Our Website

Node3: Expertise in Node Operations

Node 3 - Your Expert Node Operator

Node3 is a leading provider of secure and reliable node operations for PoS protocols in the web3 and blockchain industry. With a robust infrastructure, dedicated support, and 24/7 availability, we ensure consistent uptime and optimal node...

Entity name and location

- APKloud Pty Ltd (trading as Node3)

is a private company incorporated in the Australia. It is a Blockchain Infrastructurecompany that specializes in hosting infrastructure for decentralized systems.

- According to the Australian Securities and Investments Commission (ASIC):
- Entity Name: APKLOUD PTY LTD
- Eneity Type: Australian Private Company
- ACN: 661 986 009
- ABN: 71 661 986 009
- Status: Registered
- Type: Australian Proprietary Company, Limited By Shares (201C, Document No. 5EGQ21687)

Infrastructure location and what kind of hardware do you run? Baremetal, cloud-based…? In what geographic regions?

- We have a hybrid infrastructure set up with 10,000+ nodes on AWS across Europe, Asia, and North America, along with dedicated on-premises hardware in Australia. Specifically, we have an on-premises wired Kubernetes cluster built on top of a physical rack system consisting of 500 servers, with 400 servers being active and 100 servers serving as redundant for high availability. Each server is equipped with 4 CPUs, 64GB of RAM, and 10TB of SSD storage.

Technical make-up of team (elaborate on no. of dev ops engineers, experience, etc.)

- Peter Lin (Head of Infra, Australia, GMT +10) · 15+ years experience in IT, inclusively 2 years in Blockchain
- Build global DevOps and SRE team
- Lead tech directions with 10+ certications in Cloud, Project Management, and Agile
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- Matt Bailey (Infra Lead, UK, GMT + 1)
- 7 years experience in Infra with 8 AWS Certications · Expertise in Polygon, Ethereum, and numerous nodes set up and maintenance
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- Deep understanding of infrastructure architecting
- Pierson Gupta (Senior SRE Engineer, Canada, GMT - 7)
- 5 years experience in Infra
- Maintained 5,000+ nodes in K8s clusters
- Intensive real-time dashboard and alerting system
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- Intensive real-time dashboard and alerting system
- Ryan Jackson (Senior DevOps Engineer, United States, GMT -7):
- Over 8 years of experience in DevOps and automation.
- Expertise in building and managing CI/CD pipelines using tools such as Jenkins and GitLab CI/CD.
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- Sarah Patel (DevOps Engineer, United Kingdom, GMT +1):
- 7 years of experience in DevOps practices and continuous integration/continuous deployment (CI/CD) pipelines.
- Proficient in configuring and managing infrastructure using tools like Ansible, Terraform, and Kubernetes.
- Skilled in cloud platforms, particularly AWS and Google Cloud Platform (GCP).
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- Maria Garcia (DevOps Engineer, Singapore, GMT +10):
- 6 years of experience in implementing DevOps practices and containerization using Docker and Kubernetes.
- Proficient in cloud infrastructure management, with expertise in Azure and OpenStack.
- Skilled in monitoring and log analysis tools like Prometheus and ELK Stack.
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- John Nguyen (Senior SRE Engineer, United States, GMT -8):
- 9 years of experience in site reliability engineering and managing highly available systems.
- Proficient in designing and implementing fault-tolerant architectures using technologies like Kubernetes and Apache Kafka.
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- Emily Wang (SRE Engineer, Canada, GMT -5):
- 7 years of experience in SRE practices, focusing on scalability and performance optimization.
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- Strong knowledge of cloud platforms, particularly AWS and Microsoft Azure.

- Alex Petrov (SRE Engineer, France, GMT +2):
- Over 6 years of experience in SRE methodologies and incident management.
- Proficient in implementing infrastructure as code (IaC) using tools like Terraform and Ansible.
- Skilled in performance monitoring and optimization using tools such as New Relic and Dynatrace.
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Years of experience

20+ years leadership, 20+ years technical team and 5 years in blockchain industry

What other networks are you running validators for?

Etherum, Polygon, and Pokadot. Experienced in Startware DAC committees.

Based on your participation in any previous testnets, mainnets, are there any best practices to be aware of? What are some things that made previous testnets, mainnet launches successful and/or things to avoid that have gone poorly?

Yes. We have strict processes in place to ensure the success of previous testnets and mainnet launches. Here are a few highlights from our system:

- Release Process:
- Establish a clear release process with well-defined milestones, including alpha and beta testing phases, to ensure thorough testing and bug fixing before the mainnet launch.
- Conduct multiple iterations of testing, allowing developers and external participants to provide feedback and identify potential issues.
- Implement a version control system to track changes and maintain a stable codebase.
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- Monitoring Process:
- Implement a comprehensive monitoring system to track the health and performance of the network during the testnet and mainnet phases.
- Monitor key metrics such as block production, transaction throughput, latency, and resource utilization to identify potential bottlenecks and performance issues.
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- Set up alerts and automated notifications to respond quickly to critical events or abnormal behavior.
- Production Checklist:
- Develop a thorough production checklist that covers all essential components, configurations, and dependencies required for the network to function properly.
- Include steps for validating the network’s integrity, security measures, and compatibility with different client implementations.
- Perform rigorous testing of the production environment to ensure it can handle the anticipated load and stress.

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Do you have a validator voting framework and process?

Based on our regular voting meetings with other networks, here's a concise overview of our experiences in voting framework and process

1. Proposal Submission: Members of the network community can submit proposals, covering technical upgrades, network parameter changes, or governance rule adjustments.
2. Proposal Evaluation: Submitted proposals undergo evaluation, involving technical analysis, community discussion, and assessment of their potential impact on the network.
3. Voting Period: Approved proposals enter a voting period, during which validators cast their votes through on-chain, off-chain, or hybrid mechanisms.
4. Voting Power: Validators' voting power is proportional to their stake in the network, granting greater influence to those with larger stakes or higher reputation.
5. Vote Tallying and Execution: After the voting period, votes are tallied to determine the outcome. Proposals may require a specific threshold of votes to be accepted or rejected. Actions are taken accordingly.
6. Governance Calls and Discussions: In addition to voting, regular governance calls or meetings enable validators to collectively discuss proposals, express perspectives, and contribute to decision-making.

Are you planning to play any additional roles in the dYdX ecosystem (e.g. market maker, trader, indexer, front-end, other)?

We want to play an indexer if possible, as well as any other roles if needed. We have an extreme strong technical team.

Are there other products or services you want to highlight that could be relevant for dYdX?

We response to any questions and alerts within 30 mins 24/7, and we have a global on-call 24/7 in place.

Any notable contributions in other ecosystems that you would like to highlight for the community?

1. Educational Content: At Node3, we understand the importance of education in the blockchain space. We plan to leverage our expertise to create educational content on Udemy, TikTok, Youtube and RedBook(A Chinese and Hong Kong popular social media) about dYdX validators, the dYdX ecosystem, the role of node operators. This will help increase understanding and adoption of dYdX's solution. We successfully promoted this for q.org.
2. Technical Support and Collaboration: We understand that technical issues can be a barrier to adoption for many users. We plan to provide technical support to the dYdX community, helping to resolve issues and improve the user experience. Also, We believe in the power of collaboration. We plan to work closely with other node validators in the dYdX ecosystem, sharing our knowledge and learning from their experiences. We have been providing this for Q and Myria.
3. Promote client and hardware diversity: We plan to share our technical experience on how to run thousands of nodes in an on-premises setup, as well as how to set up the enterprise level on-premises system. Additionally, we proactively aim to share our experience and promote the diversity. We successfully achieved this for StarkWare DAC.