monitor overall communication usage patterns and trigger quick SMS alerts directly from their workflow.

### Customer Success Team Lead

Verifies message delivery statuses or audits call logs when a customer calls with a specific billing or service question.

### Software Developer

Performs rapid, automated audits of communication project configurations and tests new messaging pipelines using natural language prompts.

---

## What Changes When You Connect

- 01 You can instantly send SMS alerts or initiate calls using the `send_sms` and `make_call` tools, automating crucial customer outreach without manual API calls.

- 
- 02 Stop losing time checking dashboards. Your agent pulls full communication history by listing messages ( `list_messages` ) and recent call logs ( `list_calls` ), giving you immediate answers.

---

  - 03 The MCP allows deep auditing of your setup using `list_applications` and `get_account_info` , ensuring that your communications logic is always correctly applied.

---

  - 04 You gain real-time operational control by monitoring active conferences via the `list_conferences` tool, knowing exactly who is connected at any moment.

---

  - 05 Quickly verify which lines are live. The ability to list phone numbers ( `list_phone_numbers` ) gives Ops Managers immediate oversight of their entire telecom asset.
- 

---

## Real-World Applications

### Auditing a failed deployment

A developer needs to know why an alert system failed. Instead of checking logs across five different tools, they ask the agent. The agent uses `list_calls` and `get_call_state` to pinpoint whether the issue was line provisioning or the outbound call attempt itself.

### Running pre-deployment checks

Before launching a new messaging feature, a developer uses the agent to run checks. It executes `list_applications` and reviews the configured logic to ensure no unintended communication gaps exist in the platform setup.

### Handling a service outage report

An Ops Manager needs to know which lines are affected. They prompt the agent, which uses `list_phone_numbers` and cross-references it with `get_account_info` to provide a single, comprehensive status report across all services.

### Checking participant attendance for a meeting

A customer success representative needs to confirm who is on a critical call. They ask the agent, which then uses `list_conferences` to provide an immediate headcount and list of participants without requiring manual admin access.

---

# Patterns to Avoid

---

## Treating communication data as simple records

### ✗ AVOID

Asking the AI agent simply to 'show me my calls' results in a massive, unformatted dump of raw metadata that is impossible to read and parse for actionable insights.

### ✓ INSTEAD

To get useful information, prompt the agent specifically. For example, ask it to use ``list_calls`` and then immediately follow up by asking it to 'filter this list for failed calls last week' to narrow down the scope.

---

## Ignoring account limitations

### ✗ AVOID

Attempting to send a message without knowing if the target number is active or which application handles SMS fails because the agent doesn't know the current setup.

### ✓ INSTEAD

Always start by calling ``get_account_info`` and then use ``list_phone_numbers`` first. This verifies your account status and ensures you are using a correctly configured communication line for the task.

---

## Overlooking call state details

### ✗ AVOID

Only knowing that a call happened, but not why it failed or what the final hang-up code was. This leaves the team guessing about the root cause.

### ✓ INSTEAD

Don't just rely on simple lists. If you suspect an issue, use ``get_call_state`` on the specific Call ID to get the full lifecycle details and metadata needed for troubleshooting.

---

## The Right Fit

Use this MCP if your communication process involves auditing logs, managing multiple phone lines, or automating alerts. It's perfect when you need a single source of truth for everything related to voice and SMS infrastructure—think call state tracking or checking number inventory. Don't use it if all you need is simple data storage; this isn't a database. If your primary need is simply logging text messages without any associated metadata (like sender/receiver status), a generic messaging API might be enough. But if you need to track who was on the line, check application configurations, or verify call outcomes, Bandwidth provides the necessary depth.

---

## Bandwidth MCP for AI Agents: Solving Telecom Audit Pain Points

Right now, auditing your cloud communications is a nightmare. You have to log into the main dashboard, pull reports on calls, then switch over to an SMS portal to check message delivery status, and finally jump to another tab just to see which phone numbers are even active. It's slow, it's manual, and you almost always miss something critical in the cross-referencing.

With this MCP, your agent handles all that switching for you. You simply ask: 'What was the status of our outbound calls last week?' The agent runs multiple checks—it pulls recent call logs, confirms message delivery, and verifies number usage—and delivers one clean answer instantly. It cuts hours off a compliance audit.

---

## Bandwidth MCP for AI Agents: Managing Communication Assets

Managing communications assets means checking everything from application configurations to phone line availability. Manually, you have to navigate the settings panel just to list all configured applications or check if a specific number is still in service after an update.

Now, your agent handles asset governance automatically. You can prompt it to 'list and verify all active numbers' or 'check my application rules.' This gives you immediate oversight of every component that makes up your communication backbone.

---

## 9 Tools for Bandwidth MCP: Call Logs & Communication Data

These tools allow you to programmatically check account details, list active calls/messages, manage numbers, and execute specific communications actions.

#	TOOL	DESCRIPTION
01	<code>get_account_info</code>	Retrieves general operational details about the Bandwidth account.
02	<code>get_call_state</code>	Fetches detailed status and metadata for a specific, individual voice call event.
03	<code>list_applications</code>	Provides an inventory list of all configured communication applications within the account.
04	<code>list_calls</code>	Lists recent outbound and incoming voice calls, providing a summary log.
05	<code>list_conferences</code>	Shows details of currently active conference calls and all connected participants.
06	<code>list_messages</code>	Retrieves a list of recent SMS communications, including status reports.
07	<code>list_phone_numbers</code>	Provides an inventory and monitoring list of all phone numbers registered to the account.
08	<code>make_call</code>	Initiates a new, outbound voice call to a specified number.
09	<code>send_sms</code>	Sends a single SMS message to a targeted phone number.

# See It in Action

Real prompts you can use once this MCP is connected to your AI agent through Vinkius Cloud.

- U Show me the status of our main number, plus any recent calls made to it.



## Account Summary: Main Line Status

- **Primary Number:** +1 555-123-4567 (Active)
- **Status:** Operational for Voice & SMS

### Recent Activity Log

TIME/DATE	DIRECTION	DESTINATION	STATUS	DETAILS
2024-06-12 9:15 AM	Outbound	+1 800-CALLS	Success	Call duration: 3 min.
2024-06-12 1:01 PM	Inbound	N/A	Failure	Reason: Busy signal received.

Need me to send an update SMS right now?

- U What are all the phone numbers we have configured, and what applications do I need to review?



## Number Inventory Report

You currently manage 5 active lines:

- +1 555-123-4567 (Primary)
- +1 555-987-6543 (Secondary)
- ...and three others.

### ⚙️ Application Checklist

I found these key applications configured. You might want to review the 'Alerting' app and the 'Outgoing' flow:

- `alert_system_v2` : Used for critical SMS alerts.
- `outbound_dialer` : Manages all voice calls.
- `marketing_sms` : Handles bulk messaging.

**U** Check if there are any active conference calls running right now.



#### Active Conference Status

I scanned the system and found **1 active conference call**.

- **Conference ID:** CONF-9023K
- **Participants Online:** 4 people.
- **Last Activity:** Participant 'J. Doe' spoke at 10:35 AM.

If you need the list of participant IDs, just let me know.

---

## Frequently Asked Questions

---

### 01 How can I use Bandwidth MCP to audit my call logs?

You can ask your agent to list recent voice calls and check their detailed status. It pulls metadata like duration, failure reasons, and who called whom into one single report.

### 02 Can Bandwidth MCP help me manage my phone numbers?

Yes. The MCP lets you instantly see all the phone lines active on your account, making it easy to track inventory without logging into a separate number management dashboard.

### 03 What if I need to send an urgent SMS alert? Does Bandwidth MCP handle that?

Absolutely. You simply tell your agent the message and the destination number, and it sends the SMS immediately, providing confirmation of delivery status right away.

### 04 Is Bandwidth MCP useful for troubleshooting communication failures?

It's perfect for that. If a call fails or an alert doesn't go out, you can ask the agent to retrieve the specific call state details, which pinpoints the exact cause of the failure.

### 05 Do I need to manually check every application setup using Bandwidth MCP?







No. You just tell your agent what you're checking, and it runs a comprehensive list of all configured applications for you, saving hours of manual navigation.

# Go Live in 60 Seconds

Get your connection token from [cloud.vinkius.com](https://cloud.vinkius.com), then paste the endpoint URL into any MCP-compatible client.

YOUR MCP ENDPOINT

```
https://edge.vinkius.com/[TOKEN]/mcp
```

CLIENT	WHERE TO CONFIGURE
 <b>Claude AI</b>	Profile → Customize → Connectors → "+" → Add custom connector → Paste endpoint
 <b>Cursor</b>	Settings → Features → MCP Servers → "+ Add New MCP Server" → Type: SSE → Paste endpoint
 <b>VS Code</b>	Ctrl/Cmd+Shift+P → "MCP: Add Server" → add <code>"bandwidth-alternative": { "url": "..." }</code>
 <b>Windsurf</b>	MCP Settings → <code>mcp_settings.json</code> → Add endpoint URL
 <b>ChatGPT</b>	Settings → Tools & plugins → Add MCP server → Paste endpoint
 <b>Gemini</b>	Extensions → Add MCP Server → Paste endpoint URL

## ASK AN AI ABOUT THIS

Let your preferred AI explain this MCP server

-  **Ask ChatGPT** 
-  **Ask Claude** 
-  **Ask Perplexity** 
-  **Ask Gemini** 
-  **Ask Grok** 

READY TO CONNECT

# Bandwidth is live on Vinkius Cloud.

Get your connection token, paste it into your AI agent, and start building. No SDK. No deployment. Just results.

[Start at cloud.vinkius.com](https://cloud.vinkius.com) →

[vinkius.com](https://vinkius.com) · [support@vinkius.com](mailto:support@vinkius.com)

### INDEPENDENT PLATFORM DISCLAIMER

Vinkius is an independent platform and is not affiliated with, endorsed by, sponsored by, verified by, or otherwise authorized by Bandwidth. All third-party trademarks, logos, and brand names are the property of their respective owners. Their use in this document is strictly for informational purposes to identify service compatibility and interoperability.

### DOCUMENT INFORMATION

Generated	June 2026
MCP Server	Bandwidth MCP
Server ID	019d841c-7487-7231-b4ec-b072f08c97ff
Platform	Vinkius Cloud for AI Agents
Endpoint	<a href="https://edge.vinkius.com/{token}/mcp">https://edge.vinkius.com/{token}/mcp</a>

### LICENSE & USAGE

This document is generated automatically by the Vinkius PDF Engine. Content reflects the MCP server configuration at the time of generation and may change as updates are deployed. For the most current information, visit [vinkius.com/mcp/bandwidth-alternative](https://vinkius.com/mcp/bandwidth-alternative).