MCP SERVER | NO CODE | CLOUD HOSTED

Cycling Distance Analyzer MCP

Turn raw cycling segments into clear distance metrics.

Cycling Distance Analyzer MCP lets your AI agent process cycling activity data instantly. It handles the math for your riding segments, allowing you to find total distance, identify your longest rides, and pull high-level statistics without manual calculation.

A+ Quality Score 100/100

cycling | distance | fitness-tracking | sports-data | analytics

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vinkius.com/en/ai-agent-connect/cycling-distance-analyzer

SCAN TO VIEW

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.

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.

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.

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	Ed25519	24h TTL	V8 Isolate
Encryption at rest	PKI vault signatures	Ephemeral session keys	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.

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.

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.

06 — Honeytoken Trap System

Phantom credentials are injected into isolated environments. If a honeytoken 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.

Agent Activity

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

FinOps

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

Tool Health

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

Firewall & DLP

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

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.

Cycling Distance Analyzer MCP

4 tools available
Cloud-hosted on Vinkius

If you have a list of cycling segments, you can hand them directly to your AI client to do the heavy lifting. This MCP gives your agent the ability to crunch numbers from your rides, whether you're looking at a single afternoon of training or a month's worth of data. Instead of manually adding up kilometers or miles, you just provide the segment data and ask for the totals. Your agent can pinpoint exactly which ride was your longest or calculate the average length of your segments to help you track consistency. It's a straightforward way to turn raw activity logs into useful fitness insights using any MCP-compatible client like Claude, Cursor, or Windsurf.

Core Capabilities

01 — Distance Aggregation

Your agent sums up multiple segments to find your total mileage.

02 — Outlier Detection

The AI identifies your longest individual rides from a dataset.

03 — Statistical Summaries

Your agent generates high-level metrics for a group of segments.

04 — Average Calculation

The tool computes the average length of your training segments.

One Click on Vinkius — From Prompt to Execution

Available at **vinkius.com/en/ai-agent-connect/cycling-distance-analyzer** — connect your AI agent in three steps.

01 Connect your preferred MCP-compatible client to Vinkius.

02 Provide your cycling segment data to your AI agent.

03 Ask your agent to perform a specific calculation or summary.

04 The agent uses the MCP tools to process the numbers and returns the result.

Connecting this MCP to your AI client gives your agent immediate access to these math tools.

Built For

This is built for anyone managing cycling data who wants to use AI to interpret their training logs.

Cyclists

Hand your ride data to an agent to get quick summaries of your progress.

Fitness Data Analysts

Use the tool to process large batches of segment data for reporting.

Coaches

Let your AI client calculate training volumes for your athletes.

What Changes When You Connect

01 Eliminates manual math for segment totals.

02 Provides instant statistical summaries of riding data.

03 Identifies peak performance segments automatically.

Real-World Applications

Training Volume Tracking

Provide a list of recent rides to your agent to see your total distance for the week.

Performance Benchmarking

Ask your AI client to find your longest segment to see how it compares to your average.

Data Cleanup

Use the statistical tools to check for inconsistencies in your segment lengths.

Quick Summaries

Get a full breakdown of distance, averages, and counts from a raw list of numbers.

Patterns to Avoid

Manual Math Errors

AVOID

You try to manually add up fifty different ride segments in a spreadsheet to find your weekly total.

✓ INSTEAD

Hand the raw list of segments to your agent and use `calculate_total_distance` to get the exact sum instantly.

Missing Peak Performance

AVOID

You scroll through months of training logs trying to remember which specific ride was your longest.

✓ INSTEAD

Let your agent scan the entire dataset using `find_longest_segment` to pinpoint that specific ride.

Vague Training Trends

AVOID

You guess whether your training volume is increasing or decreasing based on a general feeling.

✓ INSTEAD

Use `get_distance_statistics` to get hard metrics and summary data for your segments.

The Right Fit

Connect this MCP if you regularly manage cycling logs and want to skip the manual arithmetic. If you only ride once a month and don't track segment data, you don't need this. The deciding factor is whether you have a list of segment distances that needs processing.

Cycling Distance Analyzer: 4 Specialized Tools

These tools handle the math for your cycling segments. Your agent uses them to aggregate distances, find outliers, and generate statistical summaries from raw ride data.

#	TOOL	DESCRIPTION
01	`calculate_average_segment_length`	This tool finds the mean length of all provided cycling segments.
02	`calculate_total_distance`	Use this to sum up the entire distance covered across every segment in your list.
03	`find_longest_segment`	This tool identifies the single largest segment from your collection of rides.
04	`get_distance_statistics`	This tool pulls high-level metrics and summary data for your cycling segments.

See It in Action

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

U What is the total distance of my segments: 5.2, 10.5, and 3.3?

The total distance covered is 19.0.

U Which segment was the longest among 12.4, 45.2, and 22.1?

The longest segment is 45.2.

U Give me the statistics for these segments: 10, 20, 30, 40.

Total distance: 100, Average: 25, Max: 40, Count: 4.

Frequently Asked Questions

01 **How do I use this MCP with Claude?**

You connect your Claude client to the Vinkius platform, which hosts the MCP for you. Once connected, you can simply ask Claude to analyze your cycling data.

02 **Do I need to host the MCP myself?**

No, Vinkius hosts and manages the MCP for you. You just connect your client and start using the tools.

03 **Can I use this for any cycling data?**

The MCP works with any numerical segment data you provide to your AI agent.

04 **What kind of statistics can I get?**

You can get total distance, average segment lengths, the longest segment, and other high-level metrics.

05 **Does this work with Cursor or Windsurf?**

Yes, this MCP is compatible with any client that supports the Model Context Protocol, including Cursor and Windsurf.

06 **How can I get a summary of all my rides?**

You can use the `get_distance_statistics` tool to receive a summary including total distance, average length, maximum distance, and the total number of segments.

07 **Can I find my longest ride segment?**

Yes, the `find_longest_segment` tool identifies the largest distance value within your provided list of segments.

08 **What units should I use for segment lengths?**

You can use any consistent unit like kilometers or miles, as long as all segments in a single request use the same unit.

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 `"cycling-distance-analyzer": { "url": "…" }`
Windsurf	MCP Settings → `mcp_settings.json` → 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

Cycling Distance Analyzer 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 →

vinkius.com · support@vinkius.com

INDEPENDENT PLATFORM DISCLAIMER

DOCUMENT INFORMATION

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MCP Server	Cycling Distance Analyzer MCP
Server ID	`01a0cd44-62fa-73fd-b8b3-4eba8c7ab1d9`
Platform	Vinkius Cloud for AI Agents
Endpoint	`https://edge.vinkius.com/{token}/mcp`

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