

# Proposal: RPC-node services for Moonbeam/Moonriver Q3 2022

Proponent: Dwellir Date: 14/11/2022

Requested allocation: GLMR 15,382.26 + MOVR 536.30

**GLMR Account:** 

Short Description: Operating RPC service for the Moonbeam community during Q3 2022

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#### **TLDR**

Dwellir is a leading laaS (infrastructure as a service) team providing RPC infrastructure to more than 25 projects in the Dotsama ecosystem. We are proposing to receive payment for a geographically distributed public Moonbeam RPC API Service.

This service is currently available via:

wss://moonbeam-rpc.dwellir.com https://moonbeam-rpc.dwellir.com

## **Background**

#### **About Dwellir**

Dwellir is an infrastructure provider for the decentralized web. We run RPC services for Kusama and Polkadot and more than 26 other projects. Currently, we are processing 60 million JSON RPC requests per day.

We also provide validator/collator services for the networks Kusama, Polkadot and KILT and



participated in the Thousand Validator Programme for Polkadot & Kusama.

We own and operate our own bare metal which has two important effects. The first is that we directly contribute to the real decentralization of the network away from public cloud providers. The second is that we can deliver an often better functioning service at a fair price.

Lastly, we are builders. We are working on a suite of tools associated with our infrastructure that aim to give insights to the community. An example of this work is a report produced for Parity (https://github.com/dwellir-public/rpc-perf/blob/main/report.md).

#### Team

The Dwellir crew has over a decade of experience in the crypto domain and aims to expedite the development of web 3.0. We are experienced computer scientists, entrepreneurs, and crypto enthusiasts that share the ideas and philosophies around a free and decentralized web.

Gustav Nipe - CEO (https://www.linkedin.com/in/gustav-nipe-a61ab0102/)

Entrepreneur and political activist. Worked several years for the Swedish Pirate Party on privacy issues. Previous CTO at ImpactVision Inc (Acquired by Apeel Science 2020) a startup spawned from the Google Singularity University.

Erik Lönroth - DevOps lead (<a href="https://eriklonroth.com/cv/">https://eriklonroth.com/cv/</a>)

Technology Lead for High Performance Computing at Scania, past CIO ImpactVision Inc. Board member of Open Source Sweden.

**Joakim Nyman** - Solutions Architect (<a href="https://www.linkedin.com/in/joakim-nyman/">https://www.linkedin.com/in/joakim-nyman/</a>)
DevOps engineer at Imint AB, past lead developer at ImpactVision Inc.

**Christian Ander** - Institutional Partnership (<a href="https://www.linkedin.com/in/christianander/">https://www.linkedin.com/in/christianander/</a>)
President and founder of Goobit Group, a publicly traded crypto exchange in Sweden, BTCX.

**Ankan Anurag** - Senior Engineer (<a href="https://www.linkedin.com/in/ankananurag/">https://www.linkedin.com/in/ankananurag/</a>)
Senior engineer at Dwellir, past senior engineer at P.F.C. and Klarna.

**Ben Chatwin** - Operations (<a href="https://www.linkedin.com/in/ben-chatwin/">https://www.linkedin.com/in/ben-chatwin/</a>) Has worked for several high-tech startups in drones, machine learning and more recently for deFi projects across multiple blockchain ecosystems.

### **Problem Areas**

#### Milestone 1 - Providing RPC services for Moonbeam

Setting up blockchain infrastructure is difficult, time-consuming, and expensive:



- It requires a level of DevOps skills that many do not have. A Moonbeam node, for example, requires knowledge of SSL certificate handling, WebSocket management, HTTPS management, firewall configuration, security measures, monitoring, reporting, upgrades etc.
- It's extremely costly to run a node. Since we own and operate our infrastructure our cost structures are fair and more sustainable than cloud providers where one can expect huge increases in price.
- Running production-level infrastructure is not trivial. You need to autoscale quickly to handle sudden increases in traffic which is very common when new projects launch.
   Our infrastructure uses a smart cluster stack whereby sudden increases in traffic are expertly scaled up and down as needed without the need for intervention.
- It requires time. Time is the most valuable resource for projects. Most projects simply do not have the time to spend on DevOps, especially in crunch moments.

## **Proposal**

#### Scope

We are builders first and want to ensure that we provide infrastructure and additional services that meet the community's needs for the next decade!

This grant will enable us to continue the service we currently provide which entails:

- Hosting of the Moonbeam node(s)
- 24/7 Monitoring of core functions including scaling mechanism
- Continuous security improvements
- Continuous updates, upgrades, and optimisations
- Communication with development teams (where necessary)
- Currently we operate three clusters in Northern Europe.

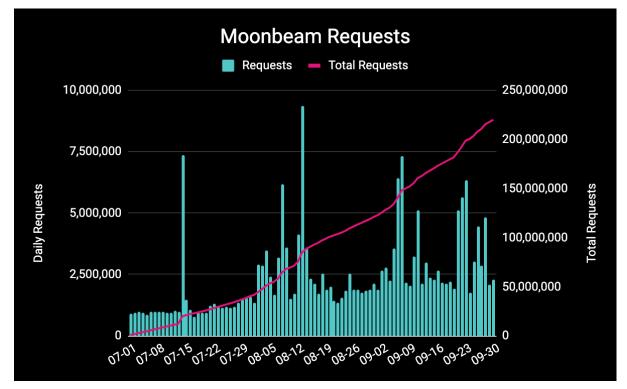
#### **Outcomes**

There are three main outcomes:

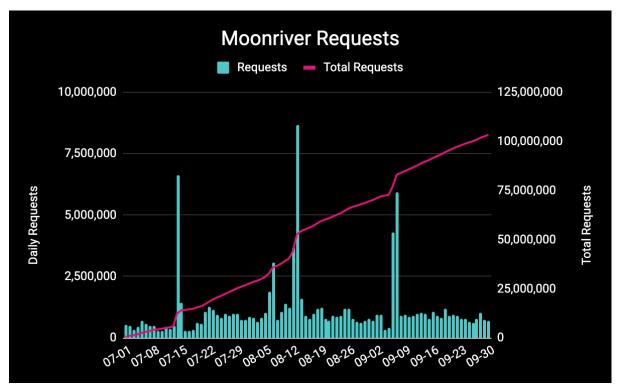
- 1. Improve the decentralization of the polkadot ecosystem by providing our own bare-metal infrastructure
- 2. Improve the user experience within the Moonbeam ecosystem by ensuring the reliable availability of the network.
- 3. Strengthen the team's ability to work on core business problems as a result of reducing the strain on DevOps. We believe it's important that parachain teams innovate on their core technology rather than spend time and resources on DevOps where we are clearly positioned to take the load.



## **Highlights**



In Q3 we processed 219,887,228 million RPC requests for the Moonbeam ecosystem.



In Q3 we processed 103,216,540 million RPC requests for the Moonriver ecosystem.



## **Fund Management**

## **Costs Breakdown Moonbeam**

Description	Price (USD)	Billable Units	Cost
Compute Costs	US\$0.085 / Compute Unit / Hr	23,040	\$1,958.40
Storage Costs	US\$0.0004 / GB / Hr	360,000	\$144.00
Data Traffic	US\$0.085 / GB	3000	\$255.000
	1 month	Subtotal	\$2,357.40
	3 month	USD Total	\$7,072.20
GLMR Token Price	\$0.4598	GLMR Total	GLMR 15,382.26

## **Costs Breakdown Moonriver**

Description	Price (USD)	Billable Units	Cost
Compute Costs	US\$0.085 / Compute Unit / Hr	17,280	\$1,468.80
Storage Costs	US\$0.0004 / GB / Hr	432,000	\$172.80
Data Traffic	US\$0.085 / GB	2500	\$212.500
	1 month	Subtotal	\$1,854.10
	3 month	USD Total	\$5,562.30
MOVR Token Price	\$10.3717	MOVR Total	MOVR 536.30