

TFDx - NooBaa

Cloud services engine

Yuval Dimnik (Co-founder and CEO)  
Exanet filesystem team (Dell FluidFS nowadays)  
Guy Margalit (Co-founder and CTO)

Founded 2014, product launch September 2016, headcount 14 (security/storage DNA)

Customers don't care how you do your tech, they care how it fixes their problems  
Customer sweat investment, platform lockdown, cloud choice.

Hybrid cloud is painful  
cloud and on premises resources mixture is a fact for large enterprise  
applications are forced to either/or since "hybrid" products provide gateway, DR or migration  
data gravity makes enterprise public cloud adoption hard and costly  
agility and cost driven - results in complexity

Enter NooBaa

A pure software product

Enabling to create and provision cloud services

- storage (like AWS S3) - First!
- server less compute (like AWS Lambda) - Future

The customer owns the service

- full control of who accesses what, and what stays on-premises
- removing cloud vendor lock-in

The services use

- heterogeneous resources - cloud resources and servers
- in the cloud, on-premises, and spanned

Design considerations (once bitten, twice shy)

behave like the cloud

consume from on-prem, cloud

Can you predict the unpredictable?

cloud strategy?

growth rate?

hardware technologies?

vendors?

organisational changes?

security issues and lurking "heart bleeds"?

Need to be

on-premises, multi-cloud, cloud migration

P2P scalable capacity

monitor hardware and adapt

agnostic to the machine

allow to grow, all to shrink  
user space as a religion - when you need to fix that you can do it right away

#### Architecture

[TFDx - NooBaa - architecture.tiff]

[TFDx - NooBaa - architecture2.tiff]

[TFDx - NooBaa - architecture3.tiff]

#### Demo

Not targeting low-latency workloads  
Node pools, you can add cloud resources as well

At this stage - cloud agnostic

1. Cloud back-end
2. Stripe to EC2 nodes
3. Cloud sync - to or from cloud, bidirectional

Community Edition - limited to 20TB aggregate object size

#### White boarding with Guy

A complete data path white board (write, read)  
networking review p2p/cross sites

Heterogeneous resources are key for NooBaa