

CUSTOMER SUCCESS STORY



Since 2013, MyMiniFactory has been developing a “MetaReverse” community for independent digital creators. Over the years, they have steadily grown their user base, but a significant surge in 2021 as well as infrastructure outages prompted them to assess their cloud infrastructure choices to accommodate future expansion.

OpenMetal helped MyMiniFactory find:

- **Mission Alignment**
- **Cost and ROI Optimization**
- **A Partner in Growth**
- **Granular Control Over Infrastructure**



OpenMetal is an essential partner that aligns with our values and ambitions. They grasp the significance of fostering creativity and building a strong sense of community. They are an extension of who we are.



Nebo Nikolic, Chief Executive Officer of MyMiniFactory



ABOUT MYMINIFACTORY

MyMiniFactory is the world's leading 3D printable object-sharing platform, with a catalog of over one million 3D printable files created by thousands of talented digital creators.

MyMiniFactory aims to build what they call a “MetaReverse” – a liberating universe built on actual re-connections between people in virtual worlds, thanks to the power of 3D printing. This value-driven ecosystem is built on and reflects the overall goals of MyMiniFactory: Sustainability, Purposefulness, Inclusivity, and Freedom.

MyMiniFactory's cohesive platform is made up of 3D designers, 3D scanners, illustrators, creators, storytellers, painters, makers, and users, and is constantly growing. They are based out of the United Kingdom, with users around the globe.

Recognizing the need for a cloud provider that could optimize costs, minimize cloud waste, and facilitate their growth plans, they embarked on a search. Additionally, they prioritized finding a provider that shared their core values and demonstrated a commitment to giving back to the community.

The MyMiniFactory Cloud Wishlist

- Minimal downtime or service interruptions.
- Flexible infrastructure capabilities to accommodate traffic and usage fluctuations.
- Great support and customer service.
- Cost reduction and better ROI.
- A cloud partner, invested in their growth and success.
- Cultural fit; the new vendor had to be aligned with their values of sustainability, purposefulness, inclusivity, and freedom.

THE CHALLENGE

Prior to OpenMetal, MyMiniFactory was hosted on a combination of two other cloud infrastructure suppliers. Several service interruptions caused irreparable damage and there was insufficient communication. Support was slow and an actual solution was hard to get. These issues along with their rapid growth had MyMiniFactory looking around for a new cloud provider.

3D printing designs often consist of multiple files, each being of significant size. A company like MyMiniFactory offering storage for 3D printing files faces several cloud infrastructure challenges.



Scalability

As user base and data storage requirements grow, MMF needs scalable cloud infrastructure to meet growing demands, ensuring adequate storage, processing power, and network bandwidth.



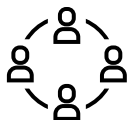
Data Security

Storing 3D printing files requires robust data security measures. The cloud infrastructure must incorporate encryption protocols, access controls, and backups to protect sensitive designs and intellectual property.



Bandwidth and Latency

Cloud infrastructure must provide sufficient network bandwidth and minimize latency to facilitate smooth and efficient 3D printing file transfers, especially for real-time collaboration or time-sensitive projects.



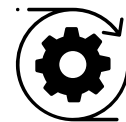
Accessibility and Collaboration

Cloud infrastructure should enable easy access to 3D printing files from any device or location, with collaboration features for seamless teamwork.



Cost Optimization

The solution should optimize storage utilization, employ efficient data compression techniques, and implement intelligent resource allocation to minimize unnecessary expenses.



Integration With 3D Printing Workflow

Cloud infrastructure should integrate with 3D printing workflow, including file format compatibility, slicing software support, and printer integration.

Among the aforementioned factors, the primary obstacles MyMiniFactory aimed to tackle while seeking a new cloud provider were scalability, data security, and, most importantly, cost optimization for their expanding storage requirements as well as control over data egress costs.



THE SOLUTION

*An Enterprise Storage Cluster with OpenMetal Standard
Cloud Core + Ceph Storage*

The initial solution implemented for MyMiniFactory's mission-critical storage needs was an enterprise Ceph cluster for S3 storage. This was deployed in OpenMetal's US East Coast Ashburn data center with a Standard Cloud Core connected to three large storage nodes with 12x12 TB drives, yielding a raw storage capacity of approximately 0.5 PB.

The Ceph cluster allows for:

- Scalability with easy expansion of storage capacity as the demand for 3D files increases.
- High performance by distributing the workload across multiple servers, enabling fast access and retrieval of large files.
- Improved data redundancy and availability through data replication and erasure coding techniques, minimizing the risk of data loss.
- Cost-effectiveness as Ceph can utilize commodity hardware and allows for incremental scaling, reducing upfront expenses.
- Simplified management of storage infrastructure with centralized interfaces, streamlining operations and ensuring efficient resource utilization.
- Flexibility and freedom from vendor lock-in since Ceph is an open source solution.
- Compatibility and future expansion as Ceph supports industry-standard protocols and integrates seamlessly with existing infrastructure.

By implementing an enterprise-level three-server hyper-converged Ceph cluster, OpenMetal was able to immediately enhance MyMiniFactory's ability to meet the growing storage demands of their customers effectively, while benefiting from scalability, high performance, data redundancy, cost optimization, simplified management, and flexibility.

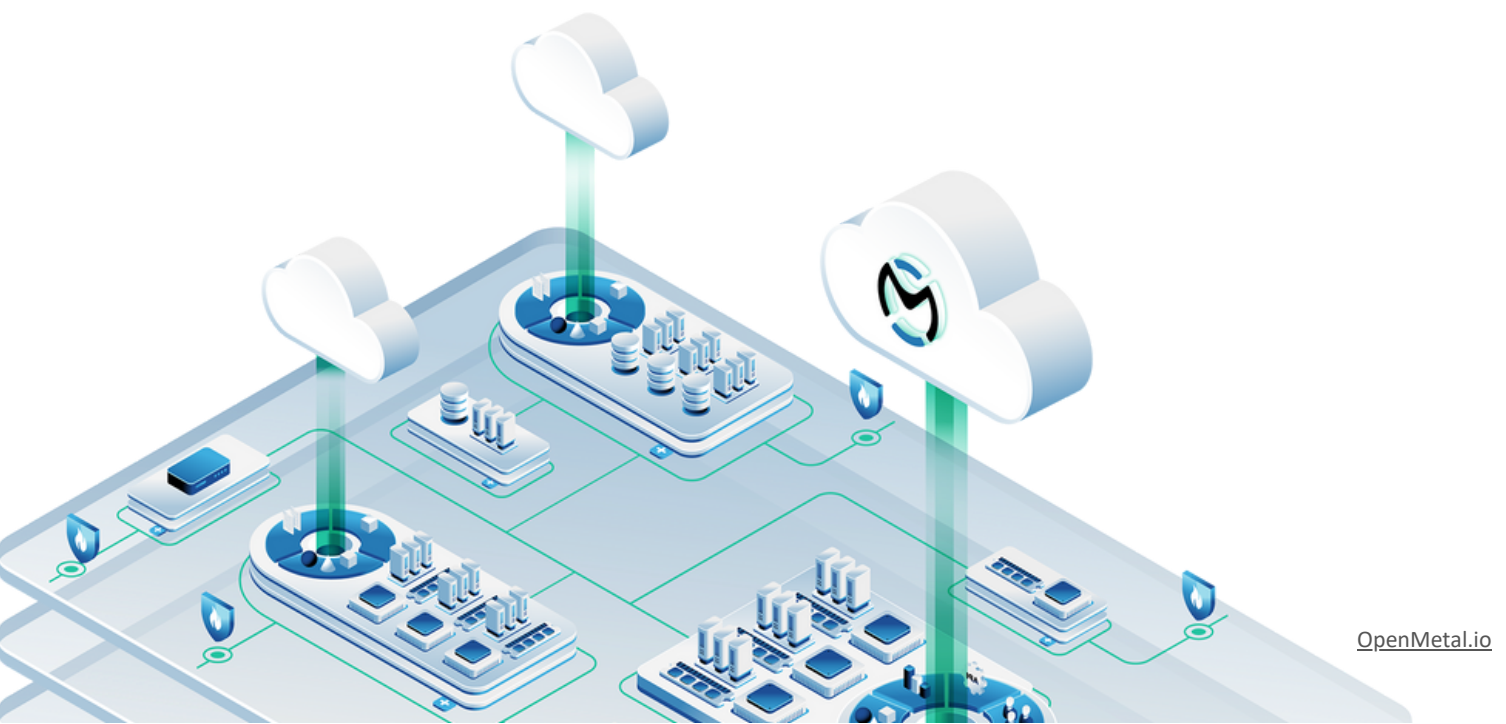
Within less than a year MyMiniFactory's storage cluster has grown from supporting 0.5PB to 1.9PB of data on nine of OpenMetal's XLv2 Storage Nodes with 12x 18TB drive and Erasure Coding 7/2 for efficiency.

INDUSTRY LEADING FAIR DATA EGRESS PRICING MODEL

OpenMetal employs a unique model for data egress pricing which highly benefits MyMiniFactory by reducing their overall bandwidth related costs as compared to a public cloud provider.

- **Cost Clarity:** MyMiniFactory benefits from a pricing model that assigns a specific amount of egress to each hardware unit in their cloud, bare metal, or storage cluster deployment. This clarity ensures MyMiniFactory can budget effectively and understand their baseline costs.
- **Financial Control:** When MyMiniFactory's use cases require more egress than the included amount, OpenMetal charges based on the 95th percentile of megabit usage. This approach prevents unexpected cost spikes and grants MyMiniFactory greater control over their egress expenses.
- **Flattened Bursting:** OpenMetal's pricing model flattens bursting, ensuring that MyMiniFactory does not encounter unexpected surges in egress costs during peak usage periods. This stability is particularly advantageous for MyMiniFactory as they have fluctuating data transfer needs.
- **Customized Savings:** For MyMiniFactory's specific use cases, averaging egress usage can yield substantial cost advantages compared to conventional per-GB billing. OpenMetal's tailored approach permits MyMiniFactory to optimize costs according to their unique requirements.
- **Adaptability:** MyMiniFactory appreciates the flexibility in OpenMetal's egress pricing model, aligning costs closely with their actual data transfer patterns. This adaptability enables MyMiniFactory to avoid unnecessary expenses while ensuring reliable data handling for their platform.

OpenMetal's egress pricing model empowers MyMiniFactory with financial predictability, control, and customization, enabling them to manage their egress-related expenses efficiently and effectively serve their growing platform's needs.



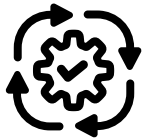


THE RESULTS

Along with finding mission alignment between our two companies, OpenMetal helped MyMiniFactory meet their technical and business goals. They are set up for growth, efficiency, and scalability.

“Support has been excellent. All technical issues have been resolved within 24 hours and any responses to technical enquiries have been thoroughly thought out first.”

Arys Andreou, Head of Infrastructure @ MyMiniFactory



Streamlined operations with more flexibility and security

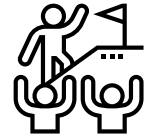
Through the utilization of OpenStack's tools and APIs, MyMiniFactory has adeptly configured its infrastructure to align seamlessly with its needs. This was achieved in an unattended manner using code.



Improved agility, scalability, and costs

MyMiniFactory orchestrated its infrastructure to facilitate swift testing and a seamless journey toward a more robust product.

The establishment of a predetermined, monthly cost has proven to be a source of liberation on the budgetary front.



Reliability and competitive edge

No downtime or network interruptions have allowed MyMiniFactory to be resilient.

Their choice to take advantage of OpenStack allows them to differentiate and be competitive.

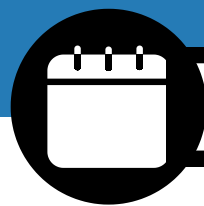
Continued Partnership

MyMiniFactory has shared that they envision working with OpenMetal for years to come, and only see the partnership getting stronger as both companies expand globally.

“Having a set out planned monthly cost already agreed in advance has been liberating from a budget perspective and has allowed us to allocate resources elsewhere within the business with the knowledge our infrastructure costs are not going to spiral out of control. It has allowed the technology budget to be used on hiring new members for the team, which is permitting our growth to accelerate further.”

Matt Weston, Chief Financial Officer at MyMiniFactory

Did this resonate with your business needs? Contact our team to find out how OpenMetal can optimize your infrastructure and help you break away from exorbitant public cloud costs and restrictions.



Schedule a demo

ABOUT OPENMETAL

OpenMetal is a leading provider of open source cloud and infrastructure-as-a-service (IaaS) solutions. By combining the strengths of traditional public cloud, private cloud, and bare metal fused into an alternative cloud platform (powered by OpenStack and Ceph), OpenMetal eases accessibility to highly complex open source systems and allows companies of all sizes to realize new opportunities in performance, productivity, and profitability. A strategic member of the Open Infrastructure Foundation (OIF), OpenMetal is committed to empowering individuals – by themselves or within teams – to meaningfully contribute to the larger open source community to foster innovation that benefits all.

