

An Introduction to **Azure Service Fabric**

————— created by Mike Wood —————

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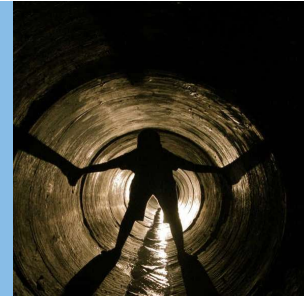
Gold Sponsors



SETTING EXPECTATIONS



#1



#2

WHAT IS SERVICE FABRIC ?

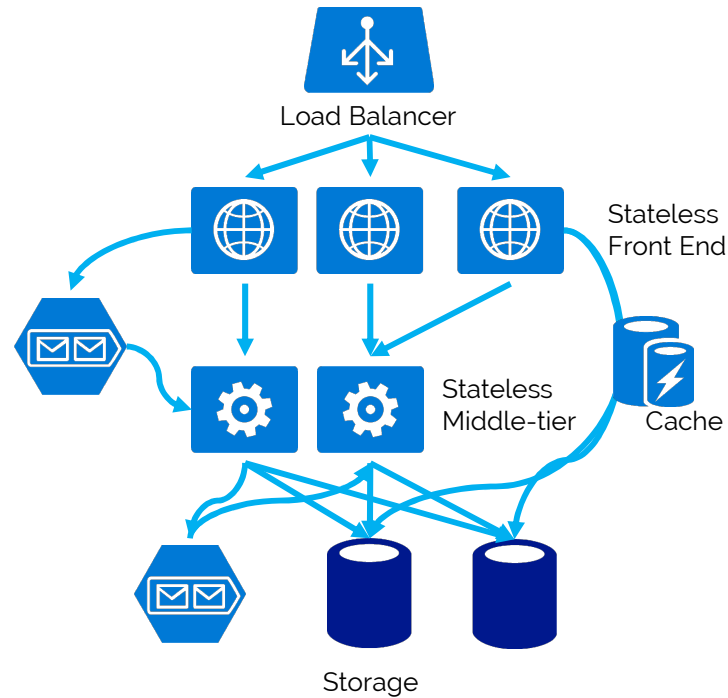
“ a distributed systems platform used to build scalable, reliable, and easily-managed applications for the cloud.



Image: Jedi Salesman by Brad Montgomery / CC by 2.0

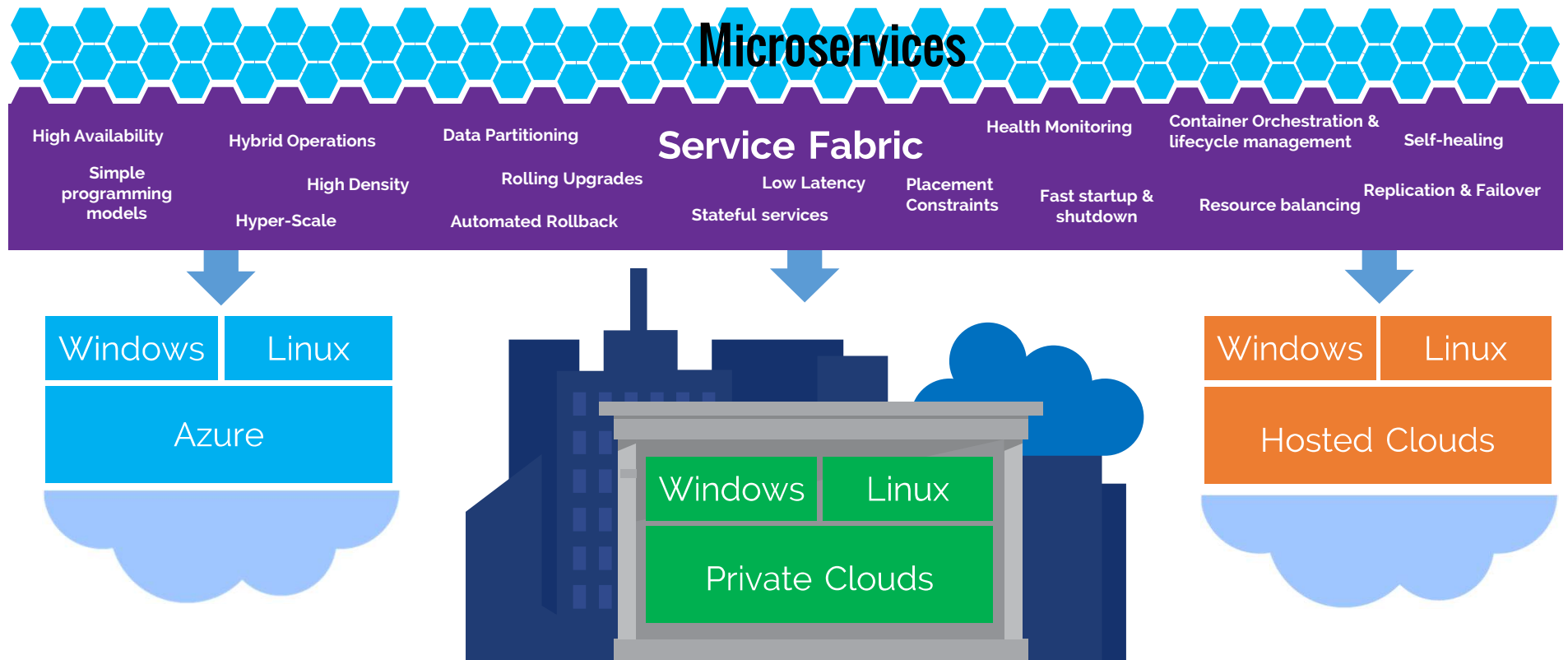
What **PROBLEM** is this solving?

- **Complex**
- **Handle HA**
- **Handle Partitioning**



- **Slow Deployments**
- **Resource Distribution**
- **Multiple Deploy Models**

What is SERVICE FABRIC?



What is SERVICE FABRIC?

System Services



Cluster manager



Failover manager



Naming

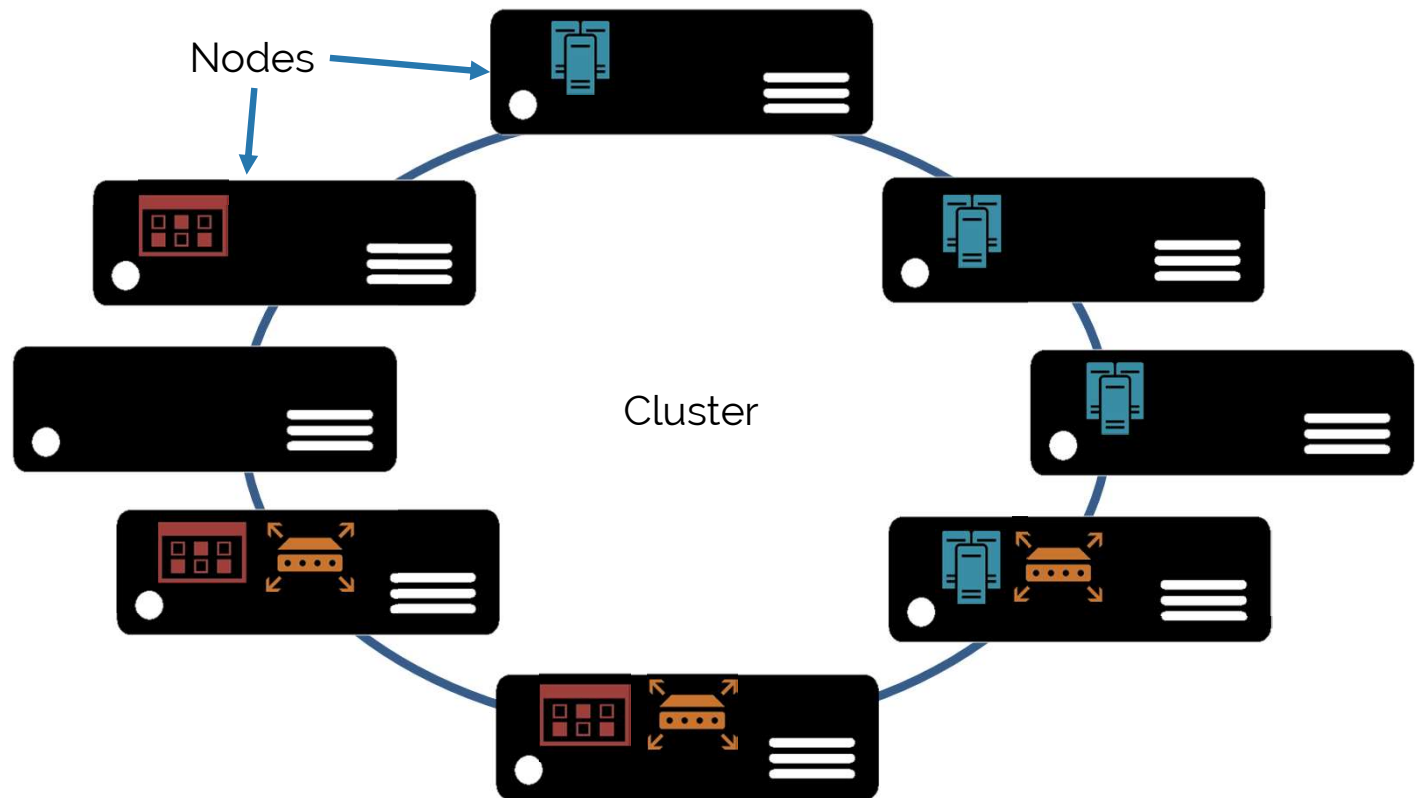


Image Store

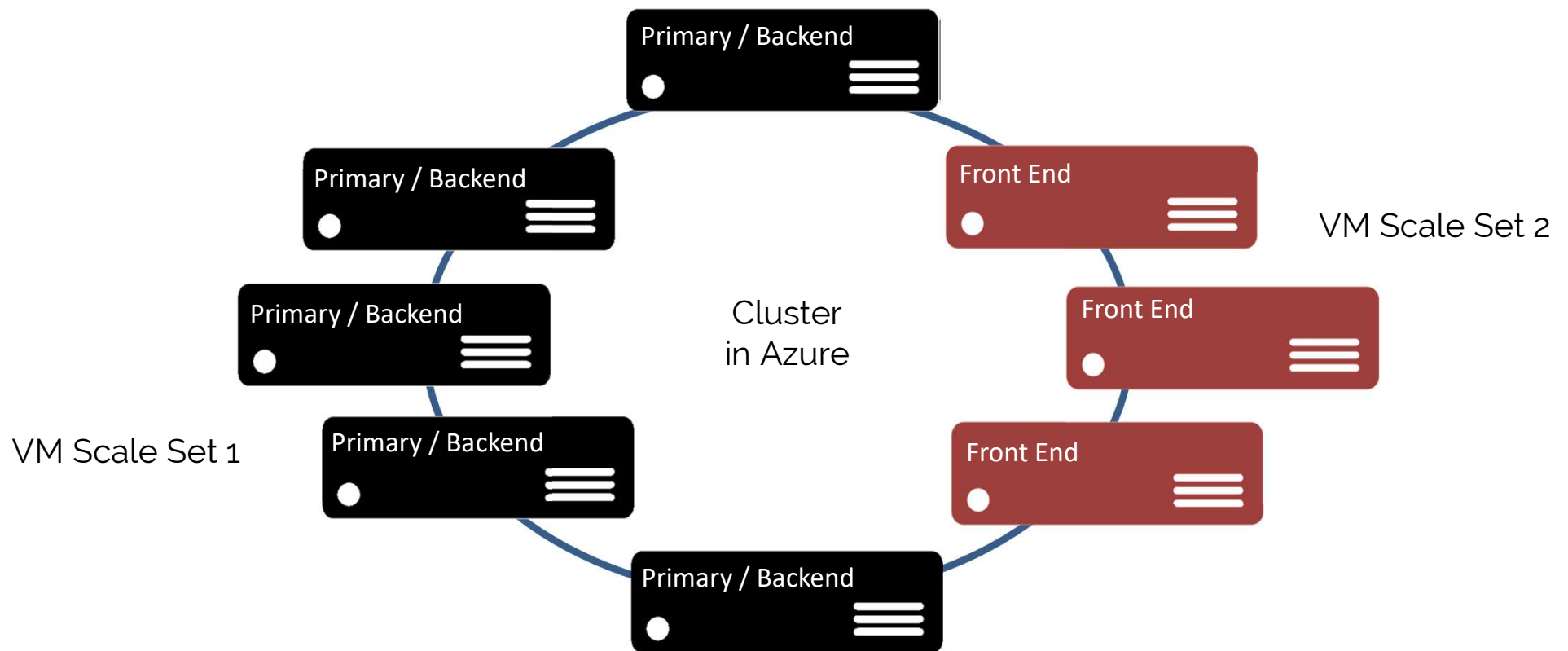
Health Manager

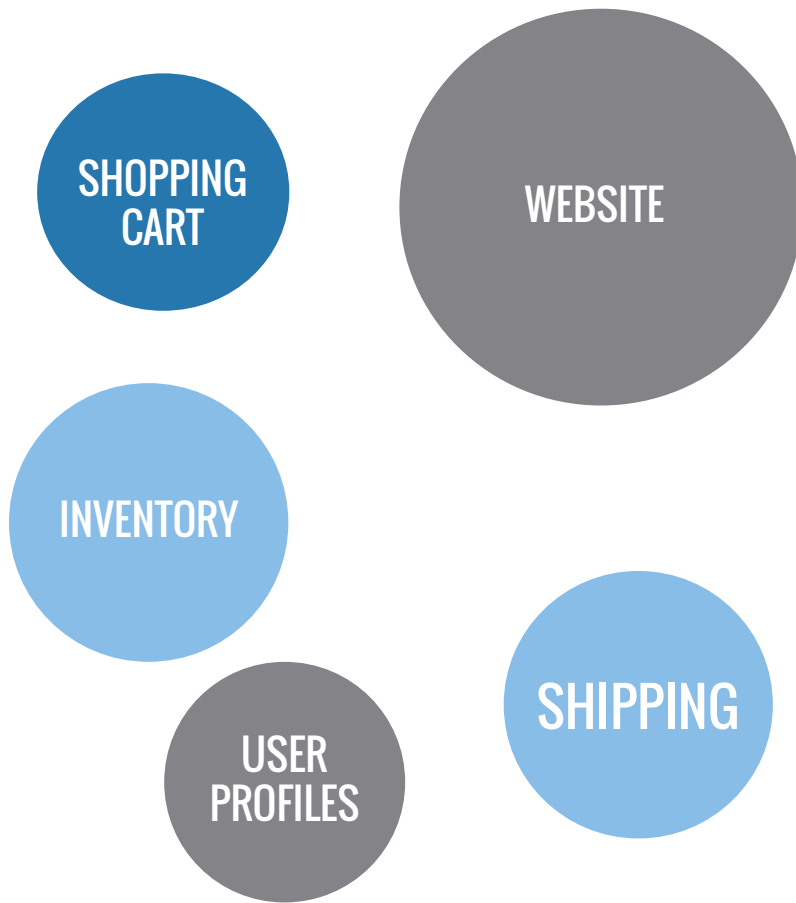
Reverse Proxy

DNS Services

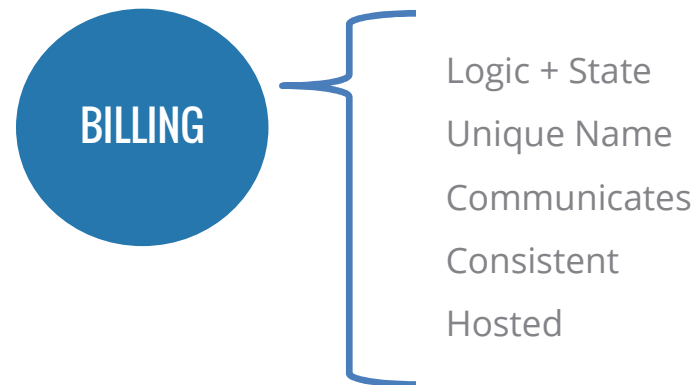


What is SERVICE FABRIC?



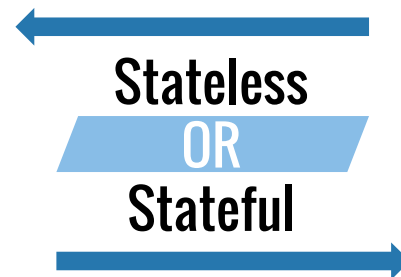


/// MICRO SERVICES



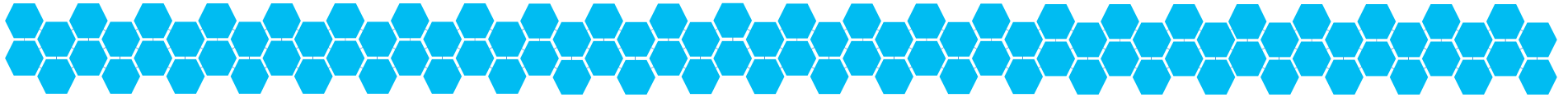
TYPES OF MICROSERVICES

- ✓ No state (external)
- ✓ N instances



- ✓ Authoritative State
- ✓ Partitioning with N consistent copies

Microservices



Programming Model Options

Reliable Actors API



SMALL INDEPENDENT UNITS

SINGLE THREADED

MANAGED CONCURRENCY

MANAGED COMMUNICATION

Reliable Services API



LOGIC ACROSS COMPONENTS

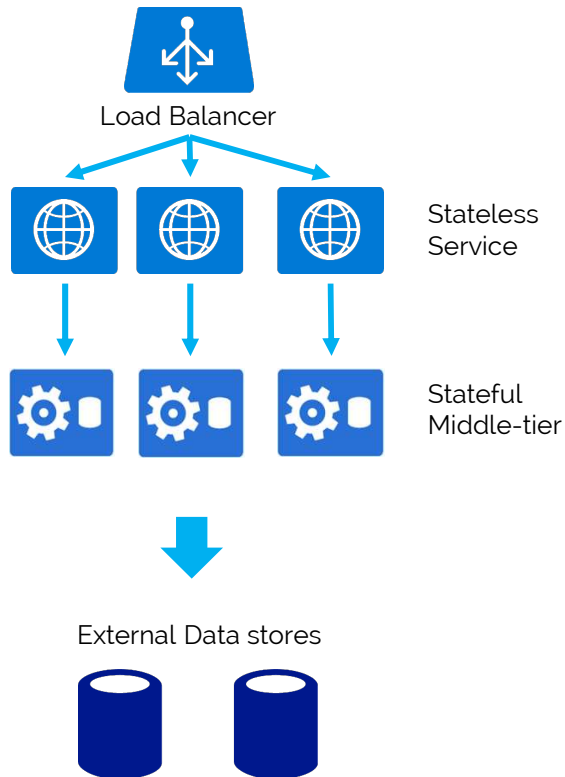
RELIABLE COLLECTIONS

CONTROL GRANULARITY OF STATE

CONTROL COMMUNICATION

Solving the **PROBLEM**

- Reduces Complexity
- Managed HA
- Managed Partitioning



- Fast Deployments
- High Density
- Single Deploy Model

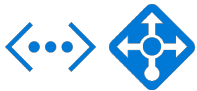


You are not
Constrained

Compute Continuum



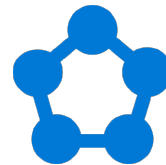
Virtual Machines



VM Scale Sets



Container Service



Service Fabric



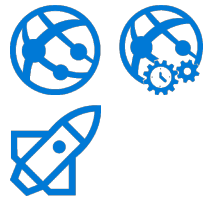
Cloud Service



Batch



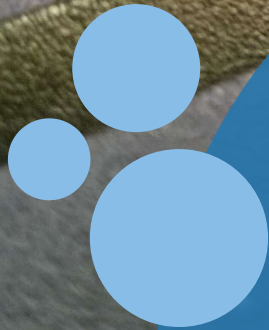
App Service



<http://bit.ly/chooseazureservice>



DEPLOY





TESTABILITY

" We adore chaos because we
love to produce order." - M C Escher

Image: Monkey by Samuel Rogers / CC by 2.0



WHAT DID WE LEARN TODAY?

- **Service Fabric can solve problems**
- **Exceedingly flexible and powerful**
- **Not a golden hammer**
- **Complexity may be ... moved**



/// Want to use it? No waiting required

Download the SDK

Azure Hosted Clusters & Windows Deployments are Generally Available

Party Clusters!

Service Fabric “Deploy Anywhere” for Linux in Preview

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THANK YOU

 mvwood.com

Get Started at
<http://bit.ly/azureservicefabric>