

Koios Evolution:

Enhancements, Infra Support & Maintenance

Project ID: 1000098

Milestone 3 represents a pivotal phase in the Koios Evolution project, focusing on the growth and seamless integration of new initiatives within the Koios ecosystem. This milestone aimed to expand the ecosystem's reach, improve its functional diversity, and ensure that new integrations operated efficiently within the existing framework.

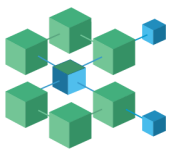
Through strategic collaborations and precise performance testing, the milestone fostered a dynamic and scalable environment. By coordinating closely with partner projects, the Koios team ensured that each integration added value to the decentralized ecosystem while maintaining the platform's reliability and user-centric approach. This achievement underscores the project's commitment to building a robust, interconnected infrastructure for blockchain developers and stakeholders.

Milestone 3: Ecosystem Expansion and Integration

Objective: Identify and integrate new initiatives into the Koios ecosystem, develop and test necessary changes, conduct performance testing, and coordinate closely with projects for successful integration.

Achievements:

- Expanded the Koios ecosystem by integrating multiple new initiatives.
- Developed and implemented necessary changes to support these integrations.
- Performed comprehensive performance testing to ensure that new integrations operated smoothly within the existing ecosystem.
- Worked closely with partner projects to ensure successful and seamless integration.



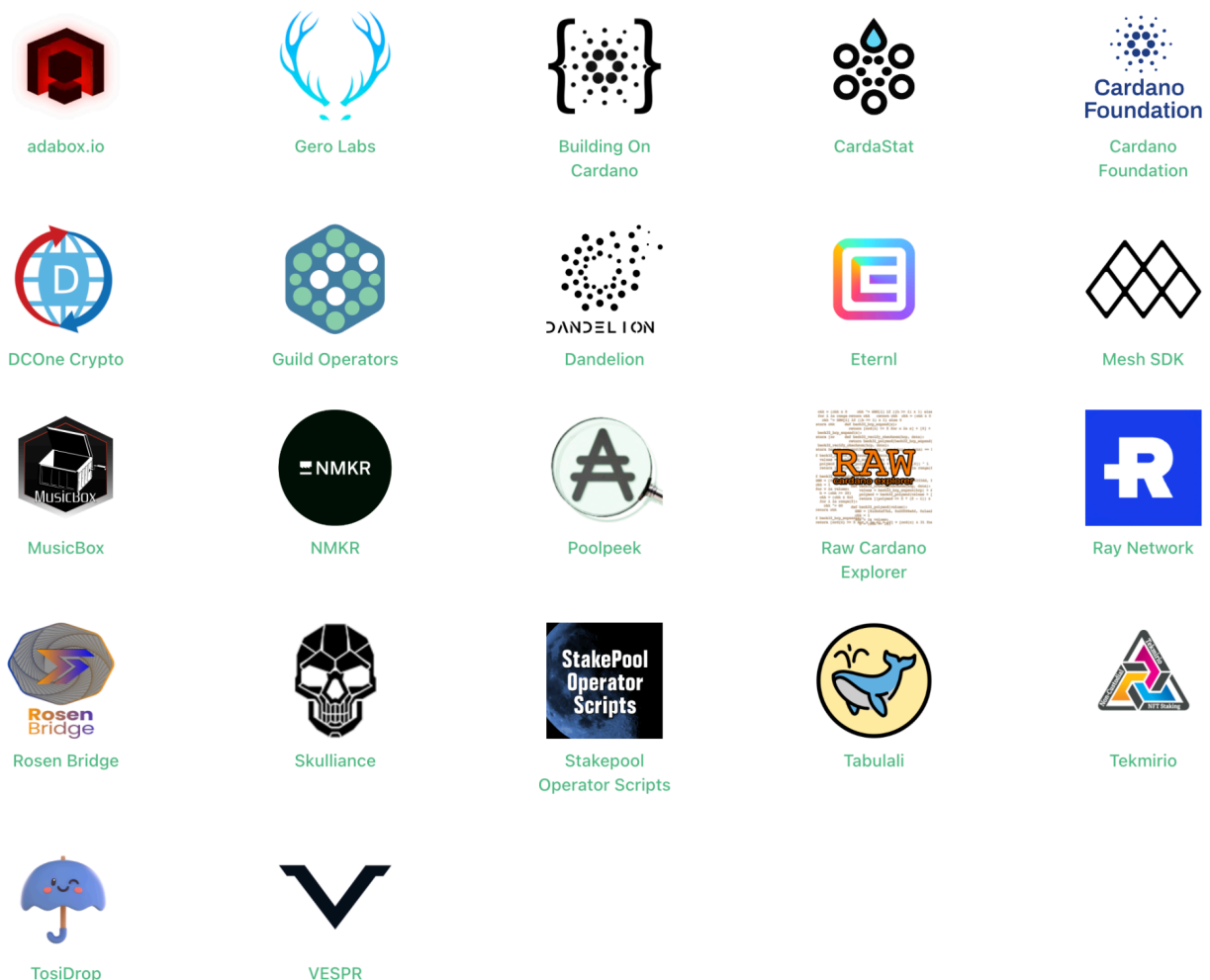
Collaborations and Partnerships

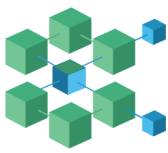
The success of the Koios Evolution project was bolstered by strategic collaborations with key partners. These partnerships not only expanded the reach of Koios API but also enhanced its functionality and impact within the decentralized ecosystem. Some of the notable collaborations include:

- **Laravel PHP Client:** Integration of the Laravel PHP Client made it easier for developers to connect and innovate within our ecosystem.
- **Gero Labs:** Pushed the boundaries of decentralized science and technology, contributing cutting-edge research and solutions.
- **Cardano Foundation:** Brought foundational support and expertise, strengthening the overall project infrastructure.
- **DCOne Crypto:** Enhanced security and transparency, vital components of a trustworthy decentralized ecosystem.
- **Guild Operators:** Empowered communities by providing decentralized governance tools.
- **NMKR:** Redefined token creation and NFT infrastructure, contributing to the robustness of the Koios ecosystem.
- **Ray Network:** Delivered advanced blockchain solutions, paving the way for future developments.
- **Rosen Bridge:** Connected various blockchain networks, expanding the possibilities within our ecosystem.
- **Skulliance:** Infused creativity and collaboration, fostering innovation across different domains.
- **Stakepool Operator Scripts:** Streamlined operations for the Cardano community, enhancing user experience.
- **Tabulali:** Provided data-driven insights, essential for informed decentralized decision-making.
- **Tekmirio:** Developed robust decentralized applications, reinforcing the infrastructure of the Koios ecosystem.

Projects building on Koios

A subset of projects currently using Koios.

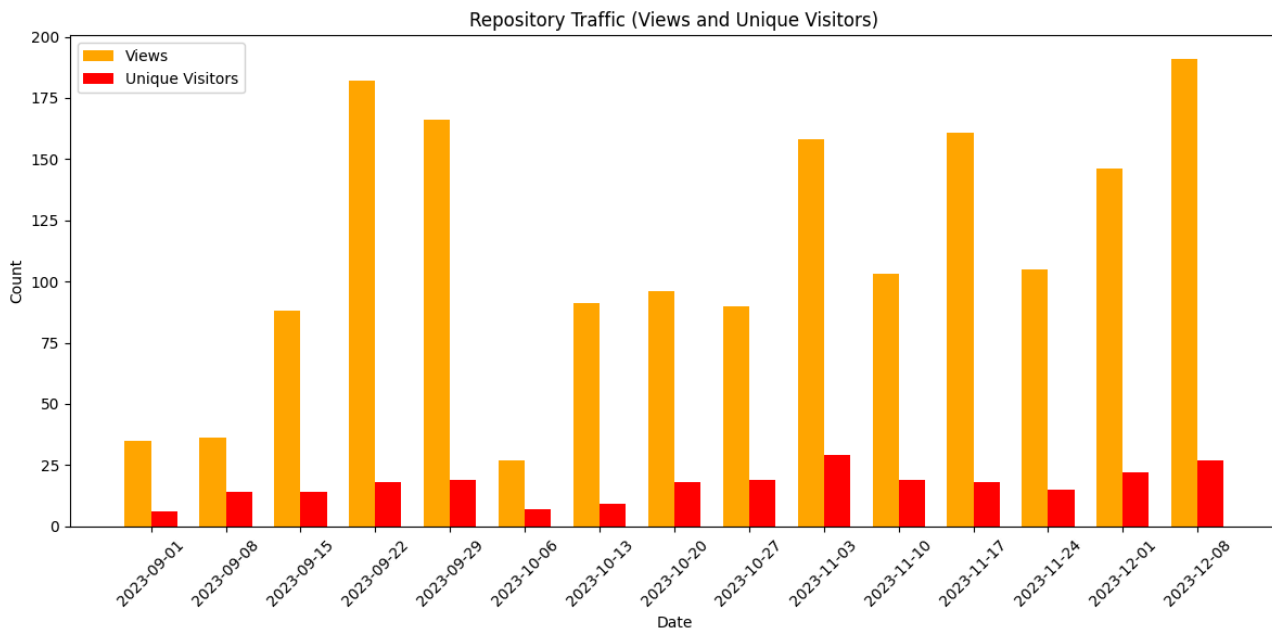




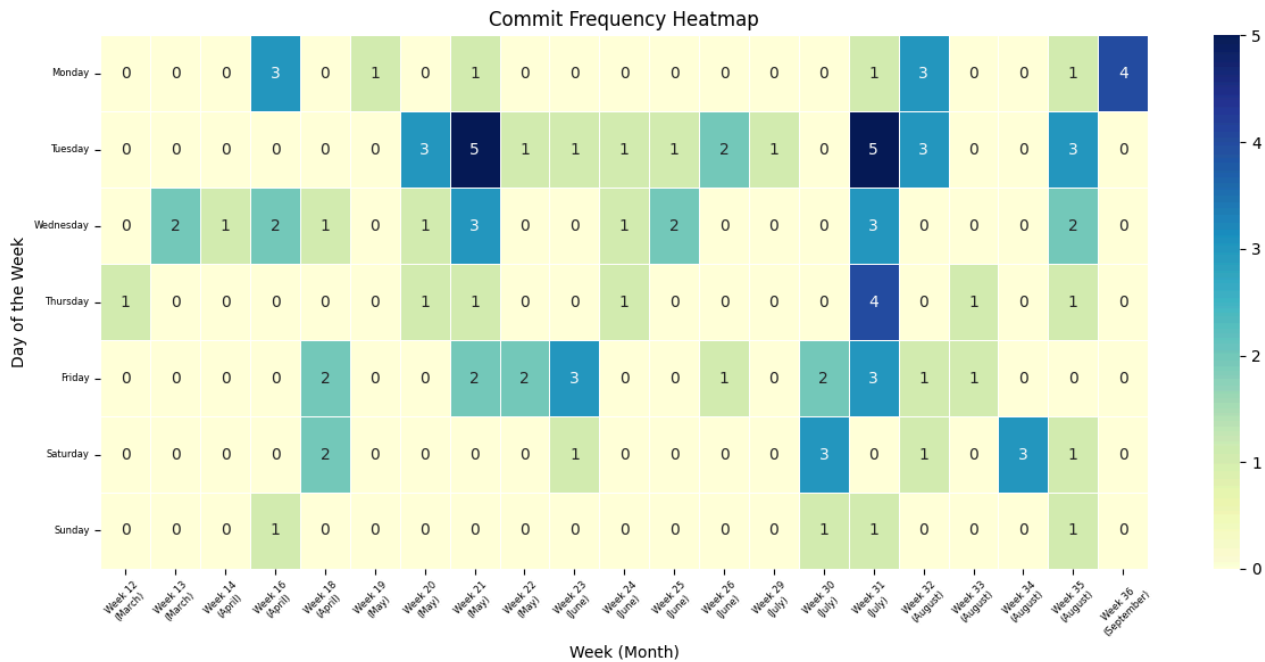
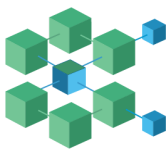
Performance Metrics and Reliability

Throughout the duration of the project, Koios gRest has maintained a high level of reliability and performance. Our monitoring systems, powered by Prometheus, have consistently demonstrated exceptional uptime and responsiveness. This reliability is a testament to the robust architecture and diligent maintenance efforts by our team.

- **Uptime Consistency:** Koios gRest has maintained over 99% uptime, ensuring that our services are always available when needed.
- **Performance Metrics:** Key performance indicators have shown sustained efficiency and speed, even as the system has scaled.



This bar chart illustrates the **Repository Traffic** over time, comparing the total number of views (in orange) with the unique visitors (in red) for each date. The chart highlights significant spikes in traffic, particularly around mid-September and early December 2023, indicating periods of heightened interest in the project. The difference between views and unique visitors suggests that many users return to the repository multiple times, reflecting sustained engagement with the content.



The image above is a Commit Frequency Heatmap, representing the distribution of code commits over different days of the week across several weeks of the year. The x-axis shows the week number, with each week also labelled with its corresponding month, while the y-axis displays the day of the week (from Monday to Sunday). The colour intensity of each cell in the heatmap indicates the number of commits on that particular day of the week for the given week.

Key Observations:

Commit Distribution:

The highest frequency of commits tends to occur on Tuesdays and Fridays, as indicated by the darker cells (e.g., in Week 11 and Week 22). These days appear to be key periods of activity for development.

Wednesdays and Thursdays also see a reasonable level of activity, but it's more moderate compared to the peaks seen on other days.

The weekends (Saturday and Sunday) have very low to almost no commit activity, reflecting typical work schedules in many development teams, where weekend work is less frequent.

Peak Weeks:

The heatmap shows particular spikes in development activity during Week 11 (March), Week 16 (April), and Week 22 (May), where commit frequency reaches its highest levels, particularly on Tuesdays and Fridays.

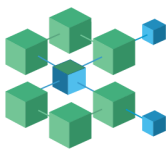
Week 31 (July-August) and Week 36 (September) also show heightened activity, suggesting important milestones or deadlines during these periods.

Trends in Activity:

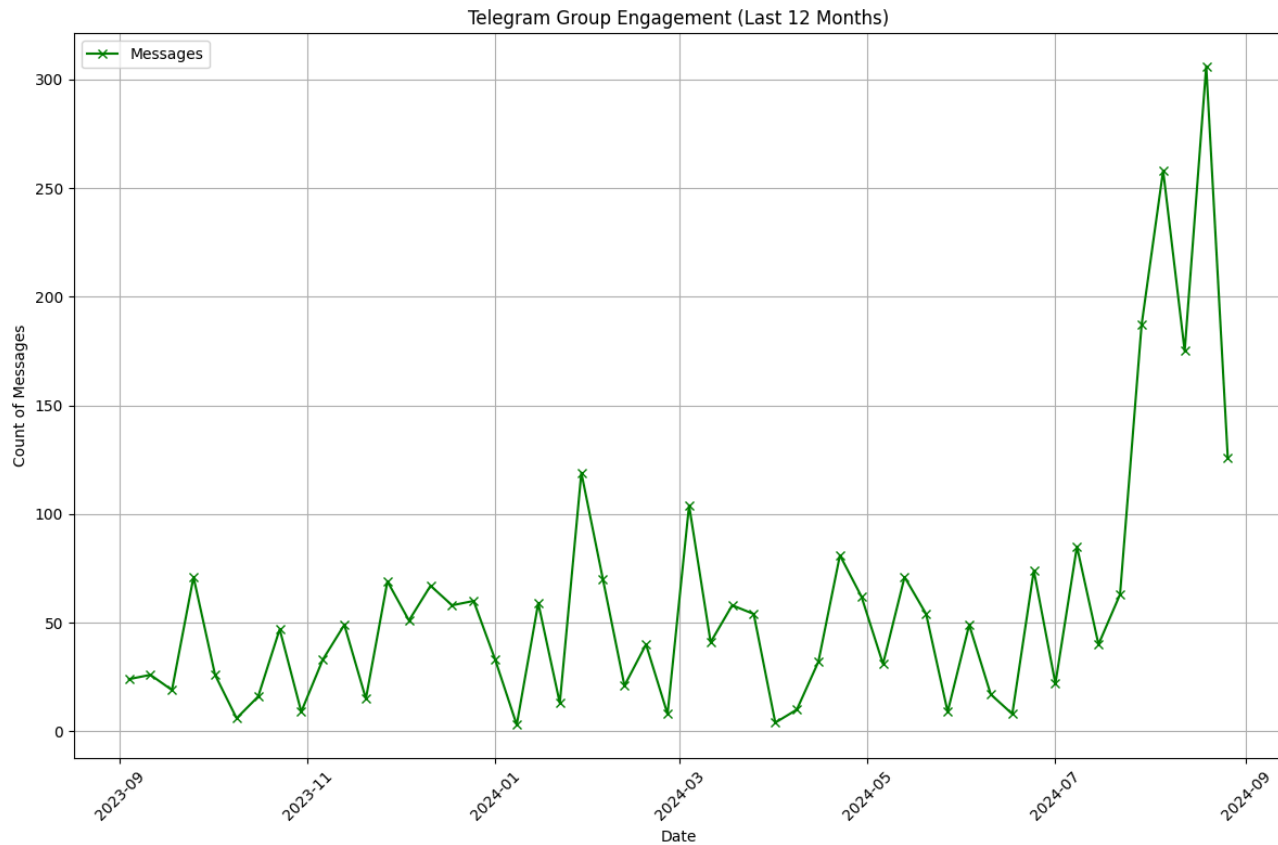
The darker cells on the heatmap suggest periods of intense development. The distribution across multiple weeks suggests that the project follows a consistent rhythm of development with higher bursts of activity during some weeks, possibly tied to significant updates or releases.

Conclusion:

This heatmap provides a clear visual representation of the team's work patterns. The peaks in activity during certain weeks and on specific days suggest planned sprints or deadlines driving more commits. This level of detailed tracking helps project managers and development teams optimise workflows, allocate resources efficiently, and ensure a balanced approach to development across the project timeline.



Telegram Support Statistics:



The graph represents the Telegram Group Engagement over the last 12 months. The y-axis shows the count of messages while the x-axis indicates the time span, beginning from September 2023 and continuing through September 2024.

Key Observations:

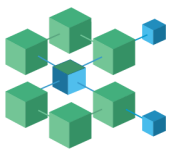
Steady Message Activity: The graph shows fluctuating yet consistent activity between September 2023 and mid-2024, with the message count generally remaining between 30 and 100 messages per week. This indicates steady engagement within the group.

Notable Spikes: There are clear peaks of increased activity during several periods, especially in January 2024, March 2024, and July-August 2024, where the message count exceeds 150 messages. These spikes could correspond to significant discussions, project updates, or other events that generated increased communication within the group.

Recent Surge: From July to September 2024, the message count shows a marked increase, culminating in a peak of nearly 300 messages before dropping back slightly. This indicates a recent surge in group activity, suggesting increased interaction or engagement due to recent events, possibly project milestones or major announcements.

Engagement Trend: Overall, the trend indicates a healthy and growing engagement pattern, with the latter half of the year seeing more frequent spikes in messages, possibly indicating greater interest and participation from group members over time.

This visualisation suggests an active and evolving community, with periods of heightened engagement likely corresponding to key moments in the project's lifecycle.



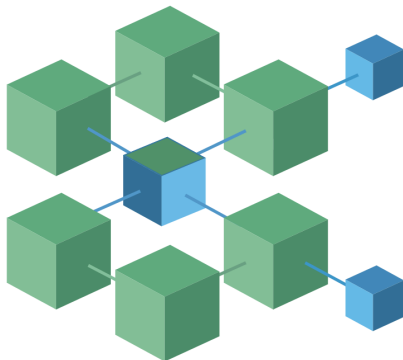
Conclusion and Future Outlook

Conclusion:

Milestone 3 successfully broadened the scope and impact of the Koios ecosystem by integrating multiple new initiatives and ensuring their seamless functionality within the existing infrastructure. Through meticulous development, testing, and collaborative efforts, the integrations strengthened the ecosystem's capacity to support diverse decentralized projects. This milestone not only enhanced the Koios platform's utility but also reinforced its position as a critical resource for blockchain developers and communities.

Future Outlook:

Building on the achievements of Milestone 3, the focus will shift to scaling these integrations further, exploring new partnership opportunities, and continuously optimizing performance to meet the evolving needs of the decentralized ecosystem. By prioritizing adaptability and innovation, Koios aims to foster a sustainable and interconnected platform that empowers developers and stakeholders to unlock the full potential of blockchain technologies.



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.