37signals 4. CASE STUDY

37SIGNALS LEFT THE CLOUD FOR SUMMIT'S DATA CENTERS. NOW THEY SAVE MILLIONS OF DOLLARS PER YEAR.

A CASE STUDY BY



COMPANY:

37signals

COMPANY DESCRIPTION:

37signals helps businesses work smarter and simpler with its suite of efficient tools, including the iconic Basecamp for project management and HEY for modern email.

INDUSTRY:

SaaS

SUMMIT PRODUCTS:

Colocation, Network Connectivity, Disaster Recovery

CHALLENGE

- Leave the cloud
- Run 37signals' project management and email applications entirely on owned, colocated hardware to save on out-of-control cloud costs



The cloud is often just as complicated as running things yourself, and it's usually ridiculously more expensive. So if the money matters – and when does it not? – I urge you to do your own math. Consider whether you have a service that really benefits from constantly scaling the capacity up and down. Then have a serious look at what your own cloud exit could look like. We pulled out seven applications in six months. You can do that too. The tools are there. They're free. So don't just stay in the cloud because of the hype

CTO, 37signals



OBJECTIVES

- Uptime is non-negotiable customers depend on Basecamp and HEY for business-critical interactions
- Managed services bills must make sense no surprise charges for opening doors or arranging cables
- Provider must truly be able to augment 37signals' small team — competence and a human approach are key



With AWS, we give them \$300,000 a month and they don't care about us. They don't answer our calls. But we call [Summit] and they're on the phone with us immediately. They care about our problems, they want to help us.

— CTO, 37signals



SOLUTION

Colocation

- Identical, future-proofed footprints in Summit's Ashburn and Chicago data centers
- (4) 48U cabinets in Ashburn with ~90 Dell R7625 servers
- (4) 48U cabinets in Chicago with ~90 Dell R7625 servers
- 40 kW of power split among four cabs in each site, so about 10 kW per cab

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29	bc3-rollout-01
28	kvm-16
27	bc3-jobs-08
26	bc3-export-01
25	bc3-16
24	bc3-10
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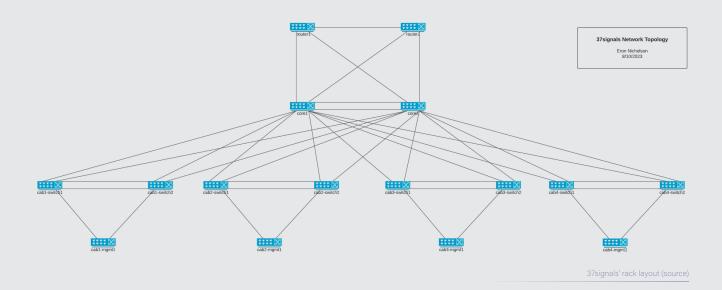
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LEGEND				
Dell R720XD				
Dell R430				
Dell R630				
Dell R730XD				
Dell R440				
Dell R540				
Dell R640				
Dell R6525				
Dell R6625				
Dell R7625				
Juniper MX204				
Juniper QFX3120-32C				
Juniper QFX3120-48T				
Juniper QFX3120-48Y				
Juniper EX2300				
Other				

37signals' rack layout (source)

Network Connectivity

- Redundancy at each layer to withstand the loss of any single link or device
- External connections to the internet, AWS, and between data center sites
- Each connection uses different providers and diverse physical paths to ensure resilience



Disaster Recovery

- Critical apps run in Summit's
 Ashburn and Chicago data centers
 in an active/standby capacity
- One site can be quickly moved to the other during a disaster event

PERFORMANCE RESULTS

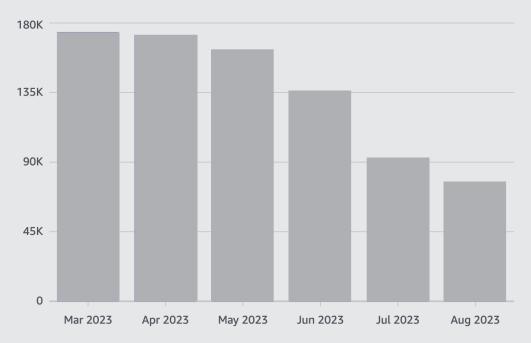
- The median Basecamp request now runs in just 19ms, compared to 67ms before
- The mean request is 95ms now vs. 138ms before
- The median query time dropped in half



37signals' rack layout (source)

COST RESULTS

- Cloud spend is down by 60%
- 37signals expects to save \$10m over five years after moving off the cloud



37signals' cloud spend per month in 2023 (Source



the bottom line.

- CTO, 37signals





CONCLUSION

The 37signals team builds everything as if "no decision is forever," says Eron Nicholson, Director of Operations at 37signals. When you approach infrastructure with the understanding that "we can always decide to reevaluate and do things better," you need a partner willing to do that with you. The relationship between Summit and 37signals has worked since 2010 because we both:

- · Constantly seek incremental improvements; and
- Experiment with techniques to push us forward while still delivering total uptime for services that businesses depend on.

In Summit, 37signals found an infrastructure partner capable of managing the day-to-day hardware maintenance and the all-hands emergencies with the same attention and dedication as its own staff.