

Proposal: High Performance Public Infrastructure (Q2 2022)

Proponent: 12mRyiCp9zdh1wEVW5gLLiFBxDPKks72rRXmSupyEK3VAMLf

Date: 11th August 2022

Requested DOT: 12,471.517 (USD \$100,383.24)

Short description: Ongoing costs for the running of high performance, scalable, and reliable public infrastructure for Polkadot, Statemint and Westend.

Raw Data:

<https://docs.google.com/spreadsheets/d/1XwZjMtHVV8OgvqeUZQgMvY45nSL3tD19RFfTylcRDq8/edit?usp=sharing>

Original Motivation

Over the last 3 months (April, May and June 2022) we've provided a scalable free public API service so that everyone can access public pools of managed Polkadot, Statemint, and Westend nodes. This provides the following three outcomes:

- Grow the ecosystem by reducing the barriers to entry to access a high performance nodes
- Help scale existing projects in the ecosystem by providing infrastructure services that can be depended on
- Assist with the testing of all networks by providing valuable data back to the community on how validator nodes are running and scaling as the network traffic increases (we've made GitHub issues based on behaviour we've observed)

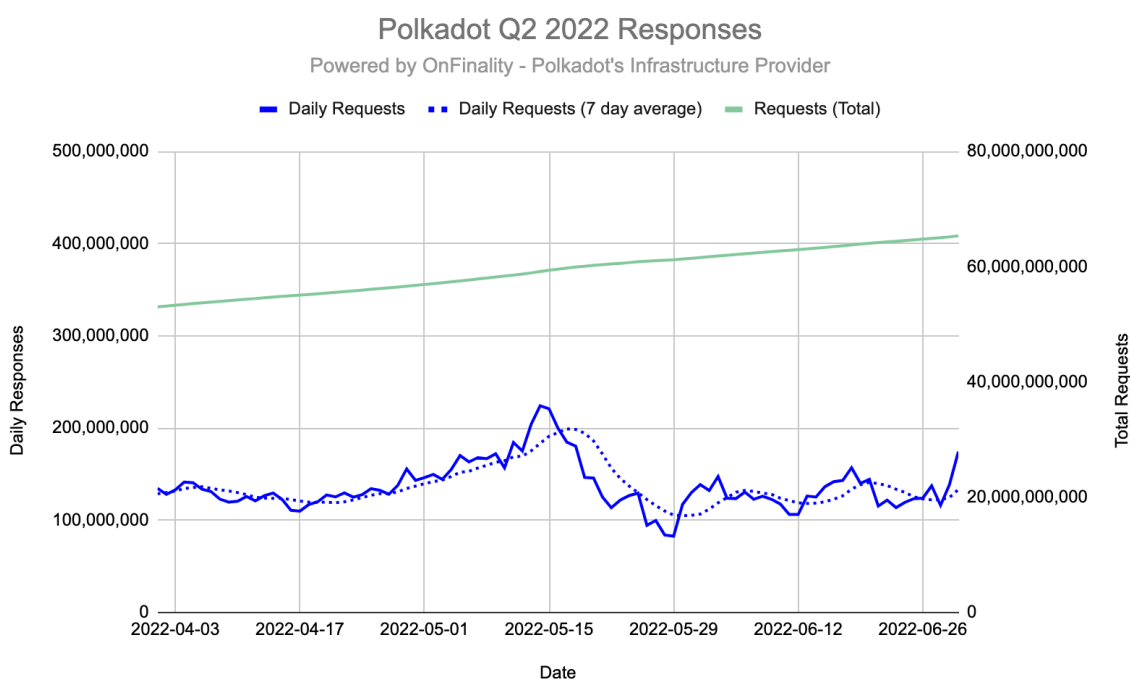
Service Details

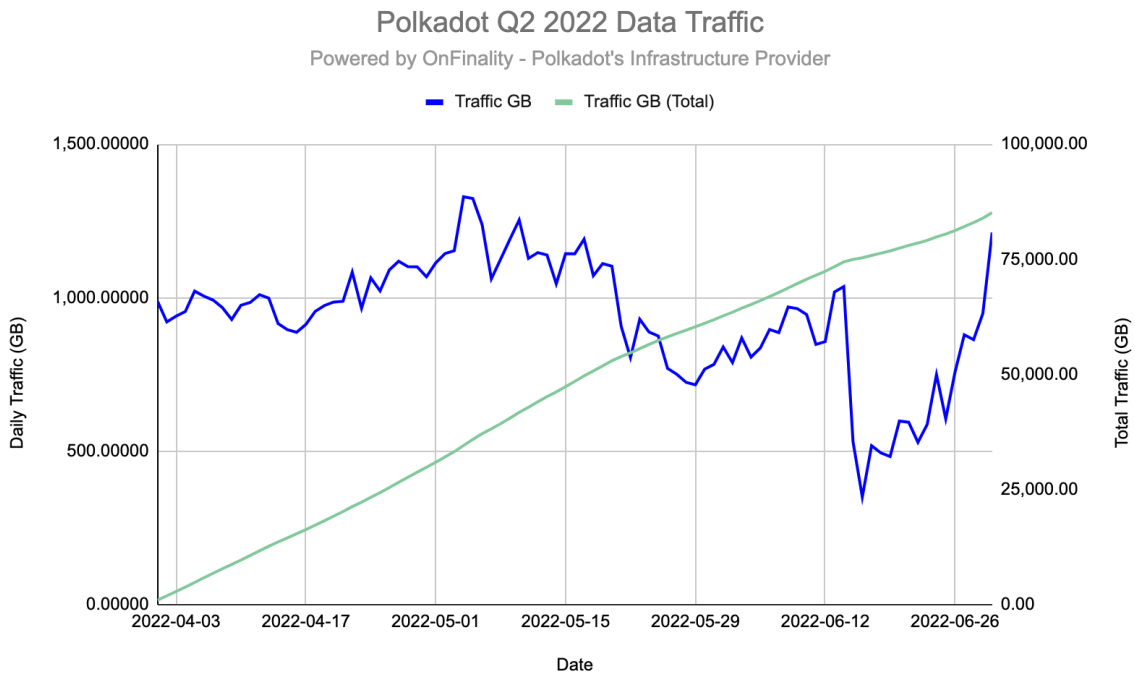
The last quarter showed a number of ups and downs in terms of numbers but still recorded high demand for Polkadot and OnFinality. May had a higher activity than the rest of the quarter which also had our largest daily responses in the quarter of over 224 million in a single day to Polkadot.

We continued to execute on our efforts to provide unprecedented service stability and reliability to this ecosystem. All supported networks exceeded our 99.9% target, including 99.98% uptime for Polkadot over the last 90 days . At this stage, OnFinality is operationally striving for a minimum of 99.99% availability, which means less than an hour of downtime each year.

Between 2022-04-01 and 2022-06-31 our Polkadot API service has:

- Served a total of 12,264,823,022 (12 billion) responses
- Accumulated over 85 TB of data egress
- The highest daily total was 224,203,539 responses in a single 24 hour period
- Our rolling 7 day average at the end of this period was over 133 million responses each day.
- Westend had over 609 million API responses in the period
- Statemint had over 353 million API responses in the period
- All time totals for Polkadot is 65,360,914,521 (65 Billion) since November, 2020
- At the end of this period the 90 day uptime for Polkadot, Statemint, and Westend was 99.98%, 99.98%, and 99.99%





Enhancements

Additionally, we are proud to have delivered some key service enhancements that benefit the Polkadot ecosystem in the last quarter. This includes:

- New features to allow users that have deployed dedicated node to access the [internal prometheus metrics endpoints](#)
- A new feature called [API Apps](#), a container for your set of API keys, dashboards, and analytics all organised in one place within your OnFinality workspace.
- We now support over 60 networks across the Polkadot and Kusama ecosystem
- A variety of improvements to our health metric collection tools and automated recovery scripts to ensure our 99.9% SLA is exceeded.
- Scale improvements to our team, processes, and systems to allow us to provide this same service to **every** parachain team at launch

You can always see live data on our API service on our public [status page](#) and [analytics page](#).

Costings

This proposal includes combined running costs for our infrastructure for Polkadot, Statemint, and Westend. The total combined running cost is USD \$100,383.24 - [raw data is here](#)

Network	Type	Unit String	Unit Price	Billable Units	Q2 2022 Cost (Total)
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Polkadot	Compute Cost	\$0.15 / Compute Unit / hr	0.15	458,449.00	\$68,767.35
				17,714,353.00	
Polkadot	Storage Costs	\$0.0005 / GB / hr	0.00	0	\$8,857.18
Polkadot	Backup Costs	\$0.0005 / GB / hr	0.00	2,930,748.00	\$1,465.37
Polkadot	Data Traffic	\$0.15 / GB	0.15	85,153.25	\$12,772.99
				Subtotal	\$91,862.89
Statemint	Compute Cost	\$0.15 / Compute Unit / hr	0.15	30,576.00	\$4,586.40
Statemint	Storage Costs	\$0.0005 / GB / hr	0.00	797,972.00	\$398.99
Statemint	Backup Costs	\$0.0005 / GB / hr	0.00	218,400.00	\$109.20
Statemint	Data Traffic	\$0.15 / GB	0.15	388.09	\$58.21
				Subtotal	\$5,152.80
Westend	Compute Cost	\$0.15 / Compute Unit / hr	0.15	17,472.00	\$2,620.80
Westend	Storage Costs	\$0.0005 / GB / hr	0.00	880,385.00	\$440.19
Westend	Backup Costs	\$0.0005 / GB / hr	0.00	353,108.00	\$176.55
Westend	Data Traffic	\$0.15 / GB	0.15	866.70	\$130.01
				Subtotal	\$3,367.55
				Grand Total	\$100,383.24
				DOT Rate	\$8.049
				DOT Total	12,471.517

About OnFinality

[OnFinality](#) is a SaaS platform providing infrastructure services for the Polkadot/Substrate community. Our mission is to support all blockchain developers in the world by providing core infrastructure so they can focus on building the next dApp.

We continue to reaffirm our dedication to providing free support of 500,000 responses to our API service each day for users around the world. You can access our public API service by connecting to it using [Polkadot.js](#) or via the endpoints listed below. You can also [create your own free API key in our application](#) and track metrics and statistics.

- <https://polkadot.api.onfinality.io/public>
- <wss://polkadot.api.onfinality.io/public-ws>
- <https://westend.api.onfinality.io/public>
- <wss://westend.api.onfinality.io/public-ws>
- <https://statemint.api.onfinality.io/public>
- <wss://statemint.api.onfinality.io/public-ws>

Thanks to the funding of our original treasury proposals back in 2020, OnFinality has run over 50 API service endpoints for many different teams around the growing Polkadot ecosystem. We've been able to take the tools and infrastructure that we've built and help other teams scale while providing superior experiences to their communities. We are dedicated to helping the Polkadot ecosystem through this next phase of parachain growth.

Our mission remains the same, to support all blockchain and dApp developers by providing core infrastructure and developer tools that save them hours.

Payment Conditions

The total ongoing running costs for high performance, scalable, and reliable public infrastructure:.

- Amount in USD: \$100,383.24
- DOT Rate: \$8.049 USD (using the [30 day avg tool](#) by Subscan on 2022-08-10)
- Amount in DOT: 12,471.517 DOT
- Beneficiary address: 12mRyiCp9zdh1wEVW5gLLiFBxDPKks72rRXmSupyEK3VAMLf
- Beneficiary contact: James Bayly - OnFinality (james.bayly@onfinality.io)