

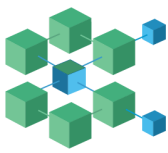
Koios Evolution:

Enhancements, Infra Support & Maintenance

Project ID: 1000098

Milestone 4 centered on maintaining the reliability and efficiency of public instances across multiple networks while implementing systematic upgrades. The primary objectives were to ensure uninterrupted service, create transparent upgrade plans, and coordinate network-wide releases to minimize disruptions.

Through meticulous monitoring and maintenance efforts, the Koios team upheld a high standard of performance and reliability across public instances. By aligning upgrade schedules with community and stakeholder needs, they successfully delivered seamless transitions and system enhancements. This milestone highlights Koios' dedication to providing a dependable infrastructure for decentralized technologies and fostering trust within its growing user base.

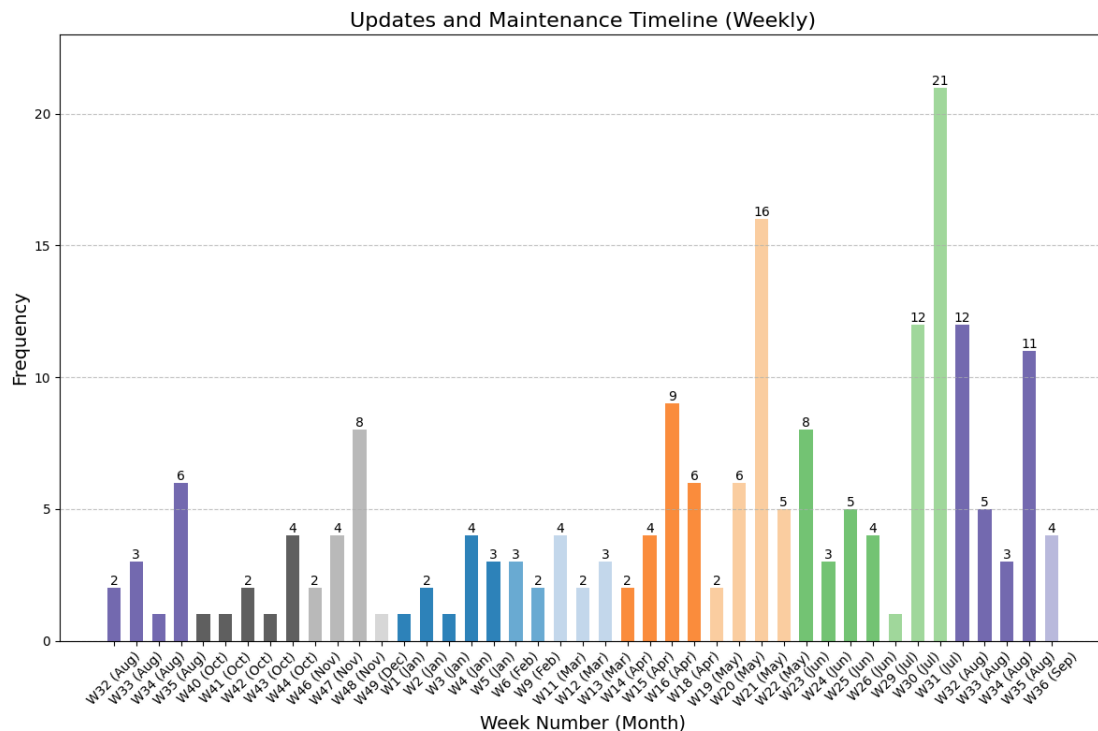


Milestone 4: Public Instance Maintenance and Upgrade Coordination

Objective: Maintain and track public instances across multiple networks, create transparent upgrade plans, and coordinate releases across the Cardano network.

- **Achievements:**

- Monitored and maintained public instances across various blockchain networks.
- Developed and communicated transparent upgrade plans to the community and stakeholders.
- Coordinated and executed upgrades across the Cardano network, ensuring minimal disruption and maximum efficiency.



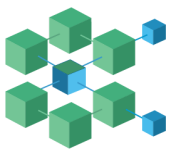
This bar chart visually represents the frequency of updates and maintenance activities on a weekly basis. Each bar corresponds to a specific week, starting from September 2023, with the height of the bar indicating the number of updates or maintenance activities performed during that week. The bars are colour-coded by month, allowing for quick identification of periods with high activity.

Key observations include:

High Activity Periods: The chart shows several spikes, particularly in Week 16 (April) and Week 21 (May), indicating concentrated periods of high development and maintenance activity.

Consistency: The project demonstrates consistent activity throughout the timeline, with frequent updates across most weeks, reflecting the ongoing commitment to maintaining and improving the system.

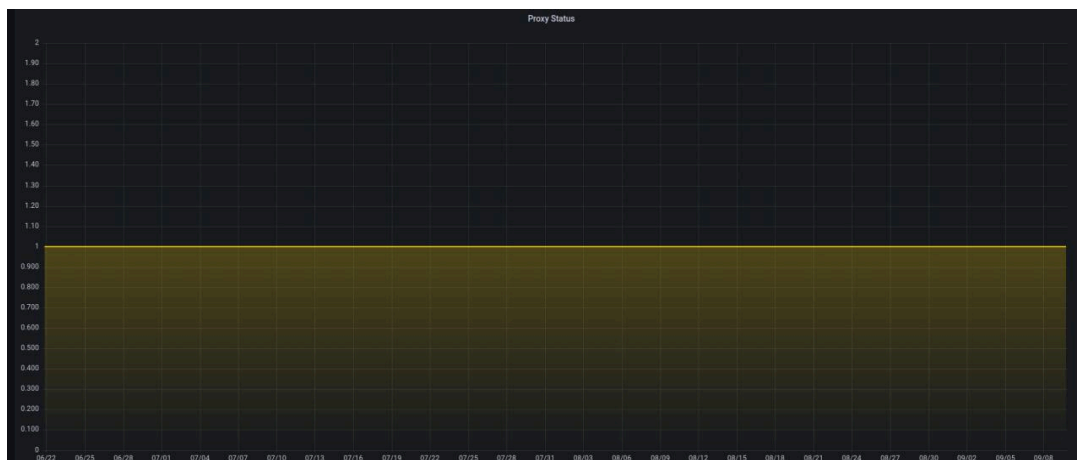
Seasonality: There is a noticeable increase in activity during the spring (April-May) and late summer (August-September), suggesting that these periods may be strategically important for the project's development cycles.



API Service Status

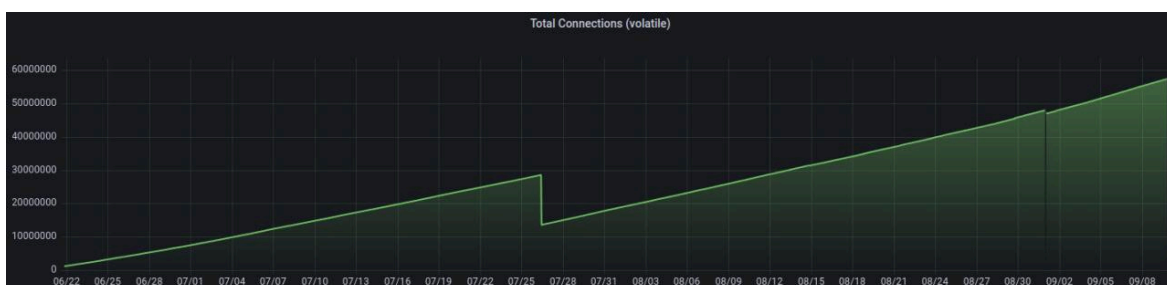
This chapter presents key Prometheus metrics that track the performance and health of our Koios API services over the last 80 days.

Due to regular server maintenance, which resets these metrics, the data displayed only reflects active service periods in between restarts. Despite the resets, the metrics provide useful information about uptime, request handling, and overall service reliability. We will concentrate on three key metrics to demonstrate the current state of our API.



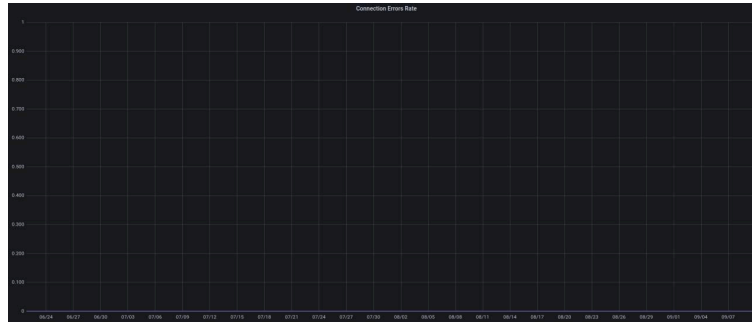
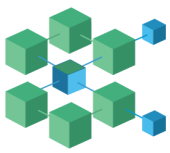
Proxy Status:

The first chart depicts a stable proxy status for the Koios API service. The yellow line consistently remains at the value of 1, indicating that the proxy is operational with no disruptions. This consistent performance indicates that the system has been operating normally, with no significant outages or failures during the time period shown. The proxy remains extremely dependable for users.



Total Connections (Volatile):

The second chart shows the total number of connections to the Koios API service in the last few months. The number of connections is steadily increasing, indicating that the service is becoming more popular and in high demand. The graph shows clear steps that reflect incremental spikes in usage, with the highest number of connections approaching 60 million. This growth indicates an expanding user base and ongoing API requests to the system.



Connection Errors Rate:

The third graph depicts the error rate in connections to the Koios API service. The chart is essentially flat at zero, indicating that there were no *connection* errors (excludes query and rate limit errors on user end) during the observation period. This demonstrates the service's high reliability and stability, as it has provided an error-free environment for users interacting with the API.

These charts highlight the Koios API's strong performance, minimal disruption, and increasing user engagement over time.

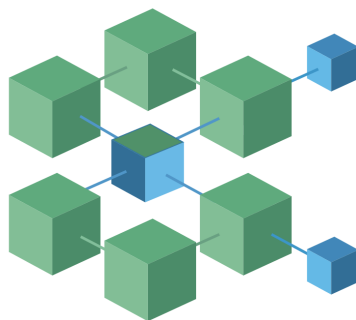
Conclusion and Future Outlook

Conclusion:

Milestone 4 successfully ensured the stability, reliability, and seamless operation of public instances across multiple networks. By proactively monitoring and maintaining these instances, the Koios team delivered a consistently high standard of performance, minimizing disruptions and maximizing system efficiency. The creation of transparent upgrade plans and the coordination of network-wide releases demonstrated the project's commitment to fostering trust and collaboration within the decentralized community. This milestone solidified the foundation for Koios' ongoing support of a scalable and reliable blockchain ecosystem.

Future Outlook:

Looking ahead, Koios will continue to prioritize the resilience and adaptability of its infrastructure. The focus will remain on refining upgrade processes, enhancing communication with stakeholders, and leveraging insights from performance metrics to further optimize the network. By staying responsive to emerging needs and technological advancements, Koios aims to provide a robust and scalable backbone for decentralized technologies, empowering developers and communities to innovate with confidence.



koios
Decentralised Opensource API

Empower your **Cardano** projects with our elastic API services

Thank you for being an integral part of this journey. Together, we have not only achieved our goals but have also paved the way for a future defined by decentralized innovation.