

MCP SERVER

NO CODE

CLOUD HOSTED

Amazon EventBridge Bus MCP for AI Agents

Managing secure event dispatching in cloud architecture

The Amazon EventBridge Bus MCP gives your AI agents precise control over triggering complex system workflows. It allows you to securely dispatch custom JSON events to a single, isolated bus. This means your agent can initiate downstream processes—like starting an audit or processing user registration data—without needing full AWS permissions. It's the safest way to manage event-driven cloud architecture.

A+ Quality Score 100/100

event-driven

aws

serverless

message-bus

orchestration

security-scoping



The infrastructure that powers AI agents in the real world.



Vinkius connects AI to the world's software through secure, enterprise-grade infrastructure — enabling real-world execution at scale, built on the Model Context Protocol (MCP).

Your AI Connections Run Through Vinkius Cloud

The world's largest
managed MCP catalog

Vinkius is the cloud infrastructure where AI agents connect 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.

Amazon EventBridge Bus MCP

1 tools available

Cloud-hosted on Vinkius

If you're building systems where different services need to talk to each other without knowing each other's endpoints, this connector is for you. Instead of calling APIs directly or running complex orchestration logic inside your agent, you send a simple message—an event—to the bus. This pattern lets dozens of decoupled microservices react automatically when something happens. For example, sending an 'InvoiceCreated' event instantly tells both your billing system and your notification service to wake up and do their jobs. The best part is that this MCP only grants scoped access to one specific bus, keeping your agent's permissions minimal and highly auditable. You can manage these event flows using Vinkius, connecting it directly to Claude, Cursor, or any other compatible AI client.

Core Capabilities

01 — Dispatching custom events

Your agent sends structured JSON payloads specifying the source and detail type to trigger AWS services like Lambda functions or Step Functions.

One Click on Vinkius — From Prompt to Execution

Available at vinkius.com/mcp/amazon-eventbridge-bus — connect your AI agent in three steps.

- 01** First, your agent constructs a specific event payload (the data you want to send) and identifies the target bus.
- 02** Second, it invokes the tool to dispatch that custom JSON event onto the Amazon EventBridge Bus.
- 03** Finally, the bus routes the event according to pre-set rules, automatically triggering any connected downstream services or webhooks.

The bottom line is: your agent acts like a reliable message sender, initiating complex business processes across decoupled cloud systems with minimal permissions.

Built For

This MCP serves Solutions Architects and DevOps Engineers who spend their time integrating various microservices. If you struggle to test event flows manually or worry about giving your AI agent too much access, this is built for you.

Solutions Architect

They use it to model and prototype new cloud architectures, proving that complex, multi-stage workflows can be reliably triggered by a simple event.

DevOps Engineer

They rely on it for CI/CD pipelines, using the agent to test whether service changes correctly propagate through all connected downstream systems without manual intervention.

What Changes When You Connect

-
- 01** Keeps your agent's permissions strictly scoped. You only grant access to one specific bus, adhering to the principle of least privilege.

 - 02** Reliably triggers complex workflows. Sending an event initiates cascades that can activate Lambda functions or Step Functions instantly.

 - 03** Simplifies testing. Instead of setting up manual API calls for every service interaction, your agent sends a standardized event and watches the whole chain fire.

 - 04** Boosts auditability. Every dispatched message is logged via AWS services, giving you a clear record of when and why an event was fired.

 - 05** Decouples systems. Your services don't need to know how other services work; they just listen for a specific event type.
-

Real-World Applications

A user registers, triggering multiple downstream actions

The agent needs to simulate a new user sign-up. Instead of calling the User Service API, it uses the MCP's `put_events` tool. This single action triggers separate flows: one that sends a welcome email via SES, and another that updates the internal analytics dashboard.

Simulating file uploads for processing

A new storage bucket receives files. The agent simulates this by dispatching a 'FileUploaded' event. This allows connected services—like image processors or data validators—to pick up the event and process the payload, proving the pipeline works.

Initiating a daily compliance audit pipeline

The Ops team needs to start an end-of-day check. The agent uses `put_events` with a specific 'AuditStarted' source. This immediately kicks off the Step Functions workflow that checks all database records against regulatory requirements.

Handling external system messages

A third-party webhook sends a status update. The agent can simulate this by sending an event detailing the 'Source' from the third party, letting the internal systems react as if the real message arrived.

Patterns to Avoid

Giving agents full AWS permissions

✗ AVOID

Telling your agent to use a generic cloud API wrapper that allows it to interact with every service in your account. This is dangerous because one bug could expose everything.

✓ INSTEAD

Stick to the principle of least privilege. Use this MCP, which only grants access to dispatch events to one specific, controlled bus.

Hardcoding workflow logic

✗ AVOID

Writing complex code in your agent that tries to call five different APIs sequentially (A → B → C → D → E). If step C fails, the whole thing bails.

✓ INSTEAD

Use event-driven architecture. Send a single event via `put_events`. The bus handles the sequencing and failure management between services.

Confusing messages with events

✗ AVOID

Sending raw data payloads that require manual interpretation by the receiving service. This lacks structure and traceability.

✓ INSTEAD

Structure your message as a JSON event payload, defining both the 'Source' and 'DetailType'. This gives every downstream system clear context.

The Right Fit

Use this MCP if you need to decouple several microservices. If your architecture relies on multiple systems reacting independently when one specific thing happens (e.g., a user registers, triggering emails, logging, and analytics updates), then this is the right tool. It manages event flow securely by limiting scope to a single bus.

Don't use it if you need two services to communicate in real-time within the same transaction boundary (i.e., Service A must wait for an immediate response from Service B before continuing). For that, you might look at synchronous API calls or direct function invocation instead of asynchronous event dispatching.

Amazon EventBridge Bus MCP: Securely Managing Cloud Message Flow

Today, managing distributed systems means copy-pasting data and manually triggering services. When a user signs up, you often have to hit the notification API, then call the billing service, and finally update the CRM record—all in sequence. This is fragile, slow, and hard to test.

With this MCP, your agent sends one event via `put_events`. That single action tells the entire ecosystem what happened. The bus takes over the rest, routing messages instantly and reliably across all connected services.

Amazon EventBridge Bus MCP: Auditing Cross-Service Data Movement

Manually tracking when a data change impacts five different backend systems requires jumping through multiple AWS consoles and checking disparate logs. It's a massive headache for compliance.

Now, every event dispatched via this MCP leaves an auditable trail on the bus. You get immediate visibility into exactly which services reacted to the initial trigger, making compliance checks simple.

Amazon EventBridge Bus: 1 Tool for Secure Message Dispatching

Use the single `put_events` tool to send structured JSON events and initiate automated workflows across your cloud environment.

| # | TOOL | DESCRIPTION |
|----|-------------------------|---|
| 01 | <code>put_events</code> | Sends custom events containing source and detail type information directly into the Amazon EventBridge Bus. |

See It in Action

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

U I just finished a user profile update. How do I send an event that tells the system this happened?



Event Dispatched Successfully

- **Source:** `com.user.profile`
- **DetailType:** `ProfileUpdated`
- **Payload Summary:** User ID 789 updated their phone number.

The billing service and the communication platform are now processing this event asynchronously. You'll see two confirmation messages in minutes.

U How do I start a test run for our nightly audit process?



Audit Pipeline Triggered

The 'AuditStarted' event has been successfully placed on the bus.

The following orchestrations were initiated:

- [✓] Database Health Check (Step Functions)
- [✓] Compliance Snapshot Request (Lambda Function)
- [⌚] Reporting Queue Update (Webhook Call)

Please check the audit dashboard in 5 minutes for results.

U Send an event to confirm a file was uploaded to our new storage bucket.



Event Sent: FileUploaded

The system received the 'FileUploaded' event from `my.storage.bucket`.

- **Key Data:** File Hash `A3B4C5D6`, Size 10MB, Uploaded by User ID 999.
- **Next Steps:** The image processing pipeline has been notified and will begin resizing the file shortly.

Frequently Asked Questions

01 What is the main benefit of using Amazon EventBridge Bus with the Amazon EventBridge Bus MCP for AI Agents?

It lets your agent trigger complex workflows securely without needing deep cloud permissions. You send one event, and the bus handles calling all dependent services in sequence, keeping your access scope minimal.

02 Can I use this MCP to simulate real-world data changes?

Yes. If you need to test how a system reacts—like simulating a new user signup or a file upload—you can dispatch the precise event payload, allowing connected services to react as if it were real.

03 How does this MCP help with security when managing events?

It enforces least-privilege access. The connection is strictly scoped to one EventBus, meaning even if your agent is compromised, its actions are limited only to dispatching messages on that specific bus.

04 Is the Amazon EventBridge Bus MCP suitable for large-scale production systems?

Absolutely. Because it uses native AWS services, the system is built for scale and reliability. It ensures high throughput and message delivery confirmation for mission-critical applications.

05 Does this Amazon EventBridge Bus MCP require me to know all my service endpoints?







No. The bus handles the endpoint routing internally based on rules you define. Your agent only needs to know how to send a structured event, not every single service's address.

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>"amazon-eventbridge-bus": { "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

Amazon EventBridge Bus 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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