

MCP SERVER

NO CODE

CLOUD HOSTED

WeChat Mini-Programs MCP

Automate sessions and retrieve verified user data.

WeChat Mini-Programs / 微信小程序 connects your AI client directly to China's dominant mini-app ecosystem. Manage complex operations like session authentication, retrieving verified user phone numbers, and sending structured messages through natural conversation. It lets you automate tasks that used to require navigating the entire WeChat MP portal.

A+ Quality Score 100/100

mini-apps

user-session-management

subscriber-engagement

mobile-ecosystem

verification



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 — connect your AI agent in under 60 seconds.

WeChat Mini-Programs / 微信小程序 MCP

10 tools available
Cloud-hosted on Vinkius

This MCP turns your agent into a real-time assistant for WeChat Mini-Programs. Instead of manually logging into multiple developer consoles, you talk to it. Your AI client handles complex session management—exchanging login codes for OpenIDs and session keys instantly. Need user data? You can retrieve verified phone numbers or audit subscriber profiles without lifting a finger. It even generates unlimited QR codes for targeted campaigns and performs content security checks on images and text. Because it unifies these actions, you get accurate results from one place, making everything from user onboarding to notification blasts straightforward.

Core Capabilities

01 — Authenticate User Sessions

Your agent exchanges login codes for OpenIDs and session keys, establishing secure connections with the WeChat ecosystem.

03 — Manage Messaging Campaigns

The agent sends structured subscription messages, allowing you to manage delivery status for your mini-program users.

05 — Check Content Compliance

The MCP audits both images and text, ensuring all your content meets platform security requirements.

02 — Retrieve Contact Information

You pull verified user phone numbers and audit subscriber profiles using secure API calls.

04 — Generate Promotional Codes

You instantly create unlimited scene-based and standard QR codes for user acquisition campaigns.

One Click on Vinkius — From Prompt to Execution

Available at vinkius.com/mcp/wechat-mini-programs — connect your AI agent in three steps.

- 01 Subscribe to this MCP and provide your WeChat AppID and AppSecret keys.
- 02 Connect the service to your AI client like Claude or Cursor within Vinkius, authorizing access.
- 03 Instruct your agent in natural language to perform tasks, such as exchanging a login code for a session key or generating a QR code.

The bottom line is, you tell your AI what needs doing—like getting user data—and it executes the necessary WeChat API calls behind the scenes.

Built For

Anyone managing a mini-program ecosystem in China. This MCP is essential for operations managers who are tired of juggling multiple developer consoles, or developers needing to automate complex authentication flows.

Operations Manager

Manages subscription messages and audits user growth directly from their AI-powered workspace instead of clicking through dashboards.

Mini-Program Developer

Automates session handling and phone number verification using natural language queries rather than writing complex boilerplate code for every flow.

Compliance Officer

Runs real-time content security checks on text and images, guaranteeing platform compliance without manual review of the MP portal.

What Changes When You Connect

- 01 Stop clicking through multiple developer consoles. Your agent handles session authentication—exchanging login codes for OpenIDs and keys—all from one chat prompt.

- 02 Instantly pull critical user details like verified phone numbers using the `get_phone_number` tool, allowing you to target messaging without manual lookups.
- 03 Manage your entire marketing funnel by generating unlimited QR codes. This feature lets you embed specific scene parameters into every code for tracking.
- 04 Ensure compliance before launch. Use the `image_security_check` or `message_security_check` tools to audit content instantly, preventing policy violations.
- 05 Get deep operational insights by checking visit trends with `get_visit_page_trend`, understanding exactly where your users are spending time in the mini-program.

Real-World Applications

Onboarding a new batch of users

A developer needs to validate 50 user accounts. Instead of writing a loop, they ask their agent: 'Get the session key and verified phone number for these five codes.' The agent uses `code_to_session` and `get_phone_number` sequentially, returning all necessary data in one list.

Running a content compliance audit

A product manager submits new ad copy and images. They ask their agent to 'Audit this text and image for WeChat policies.' The MCP runs `message_security_check` and `image_security_check`, flagging risks before publication.

Launching a referral campaign

The marketing team needs 100 unique tracking QR codes. They prompt the agent: 'Generate an unlimited QR code for the referral scene on the index page.' The tool creates batch-ready, trackable codes instantly.

Re-engaging dormant users

The operations team wants to push a new feature update. They ask the agent to 'Send a structured subscribe message to all premium subscribers.' The MCP uses `send_subscribe_message` to guarantee delivery and track status.

Patterns to Avoid

Manual API Calls

X AVOID

A user copies an OpenID, pastes it into the developer portal's session exchange page, hits submit, gets a key, then manually finds the phone number in a different tab.

✓ INSTEAD

Just ask your agent: 'Exchange this code for a session and check the user's phone number.' The MCP uses `code_to_session` and `get_phone_number` in one request.

Basic QR Code Generation

X AVOID

Creating a simple, untrackable QR code for an ad campaign that doesn't tell the platform where users came from.

✓ INSTEAD

Use `generate_unlimited_qrcode` and specify the exact scene parameter. This ensures every scan passes specific tracking data to your mini-program.

Sending generic notifications

X AVOID

Manually drafting a notification message and hoping it reaches all target users without confirmation of delivery status.

✓ INSTEAD

Use `send_subscribe_message`. This tool sends the structured notice and provides immediate feedback on the message ID and user reception.

The Right Fit

Use this MCP if your core business relies on managing, authenticating, or communicating within a mini-program ecosystem in China. Specifically, if you need to exchange session codes for OpenIDs, retrieve verified user phone numbers, or generate high-volume, tracked QR codes automatically.

Don't use it if you only need general analytics; for that, the `get_visit_page_trend` tool is useful, but dedicated BI tools are better. Also, don't use this MCP just to send simple text alerts; use a standard messaging API instead. This connector excels at combining session management with data retrieval and compliance checks. If your workflow involves multiple distinct steps—like 'get session key' AND 'check phone number'—this is the right place.

The Struggle of Cross-Platform WeChat Management

Today, managing a mini-program means jumping through hoops. You have to go to the developer console to exchange session codes. Then you open another tab to check if a user's phone number is verified. If you need 50 different users validated and their data pulled, that's dozens of clicks, copy/pastes, and manual tracking across multiple interfaces.

With this MCP, your agent does the heavy lifting. You simply tell it what you want—like gathering user profiles and phone numbers—and it handles all the complex API calls under the hood. The result is a clean, structured data dump without you ever touching the official WeChat MP portal.

Getting User Data with `get_phone_number`

Previously, checking if a user was verified or what their phone number was required navigating to a specific profile audit section and waiting for the data to populate. It was slow, prone to error, and only worked for single-user lookups.

Now, you ask your agent directly: 'What is this user's verified phone number?' The tool runs `get_phone_number` instantly and returns that specific piece of data in conversation format. That's immediate clarity.

WeChat Mini-Programs MCP: 10 Tools

These tools allow you to handle every aspect of WeChat mini-app operations, from session authentication and data retrieval to QR code generation and security auditing.

#	TOOL	DESCRIPTION
01	<code>code_to_session</code>	Exchanges a login code for necessary user session keys.
02	<code>generate_standard_qrcode</code>	Creates a standard QR code for basic user acquisition purposes.
03	<code>generate_unlimited_qrcode</code>	Generates specialized, unlimited QR codes that can include specific scene parameters.
04	<code>get_account_status</code>	Checks the general connectivity status of the WeChat account used for the MCP.
05	<code>get_daily_summary</code>	Retrieves a trend summary of daily performance metrics.
06	<code>get_phone_number</code>	Fetches a user's verified phone number associated with their account.
07	<code>get_visit_page_trend</code>	Retrieves data showing how users are visiting specific pages within the mini-program.
08	<code>image_security_check</code>	Analyzes an image to detect any sensitive or non-compliant content.
09	<code>message_security_check</code>	Scans provided text to check for sensitive keywords or policy violations.
10	<code>send_subscribe_message</code>	Sends a structured, official subscription message to the user's WeChat account.

See It in Action

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

U Exchange login code '0138...' for a user session.



I've successfully exchanged the code. The user's OpenID is `o88210934...`. The session key has been retrieved and stored securely. Would you like to check this user's profile or verified phone number?

U Send a subscribe message to 'o992018...' with template ID 'TEMP_8821'.



I've sent the structured subscribe message. The message ID is `88210934`. The user will receive the notification on their WeChat app immediately. Should I check the page-level visit trends for your mini-program?

U Generate an unlimited QR code for scene 'referral_8821' on page 'pages/index/index'.



I've generated the unlimited QR code for you. The binary data is ready for processing. This code will automatically pass the 'referral_8821' scene parameter to your mini-program when scanned. Would you like me to check the security of this page path?

Frequently Asked Questions

01 How do I use the WeChat Mini-Programs MCP to get a user session key?

You use the `code_to_session` tool. Just give your agent the login code, and it exchanges that code for the necessary OpenIDs and session keys.

02 What is the difference between generating standard and unlimited QR codes?

The `generate_unlimited_qrcode` tool allows you to embed specific scene parameters into every code. This gives you granular tracking data when users scan it, which basic codes lack.

03 Can I audit content using the WeChat Mini-Programs MCP?

Yes. You use either `message_security_check` for text or `image_security_check` for images to ensure your content meets platform compliance standards before publishing.

04 Does the WeChat Mini-Programs MCP help with user engagement?







Absolutely. You can use `send_subscribe_message` to send structured notifications and manage delivery status, keeping your users engaged within the mini-program environment.

Go Live in 60 Seconds

Get your connection token from 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
 Claude AI	Profile → Customize → Connectors → "+" → Add custom connector → Paste endpoint
 Cursor	Settings → Features → MCP Servers → "+ Add New MCP Server" → Type: SSE → Paste endpoint
 VS Code	Ctrl/Cmd+Shift+P → "MCP: Add Server" → add <code>"wechat-mini-programs": { "url": "..." }</code>
 Windsurf	MCP Settings → <code>mcp_settings.json</code> → Add endpoint URL
 ChatGPT	Settings → Tools & plugins → Add MCP server → Paste endpoint
 Gemini	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

WeChat Mini-Programs / 微信小程序 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 · support@vinkius.com

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