

Zetta.io is favored by Start-up Founders & DevOps Culture.



The Story of Zetta.io

Founders Per Brose, Dag Stenstad, Einar Forselv have been involved with delivering mission critical systems for large telecommunications and global enterprises in Europe. Their vision with Zetta.IO is to deliver the same level of service and availability that they have grown accustomed to at major telecoms and corporate data centers into the hands of webscale companies and enterprises throughout the Scandinavian region. They did in-depth evaluations of the cloud technology vendors on the market, pitting vendors against each other through bakeoffs. They arrived at the conclusion that only open source technologies can give them the most flexibility and control over their technology stack. They redefined their technology direction towards open source and started replacing the proprietary components in every part of the hardware and software stack with open source technologies starting with Linux, KVM, OpenStack cloud software and MidoNet Network Virtualization software.

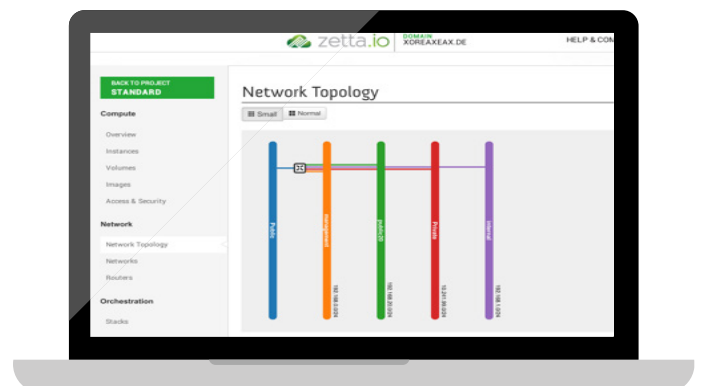
Differentiation based on customer service and customization, Zetta.IO is winning customers all over Scandinavia over global cloud providers like Amazon Web Services (AWS) and Google. One of the reasons is that Zetta.IO meets the mandates set by the Norwegian Data Protection Authority for where and how data (especially personal information) is stored and their high data privacy and security requirements.

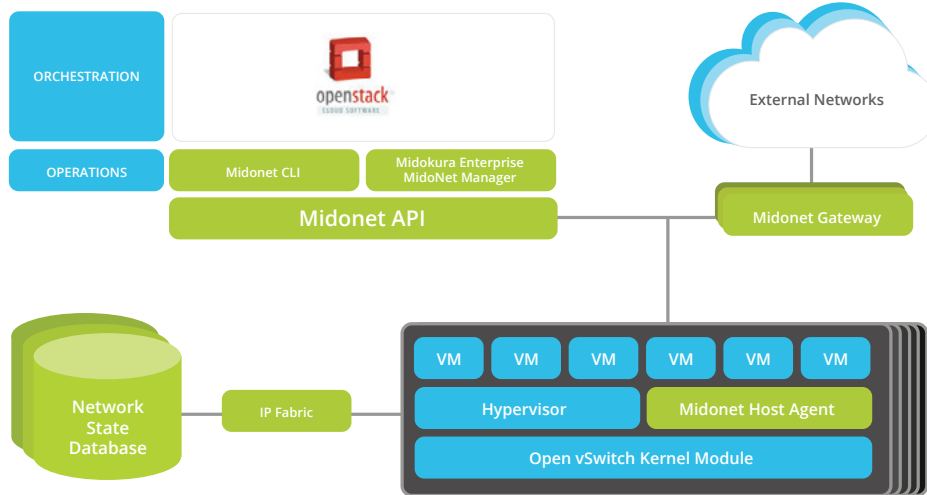
The second reason is because customers in Scandinavian countries have preference for green IT, many public cloud providers in the Nordics are making investments in green IT and Zetta.IO is no exception. Leveraging Midokura Enterprise MidoNet helps Zetta.IO scale and add virtual infrastructure and services without adding hardware requiring more power and cooling or changing the physical infrastructure. Maintaining and/or reducing the hardware footprint provided significant savings on power and cooling. Zetta.IO pride themselves on providing the most ecological return

on investment on energy produced with sustainable clean technology while maximizing the efficiency of the hardware. The technology partnership with Midokura has helped Zetta.IO win new business in the region and keep the global public cloud providers like AWS and Google at bay.

Involvement with OpenStack

While the costs advantages of open source and open systems are obvious, leveraging open source technologies that were customizable has helped Zetta.IO differentiate from competition. The founders has been involved with OpenStack since the initial project announcement and have built custom workflows on top of the OpenStack Horizon dashboard to let users launch instances and create routers and networks easily. Zetta.IO also built custom systems for billing, registration and other business workflows. Providing a custom UI gave their customers a cohesive branded experience that uniquely belongs to Zetta.IO.





Tech Stack at Zetta.IO

- Operating System: Ubuntu Linux
- Cloud Orchestration: OpenStack Cloud Software, SaltStack and Razor
- Hardware: SuperMicro
- Networking: Edge-corE with Cumulus Linux
- Object Store: Ceph + Swift
- Network Virtualization: Midokura Enterprise MidoNet

Technical Reasons for choosing Enterprise MidoNet

Zetta.IO customers have high packet processing requirements which taxes the network and present a challenge for the Open vSwitch in OpenStack Neutron to handle the heavy load.

Addressing the network bottlenecks prompting Zetta.IO to evaluate the SDN solutions available on the market at the time, they discovered that existing SDN solutions such as Cisco, Juniper, were tied to hardware and even the startups shipped as appliances. These solutions were at odds with Zetta.IO who wanted to leverage a fully open technology software, systems, storage and networking stack.

Zetta.IO admired Midokura's unwavering commitment with OpenStack since Bexar release and that MidoNet leverages OpenStack Neutron APIs. Putting MidoNet into production proved that by replacing the default Open vSwitch (OVS) plug-in with the MidoNet plugin alleviated the networking bottlenecks that their customers with high packet processing faced. Zetta.IO chose MidoNet because it met their performance requirements and was the only network virtualization vendor that was not tied to hardware and being open source helped solidified MidoNet into Zetta.IO's open cloud technology stack.

Zetta.io engineers collaborated closely with Midokura engineers because both teams have strong Linux expertise and come from similar backgrounds in enterprise data centers and cloud infrastructure. By eliminating the typical barriers between vendor and customers, formal and informal communication between the engineer teams flowed freely through the formal support engagement and informally through open source

communication channels like IRC and mailing lists. Working closely together enabled Midokura engineers to anticipate Zetta.io's growth requirements and bake those requirements into the future Enterprise MidoNet releases.

Looking Ahead

Zetta.io runs Cumulus-Linux OS architecture for the IP Fabric and eagerly anticipate the planned integration between Midokura Enterprise MidoNet and Cumulus Networks. The integration would allow operators to provision Quality of Service (QoS) for entire fabric, provide resource protection for hotlinks, detect overload and MidoNet can throttle traffic at the edge. The objective of the integration of the network overlay and the fabric is to provide a better user experience, better management experience for the operator.

"We felt that Midokura Enterprise MidoNet was the best network virtualization solution available at the time of our evaluation. Time-to-market, stability and scalability are all paramount for our success. Midokura understands this and is dedicated to helping us reach our goals of a production-ready cloud,"

- Dag Stenstad, CTO of Zetta.IO.