

# HOW STRATUS ENABLED MATTERNET TO BUILD DRONE DELIVERY PLATFORMS FOR CRITICAL MEDICAL SUPPLIES

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STRATUS  
INFORMATION SYSTEMS



**MATTERNET**



**MATTERNET**

# ABOUT MATTERNET

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Matternet products enable organizations around the world to build and operate drone logistics networks for transporting goods on demand, through the air, at a fraction of the time, cost and energy of any other transportation method used today.

## Founded

2011

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## Headquarters

Mountain View, CA

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## Industry

Drones, Logistics, Robotics

# THE CHALLENGE

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In March 2017, Matternet became the first company in the world to be authorized for urban drone delivery operations in Switzerland. The following year, the company was selected to participate in the FAA's Drone Integration Pilot Program in North Carolina and San Diego. Matternet's goals have always been ambitious.

"The vision of Matternet is to make access to physical goods as seamless as the Internet has made access to data," said Paolo Resmini, VP of Software Engineering at Matternet. "The infrastructure of the Internet has allowed equitable access to

data...and you can imagine a similar version for a physical network where the aircraft is moving physical goods in the same way."

While exciting, these opportunities are not without challenges. A significant element of Matternet's innovative delivery system involves working with a series of remote stations all over the world, and these remote stations needed secure, reliable network infrastructure -- a network that would connect back to the home office, seamlessly and effectively. That's where Stratus came in.



**I met with Jason [Lacey] at Stratus and said 'I've heard some good things about Meraki, I'd like to learn more', so it was really a very traditional IT engagement at first. But then as we got to know each other and Jason dug into what we do, we started to talk about how we could have a deeper relationship and actually integrate some of this technology into our station.**

- *Paolo Resmini*



**In our initial conversations with Paolo we were bought into their vision of worldwide drone delivery and we were very enthusiastic about rolling out Cisco Meraki at all of their remote station networks as well as their HQ. With Cisco Meraki earning their spot as the leader in multi-site cloud networking deployments, it made perfect sense to partner with Matternet.**

- *Jason Lacey*

# THE OPPORTUNITY

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As a smaller, nimble startup, Paolo and his team were concerned that a full Cisco Meraki solution would be out of reach for Matternet, and kept their initial scope small. The Stratus team, however, quickly came to understand what Matternet would need to be successful.

“We understood that Paolo needed to have secure station networks all throughout the globe,” said Jason Lacey, Sales Director at Stratus. “We understood that they weren’t able to have technical staff on site at each of these remote station networks, so it was important to be able to remotely manage

their worldwide networks through a single pane of glass from the Bay Area.”

After a demonstration of the Cisco Meraki dashboard and elements like the network topology feature, which showed a living, breathing diagram of the Matternet network, Paolo and his team realized how powerful a full stack Meraki solution could be to their growth strategy.

# THE RESULTS

The requirements that Matternet had were steep -- in addition to the “single pane of glass” platform, the launch pads and drones needed a network that could work in any weather conditions, cellular backup, and 99% uptime. By uniting Matternet and Meraki and providing the right know-how, Stratus was able to meet and exceed the startups networking requirements.

Matternet currently has remote station networks established throughout the US and Switzerland. At WakeMed hospital in Raleigh, Matternet drones were able to reduce the transit time for medical samples between labs from hours to minutes. In Switzerland, Matternet’s four point-to-point launch pads have helped reduce the transport times of critical supplies and lab specimens substantially.

Matternet is now looking to expand, with their Meraki network infrastructure ready to scale with them. From potentially partnering with UPS and CVS to building out their network of launch pads and remote stations, they’re prepared to meet the challenges of the future head-on.

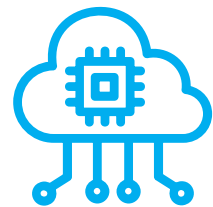


**It’s almost like Paolo had a crystal ball, pre-pandemic. COVID19 has put a lot of strain on everyone in the world and the fact that Matternet is at the forefront of the pandemic leveraging their technology to help overcome this unprecedented lockdown and come up with a solution to expedite testing as quickly as possible is fascinating.**

- Jason Lacey

# MATTERNET NETWORK SOLUTIONS

Stratus and Cisco Meraki implemented the following solutions at Matternet:



Cisco Meraki cloud-managed [firewalls](#), [switching](#), and [wireless](#)



Cisco Meraki dashboard



[Meraki 99.99% reliability SLA](#)



Network cloning and configuration sync for multi-site deployment



Stratus from the beginning treated us as if we were a Fortune 500 company and pulled in the resources of Cisco to help, and it was the same thing when the Cisco engineers jumped on. It was the same level of engagement for a company that might only be buying five to ten units from them over the next year, but they treated us with a level of engagement that was unique and refreshing.

- Paolo Resmini