


Platform As a Service

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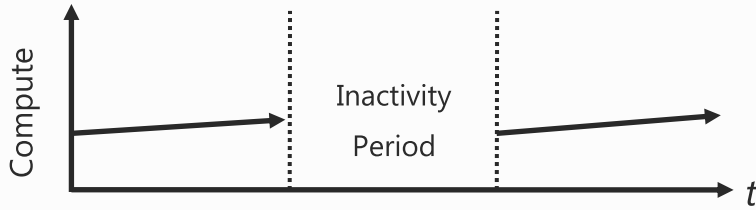


What is the cloud?

An approach to computing that's about internet scale and connecting to a variety of devices and endpoints

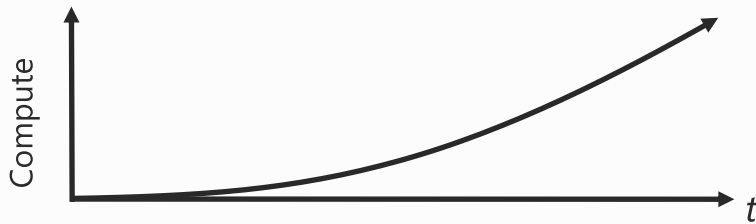


Cloud Computing Patterns



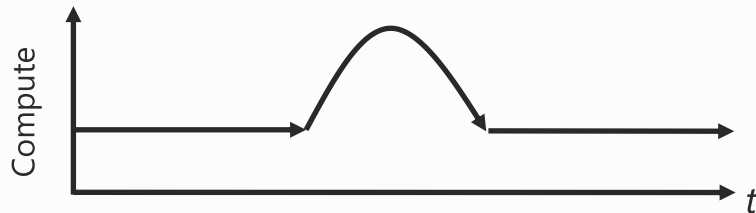
On and Off

On & off workloads (e.g. batch job)
Over provisioned capacity is wasted
Time to market can be cumbersome



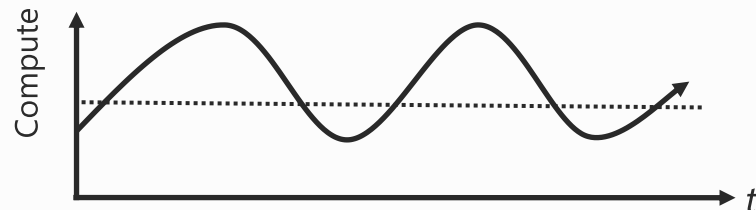
Growing Fast

Successful services needs to grow/scale
Keeping up w/ growth is big IT challenge
Cannot provision hardware fast enough



Unpredictable Bursting

Unexpected/unplanned peak in demand
Sudden spike impacts performance
Can't over provision for extreme cases



Predictable Bursting

Services with micro seasonality trends
Peaks due to periodic increased demand
IT complexity and wasted capacity

Cloud Computing



IaaS

Infrastructure-as-a-Service

host



PaaS

Platform-as-a-Service

build

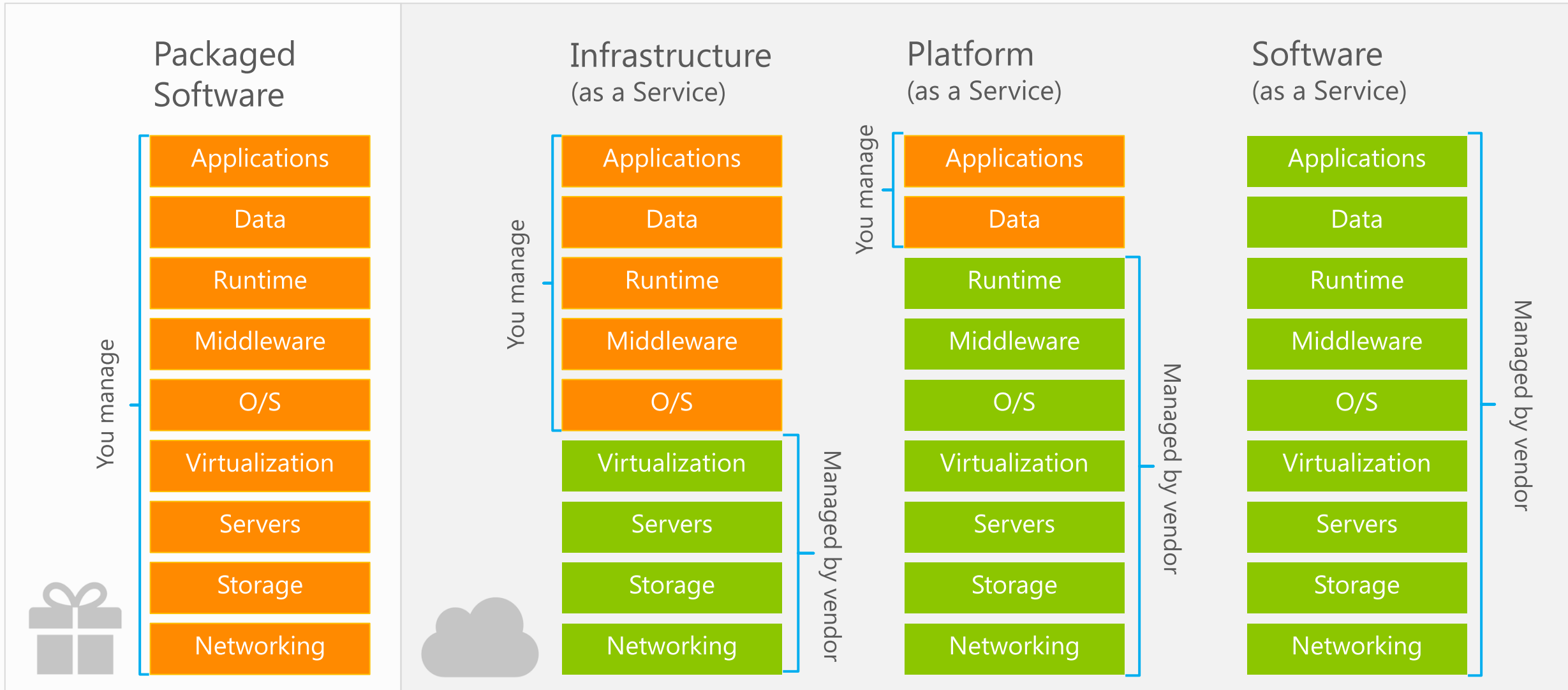


SaaS

Software-as-a-Service

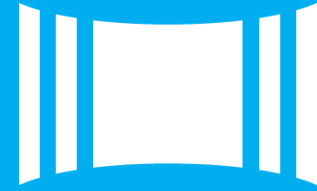
consume

Cloud Computing



Windows Azure

Comprehensive set of services that enable you to quickly build, deploy and manage applications across a global network of Microsoft-managed datacenters



Flexible



Open



Solid



Global
Footprint

99.95% monthly SLA

Pay **only** for what you use



Virtual machines



Cloud services



Web sites



Web sites

Build with ASP.NET, Node.js or PHP

Deploy in seconds with FTP, Git or TFS

Start for free, scale up as your traffic grows

Web sites



Demo

Web sites

shared

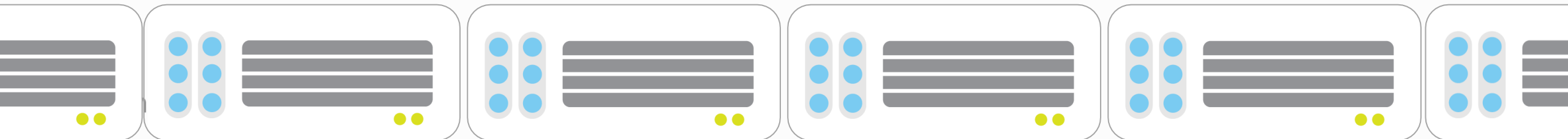
reserved

shared



1

SHARED INSTANCES



Web sites

shared

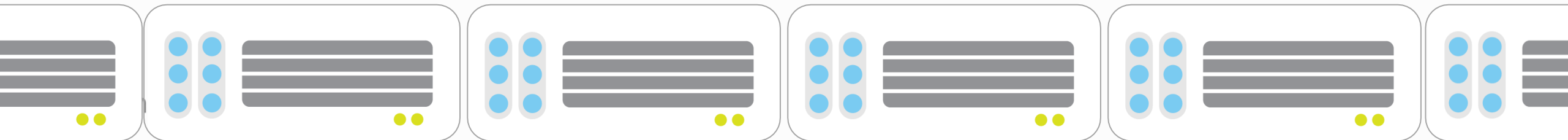
reserved

shared



2

SHARED INSTANCES



Web sites

shared

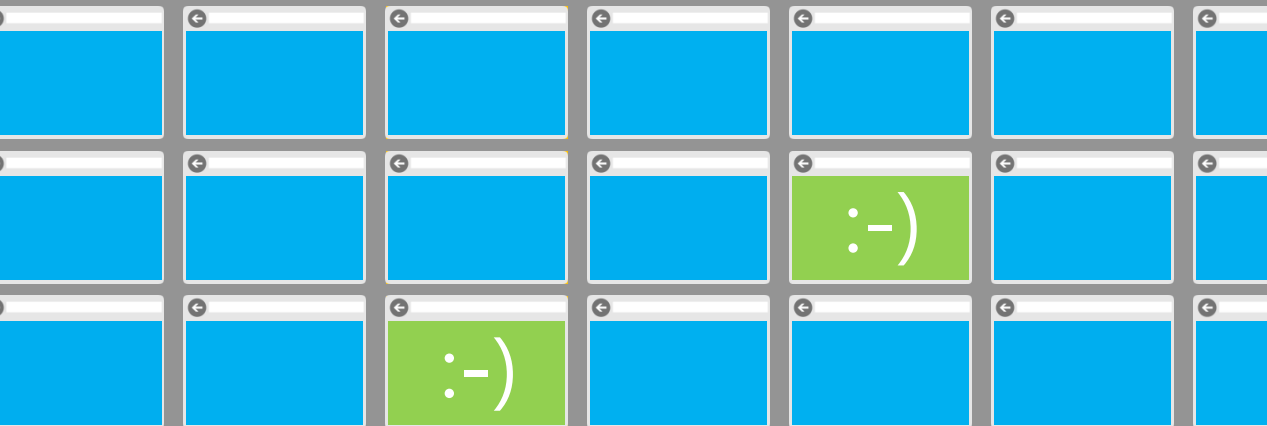
reserved

reserved

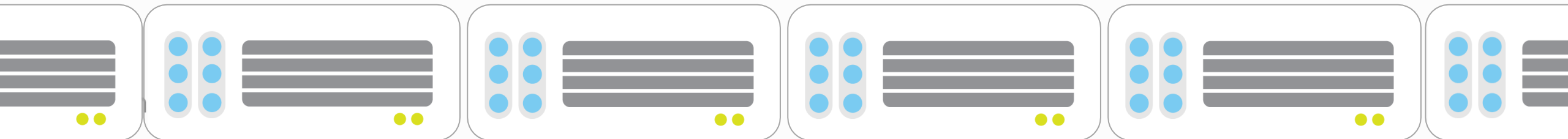
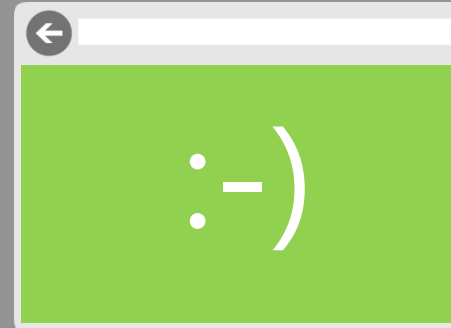


1

SHARED INSTANCES



RESERVED INSTANCE



Web sites

shared

reserved

reserved

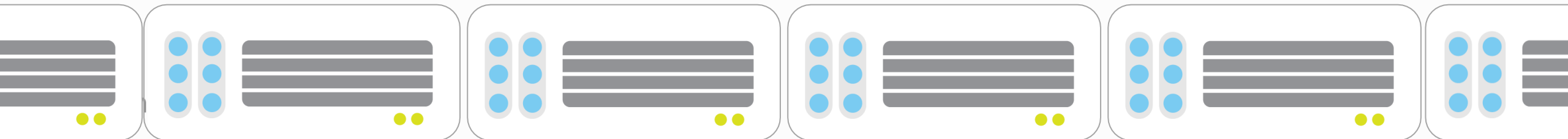


2

RESERVED INSTANCE



: -)



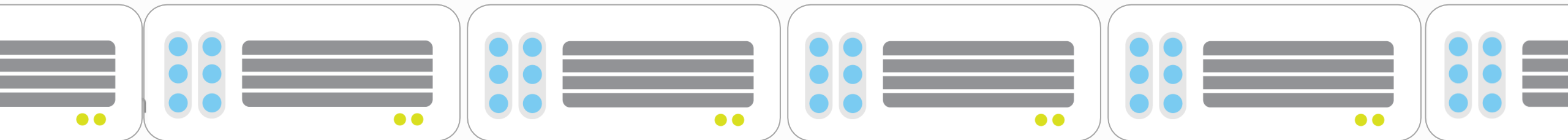
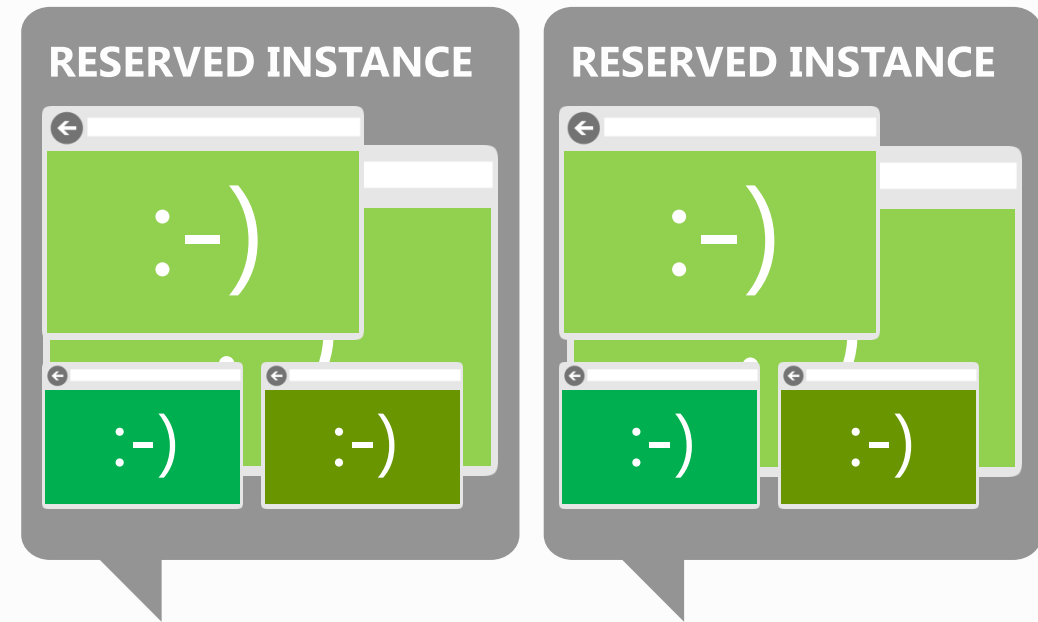
Web sites

shared

reserved

reserved

2





Cloud services

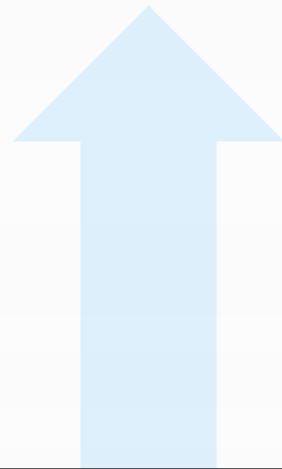
Build infinitely scalable apps and services

Support rich multi-tier architectures

Automated application management



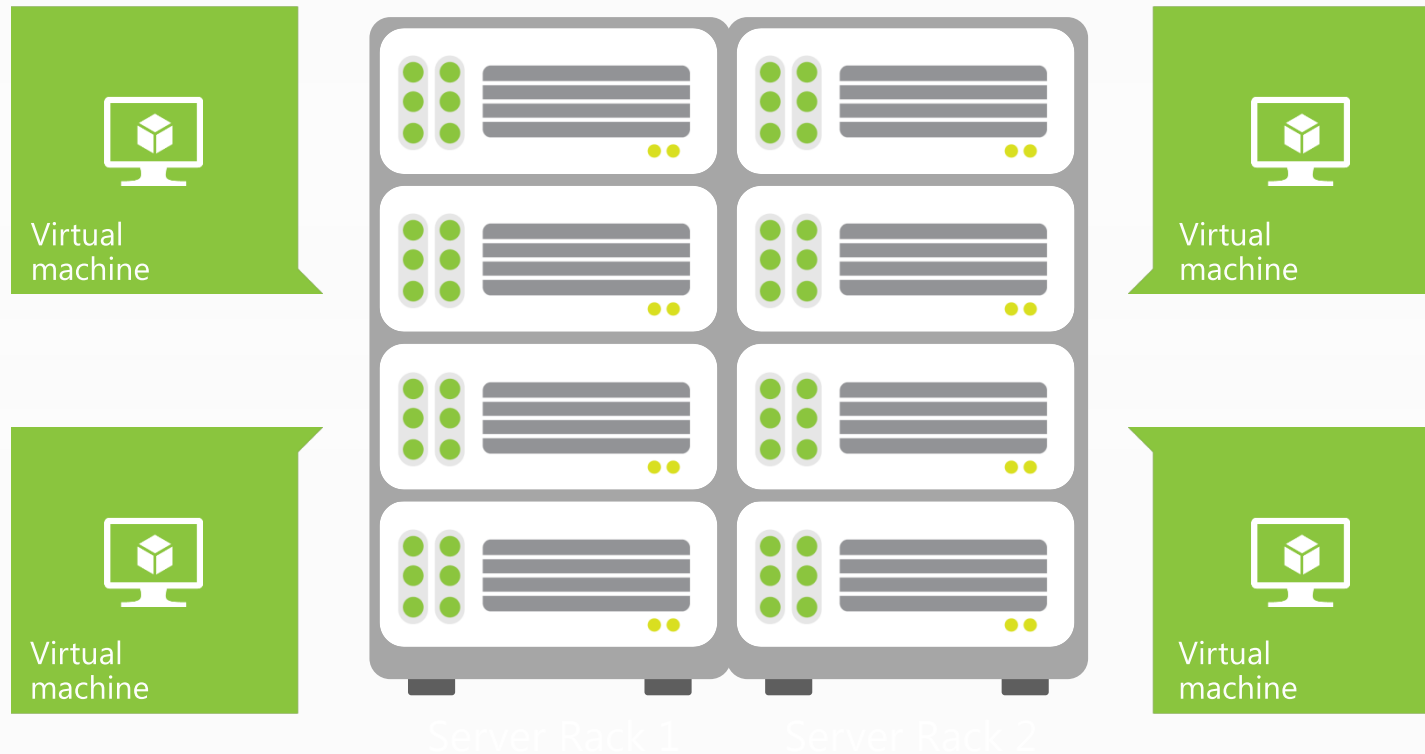
Windows Azure



Provision Role Instances

Deploy App Code

Configure Network



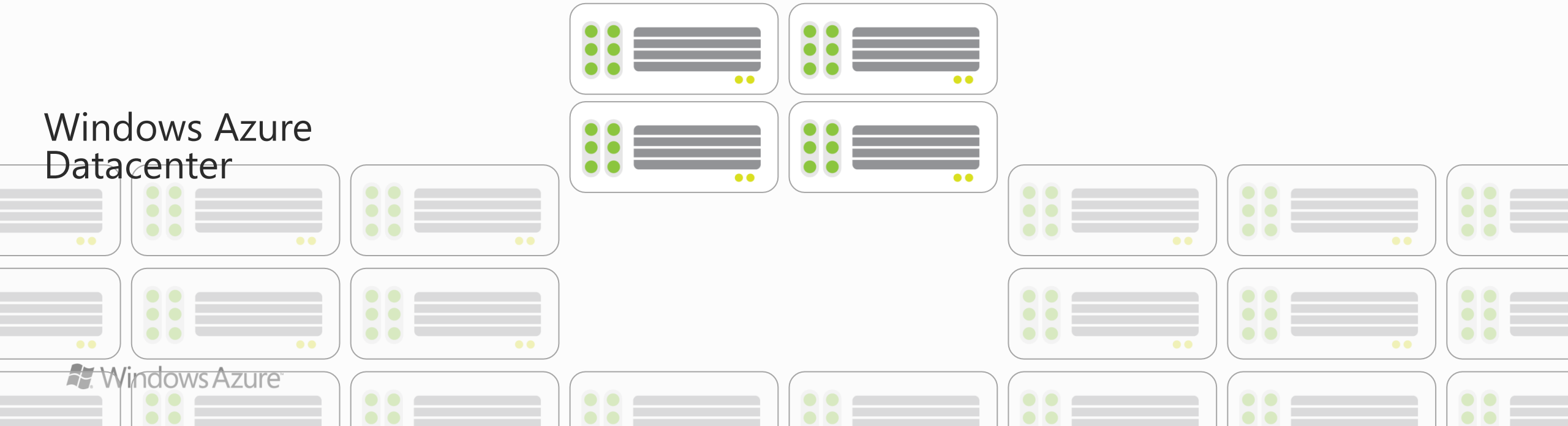
Provision Role Instances

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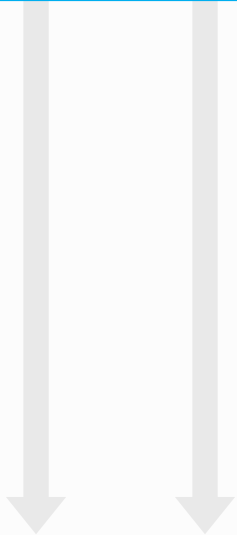
Windows Azure
Datacenter



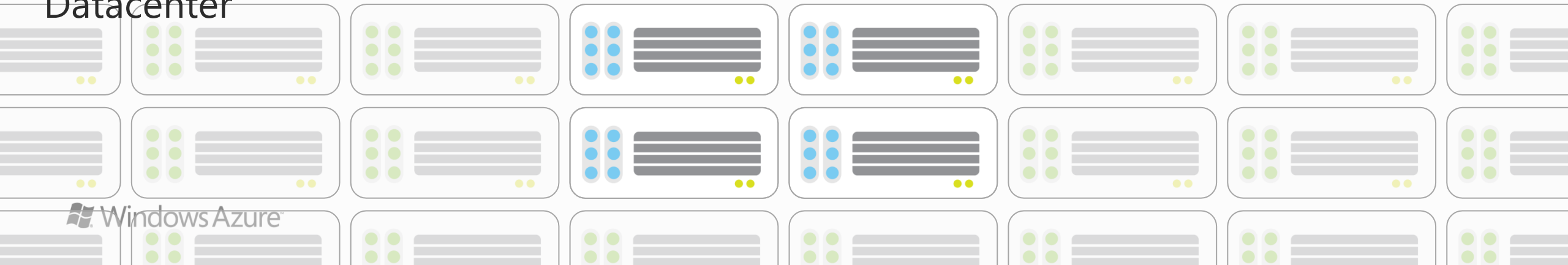
Provision Role Instances

Deploy App Code

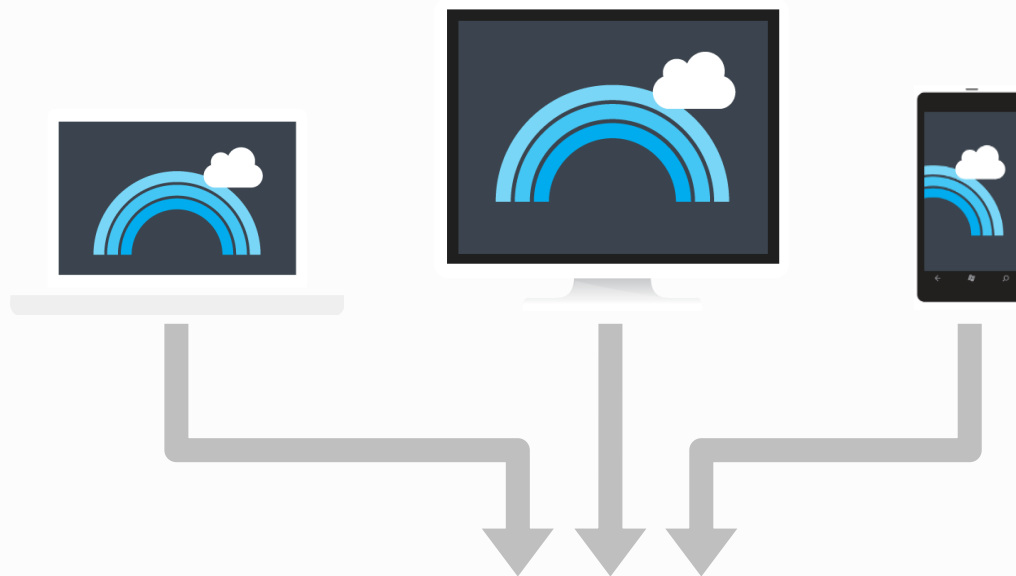
Configure Network



Windows Azure
Datacenter



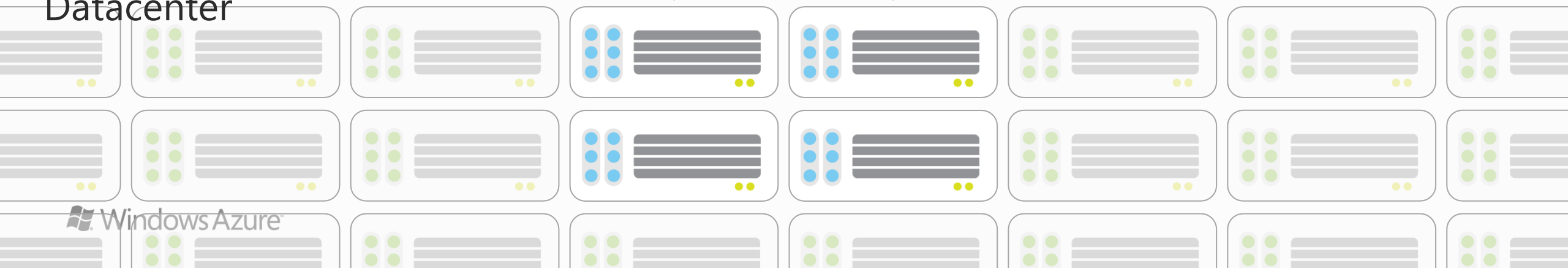
Provision Role Instances
Deploy App Code
Configure Network

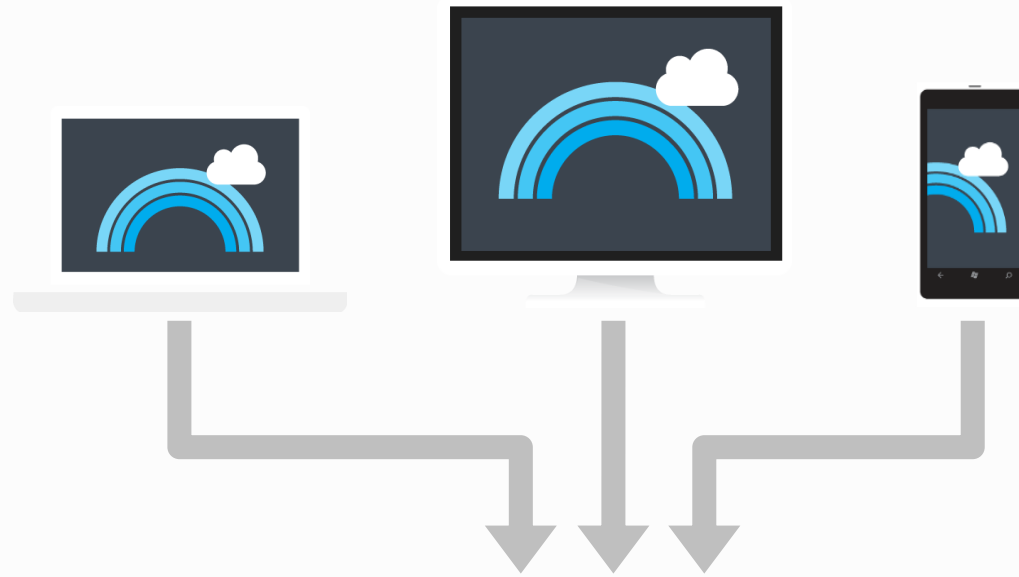


Network Load Balancer

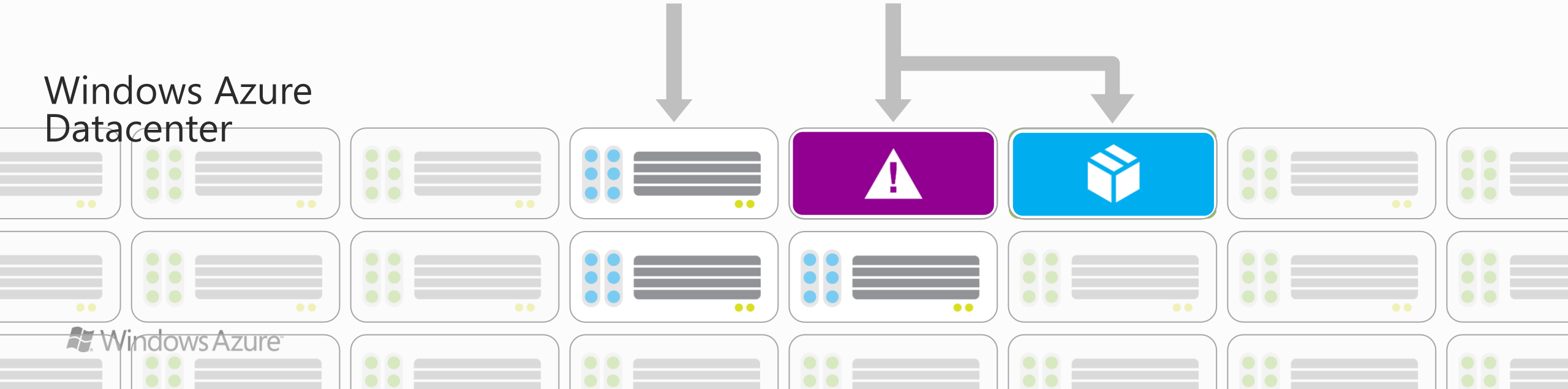
← Network load-balancer configured for traffic

Windows Azure
Datacenter





Windows Azure
Datacenter





VS



Cloud services

```
Public Overrides Sub Run()
```

```
' This is a sample implementation for $safeprojectname$. Replace with your logic.
```

```
Trace.WriteLine("WorkerRole1 entry point called.", "Information")
```

```
While (True)
```

```
Thread.Sleep(10000)
```

```
Trace.WriteLine("Working", "Information")
```

```
End While
```

```
End Sub
```

Web sites

```
<div id="body">
```

```
<asp:ContentPlaceHolder ID="FeaturedContent" runat="server" />
```

```
<section class="content-wrapper main-content clear-fix">
```

```
<asp:ContentPlaceHolder ID="MainContent" runat="server" />
```

```
</section>
```

```
</div>
```



Big data



Database



Storage



Traffic

Application building blocks



Caching



Messaging



Identity



Media



CDN



Networking

Windows Azure

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[Free trial](#)

Developer Center

Windows Azure is an open cloud platform that enables you to quickly build, deploy and manage applications across a global network of Microsoft-managed datacenters.

You can build applications using any language, tool or framework.

Centers

- [mobile](#)
- [.net](#)
- [node.js](#)
- [java](#)
- [php](#)
- [python](#)
- [other](#)

fundamentals

- [Intro to Windows Azure](#)
- [Execution Models](#)

featured videos

Multiple
languages

The screenshot shows the GitHub profile page for the organization WindowsAzure. The browser's address bar displays the URL <https://github.com/windowsazure>. The page header includes the GitHub logo, navigation links for 'Signup and Pricing', 'Explore GitHub', 'Features', 'Blog', and 'Login', and an 'ORGANIZATION' icon.

The main profile section for WindowsAzure (Windows Azure) includes the following details:

- URL: <http://www.windowsazure.com>
- Location: Redmond, WA
- Member Since: Sep 20, 2011
- 7 Public Repos
- 34 Members

The 'Public Repositories (7)' section lists two repositories:

- azure-sdk-for-java**: Java, 95 eyes, 23 forks. Description: Windows Azure SDK for Java. Last updated 3 days ago. Includes a 52-week participation chart.
- azure-sdk-for-net**: C#, 219 eyes, 29 forks. Description: Windows Azure SDK for .NET. Last updated 4 days ago. Includes a 52-week participation chart.

The 'Organization Members (34)' section lists several members:

- abhisheklal** (Abhishek Lal): 1 Public Repositories, 0 followers
- andrerod** (André Rodrigues): 9 Public Repositories, 17 followers
- antonba** (Anton Babadjanov (Microsoft)): 1 Public Repositories, 5 followers
- bennage** (Christopher Bennage): 15 Public Repositories, 46 followers
- blobaugh** (Ben Lobaugh): 17 Public Repositories, 10 followers
- BorisMoore** (Boris Moore): 9 Public Repositories, 196 followers
- cscrosati** (Christopher Scrosati): 0 Public Repositories, 0 followers
- davidfowl** (David Fowler): 24 Public Repositories, 257 followers

Open
source

→ <http://github.com/windowsazure>



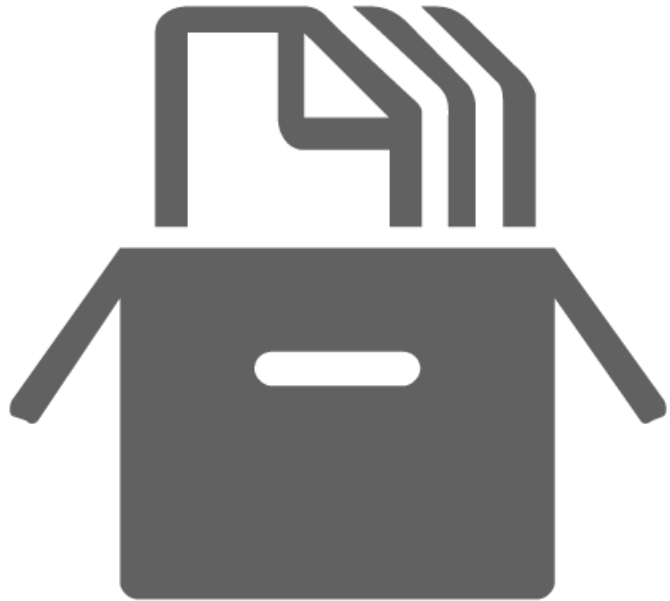
SQL database

Relational SQL Server Engine in the Cloud

Clustered for high availability

Fully Managed Service

SQL Reporting support



Blob storage

Highly available, scalable and secure file system

Blobs can be exposed publically over http

Continuous geo-replication across datacenters



Cache

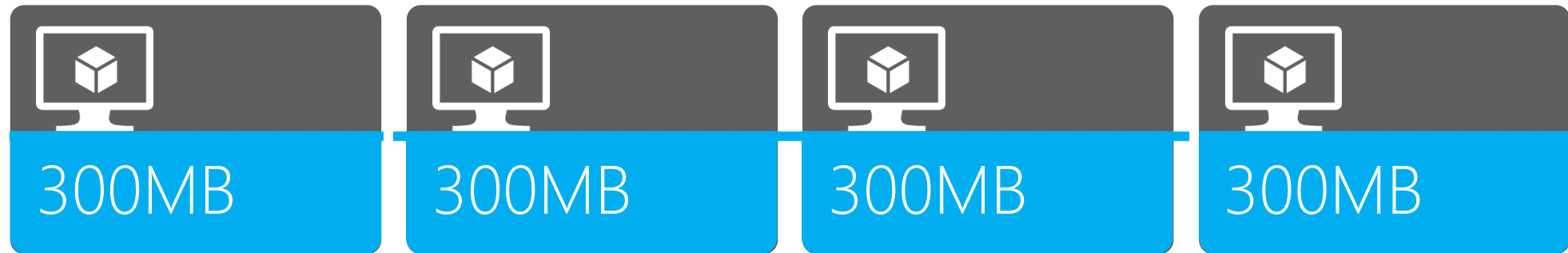
Low latency, in-memory distributed cache

Dynamically grow and shrink cache size

High availability support

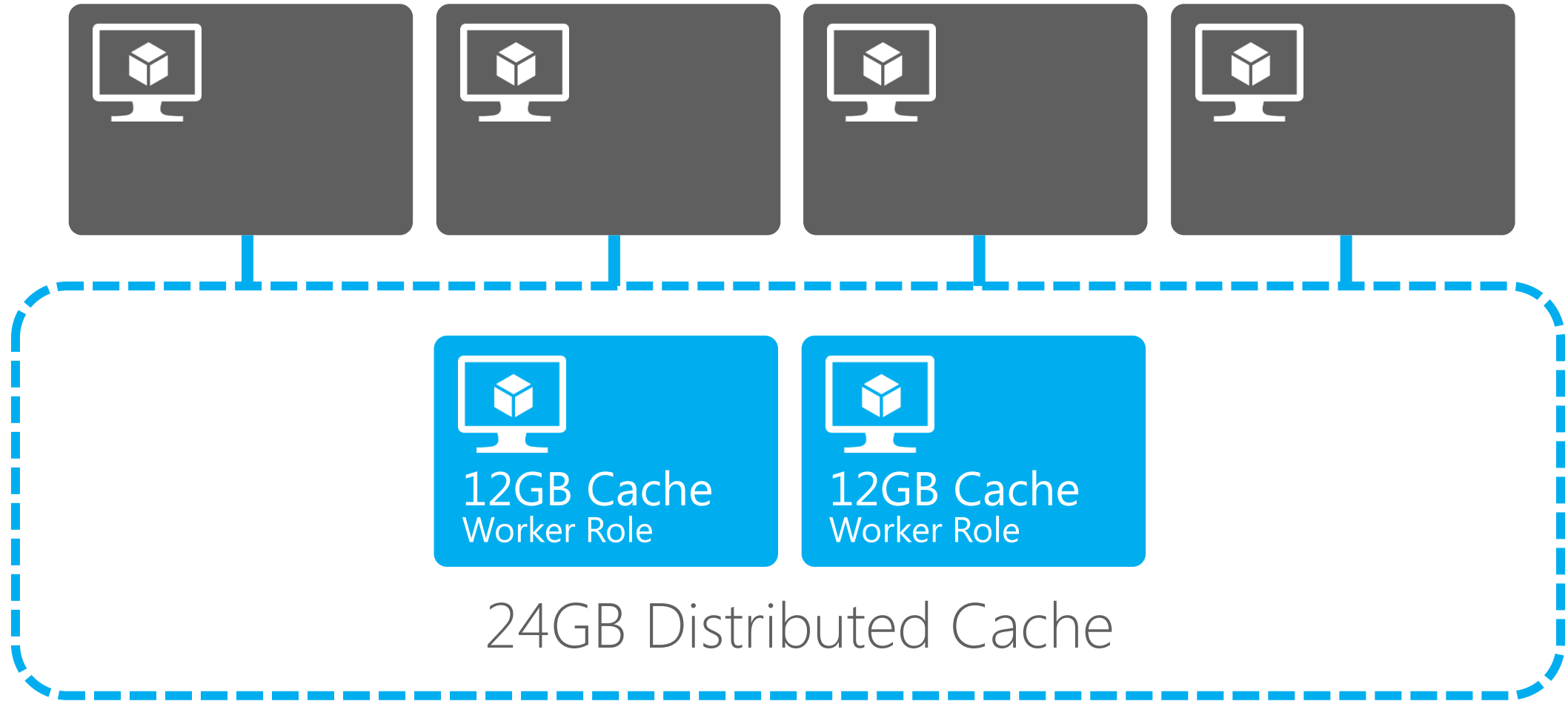
Memcached protocol support

Web Roles

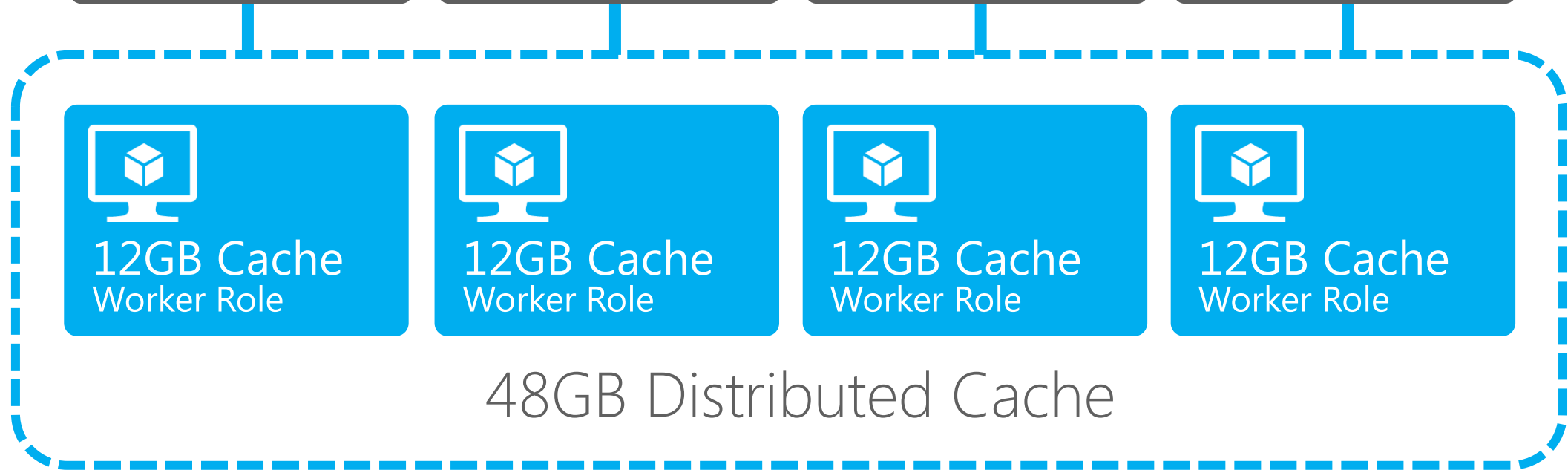


1.2GB Distributed Cache

Web Roles



Web Roles



4



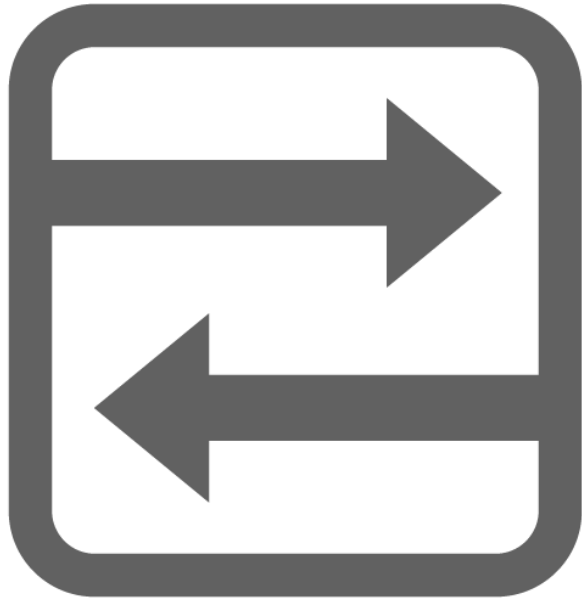
Identity

Integrate with enterprise identity

Enable single sign-on within your apps

Enterprise Graph REST API

93% of Fortune 1000 use Active Directory

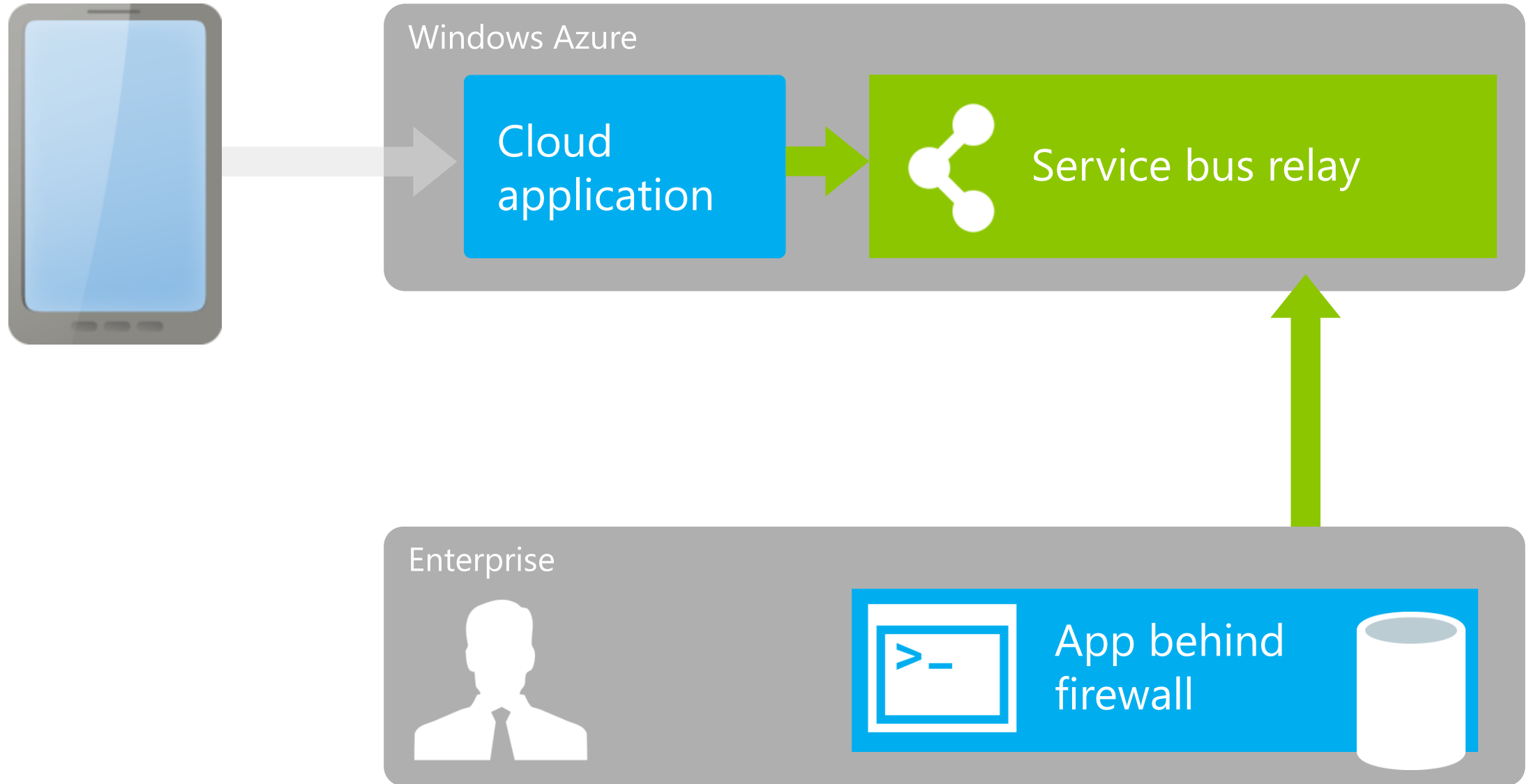


Service bus

Secure messaging and relay capabilities

Easily build hybrid apps

Enable loosely coupled solutions





Big data



Database



Storage



Traffic

Application building blocks



Caching



Messaging



Identity



Media



CDN



Networking

Windows Azure Scenarios

Ideal for Applications Needing:

Scalability

Availability

Fault Tolerance

Common Application Uses:

Web Sites

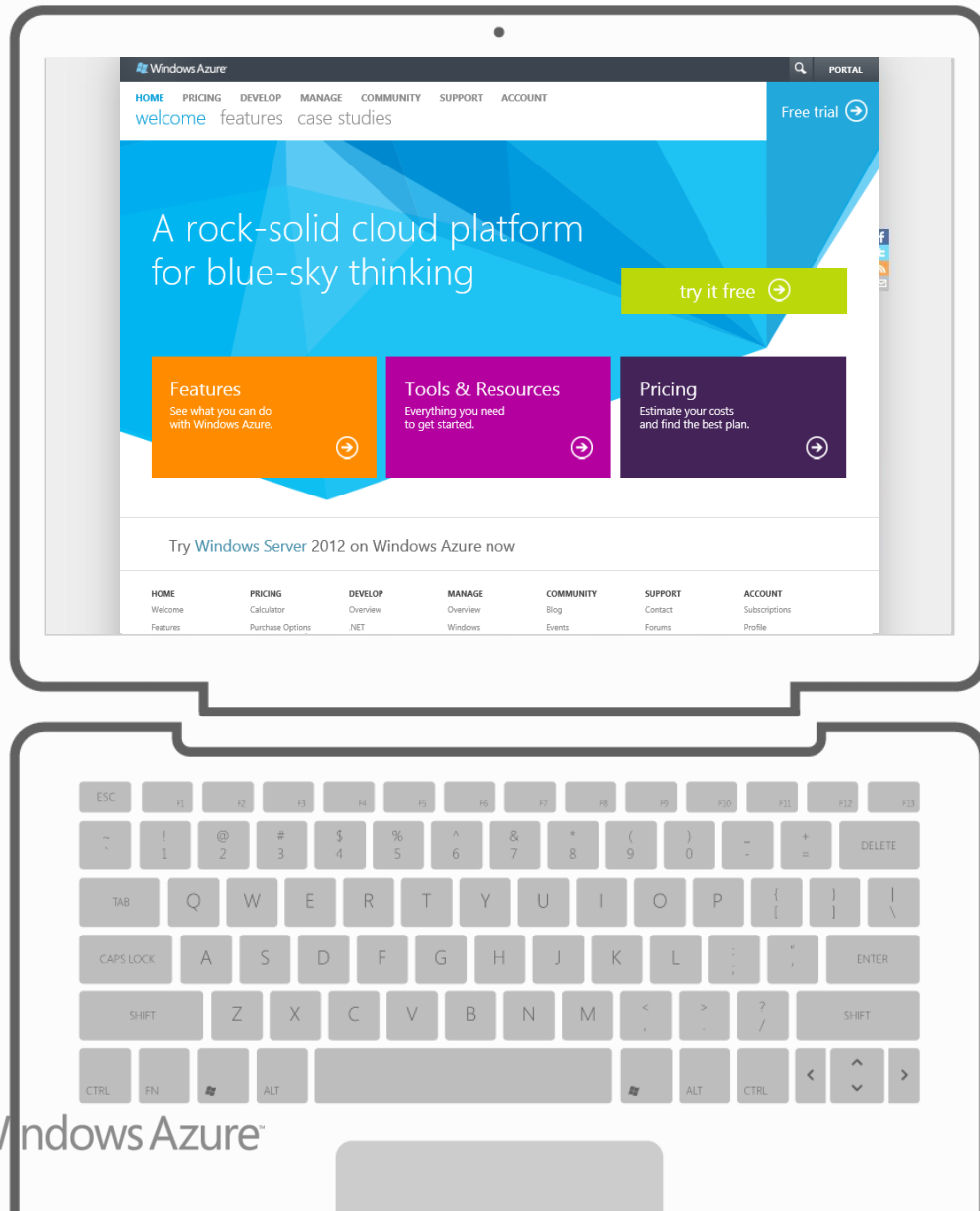
Compute Intensive apps

Device Applications

Web APIs

Social Games





Start now.

<http://WindowsAzure.com>