

App Service Web Apps

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Agenda

- Web App creation
- Language Support
- Deployment
- Source Control Integration
- Scale
- Web Jobs
- Site Slots
- Traffic Manager
- Backup
- Hybrid Connections
- Redis Cache

Azure App Service

Azure App Service

Build and scale great cloud apps



=



Web Apps



Mobile Apps



Logic Apps



API Apps

App Service - one integrated offering



Web Apps

Web apps that scale
with your business



Mobile Apps

Build Mobile apps
for any device



LOGIC Apps

Automate business process
across SaaS and on-premises



API Apps

Easily build and consume
APIs in the cloud

Develop apps with...

.NET | Node.js | PHP | Python | Java

Microsoft Azure

Users



Azure App Service



Developer



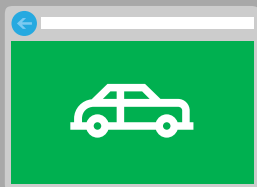
Benefits of App Services

- Automatic OS patching
- Enterprise-grade security
- High availability
 - Automated scale out/in
 - Built-in load balancing
- Supports many languages and platforms
 - .NET, Node.js, Python, Ruby and many more
- Easy continuous deployment
 - Continuous delivery from third-party source control providers
 - Built-in Git repo





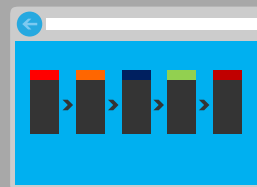
Web Apps



Customer site



Logic Apps



Order Completed



Mobile Apps



Administration App



Customer App



API Apps



http

SQL

Web Apps

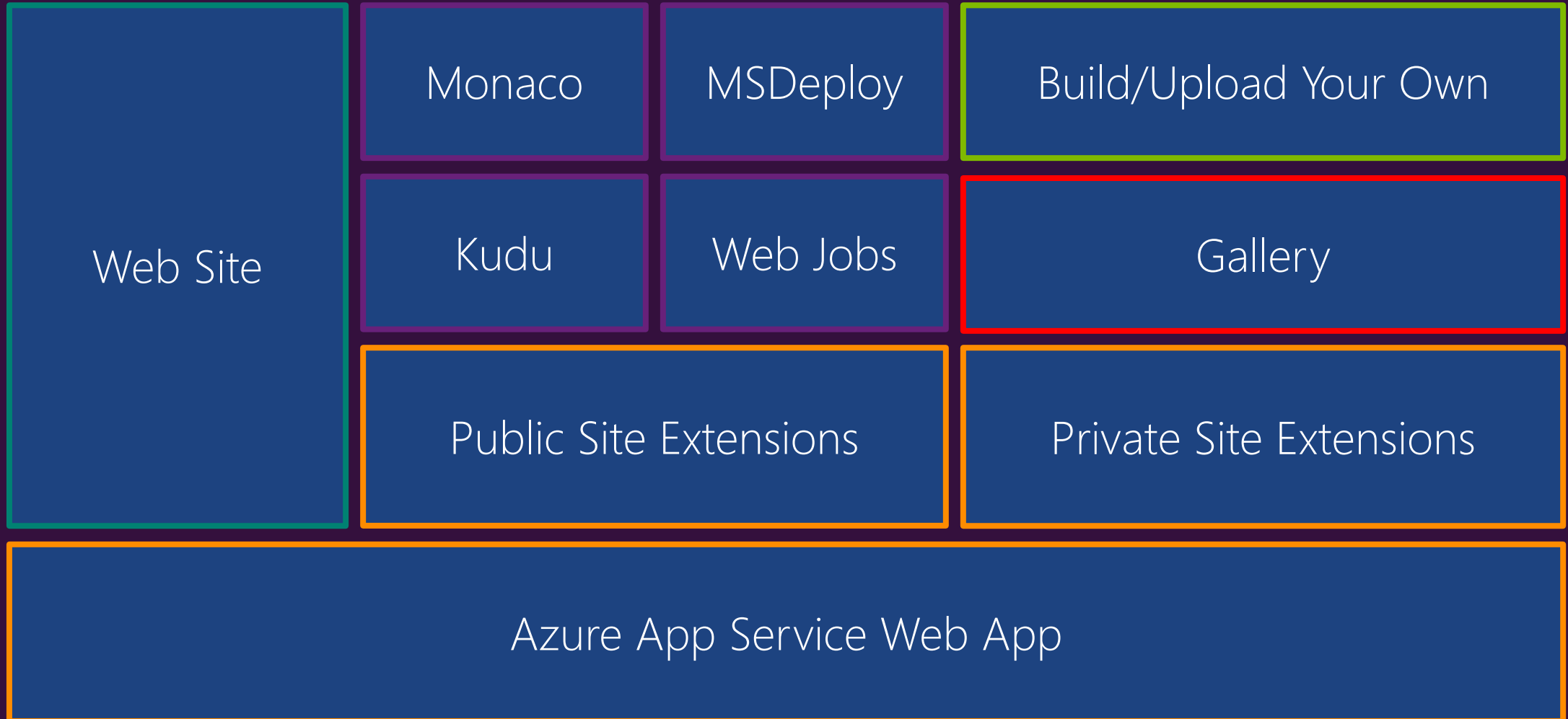


WEB APPS

Web apps run as-is
no changes required

Full capability set available including:

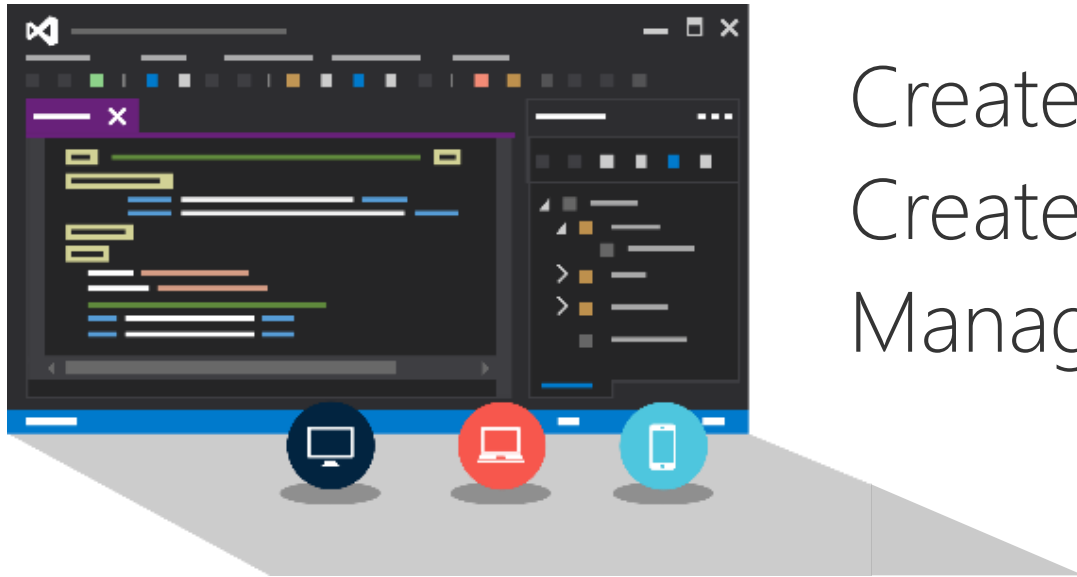
- .NET, Node.js, Java, PHP, and Python
- WebJobs for long running tasks
- Integrated VS publish, remote debug...
- CI with GitHub, BitBucket, VSO
- Auto-load balance, Autoscale, Geo DR
- Virtual networking and hybrid connections
- Site slots for staged deployments



Demo: Creating a Web App



Visual Studio + App Service Web Apps

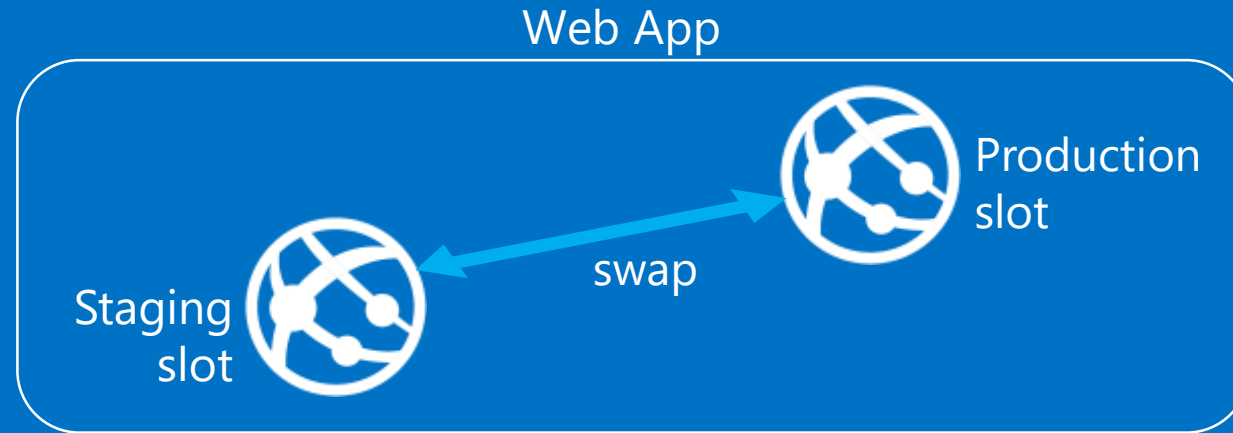


Create Azure Resources during File / New
Create Web App during deploy
Manage with Server Explorer



Deployment Slots

One Web App. Multiple deployments.

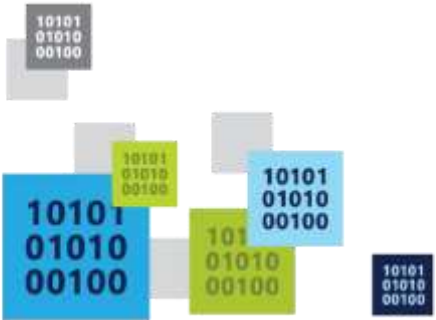


Streamline dev, test and production deployment workflow

Swap staging and production with zero downtime

Instantaneous rollback to previous "last known good site"

Enables A/B testing, continuous deployment, staged publishing and much more



Staging



WebJobs

Light-weight CPU Intensive Tasks



run.cmd, run.bat



run.exe



run.ps1



run.sh



run.php



run.py



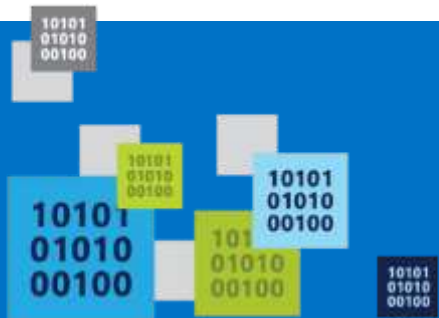
run.js

Job Type: On-Demand, Scheduled, Continuous

Scale: Singleton, Multi-instance

WebJobs SDK Feature: BlobTrigger, TableTrigger, QueueTrigger, ServicebusTrigger

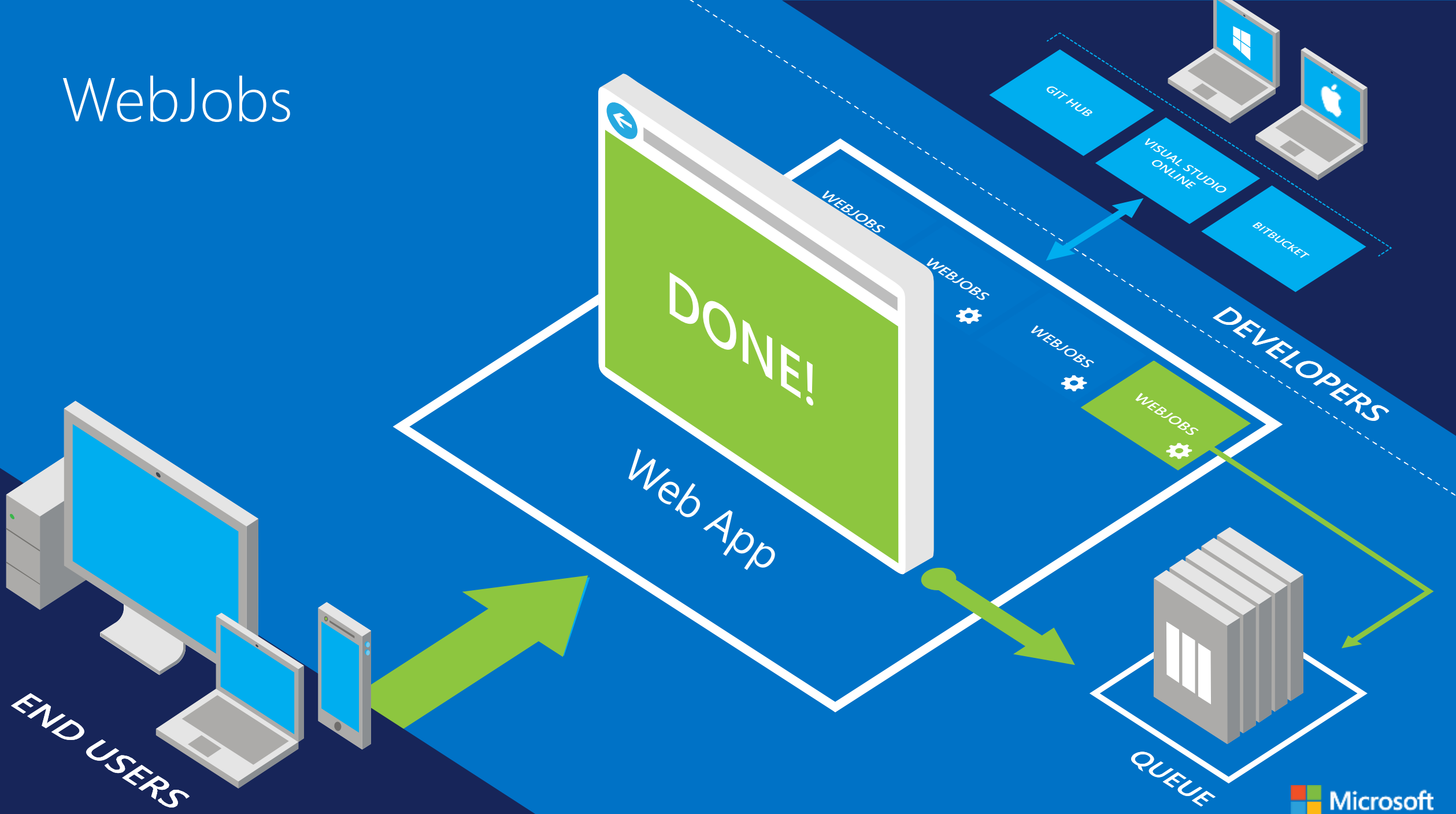
Deployment: Portal, Visual Studio, CLI, Git



WebJobs



WebJobs



Demo: WebJobs



API Apps



API APPS

Create, consume and
host APIs more easily

Easily use cloud or custom APIs:

- Dozens of built-in APIs for popular SaaS
- An ecosystem of APIs for any need
- Create and publish custom, reusable APIs
- Visual Studio tooling with one click publish and remote debugging
- Automatic client SDK generation for many languages

Benefits of API Apps

- Bring your API as-is
 - .NET Web API
 - Node.js + Express
 - Java
 - PHP
 - Many other technologies
- Connect easily to SaaS platforms



API Apps addresses key pains around building and consuming APIs

Build your API

Web Apps++: Bring
you API as is in your
language of choice

Simple access
control

SSO

Metadata contract

Microservice style

Expose enterprise
APIs



Consume APIs

Authentication,
built-in to mobile
and web SDKs

SSO,
handled by server

SDK generation

API discovery

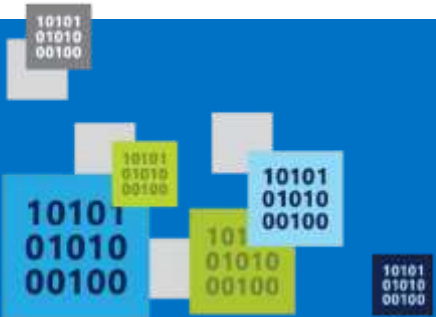
Gallery – public &
organization

Demo: Creating an API App

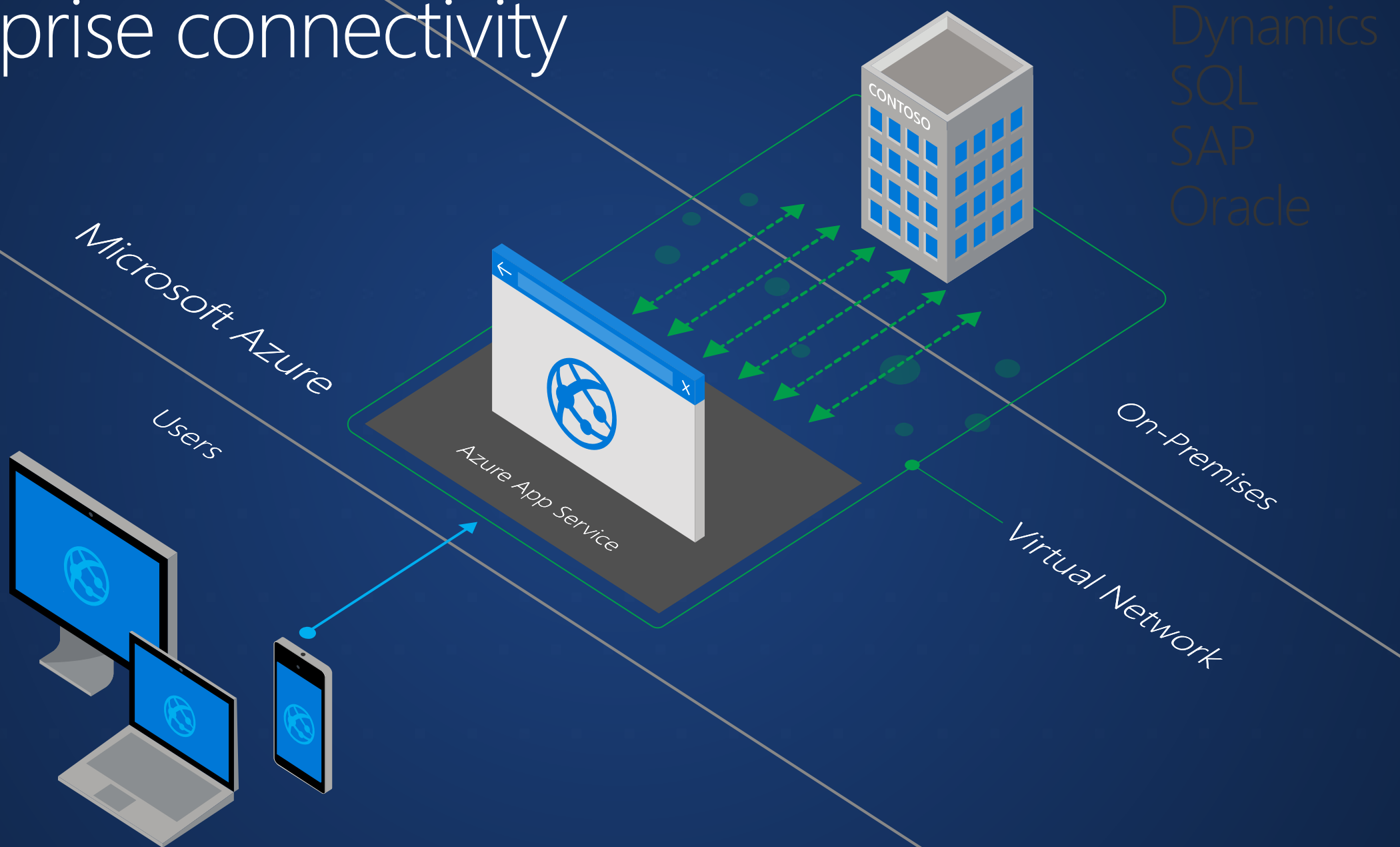


Consuming API Apps

- API Apps expose HTTP services
- Metadata is exposed using Swagger 2.0 metadata
 - JSON file
 - Widely supported
- Client applications



Enterprise connectivity



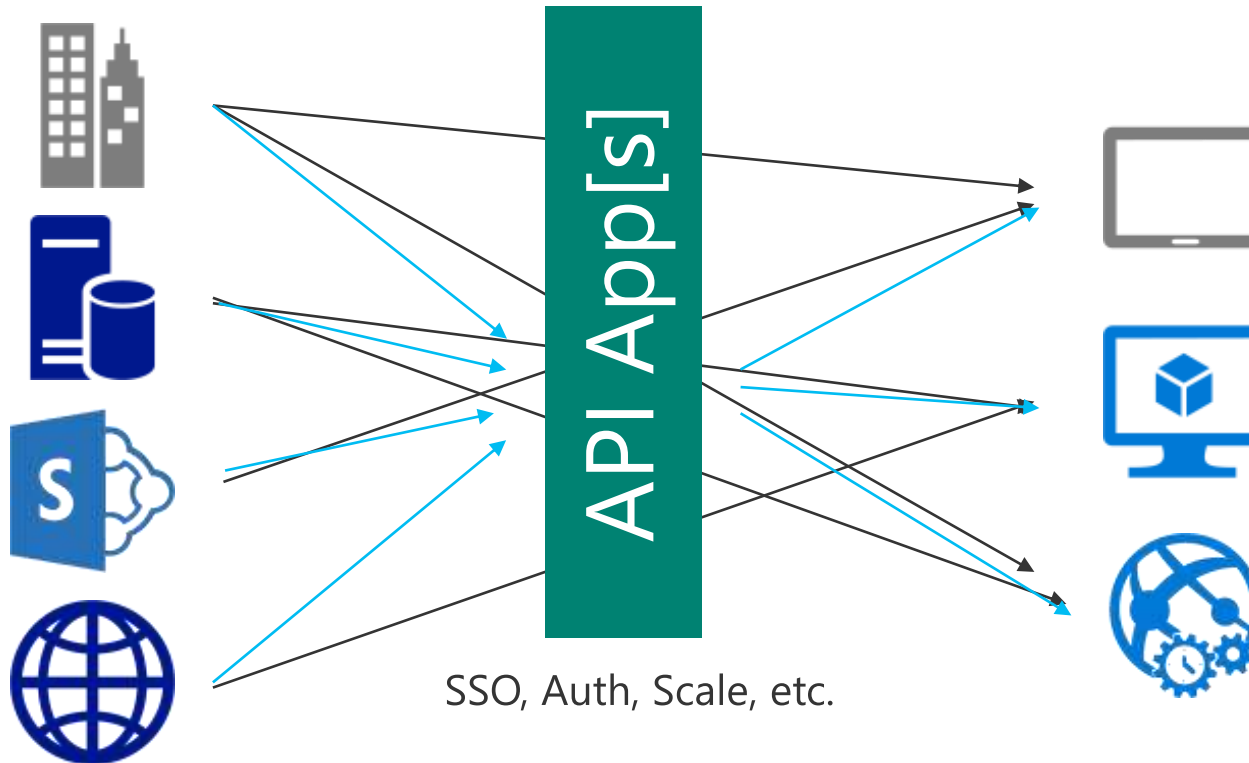
Managed Middle Tier

On Premise Applications

Databases in Azure VMs

SharePoint Online

Cloud-Hosted Web Apps



Simplifying Integration

Logic Apps



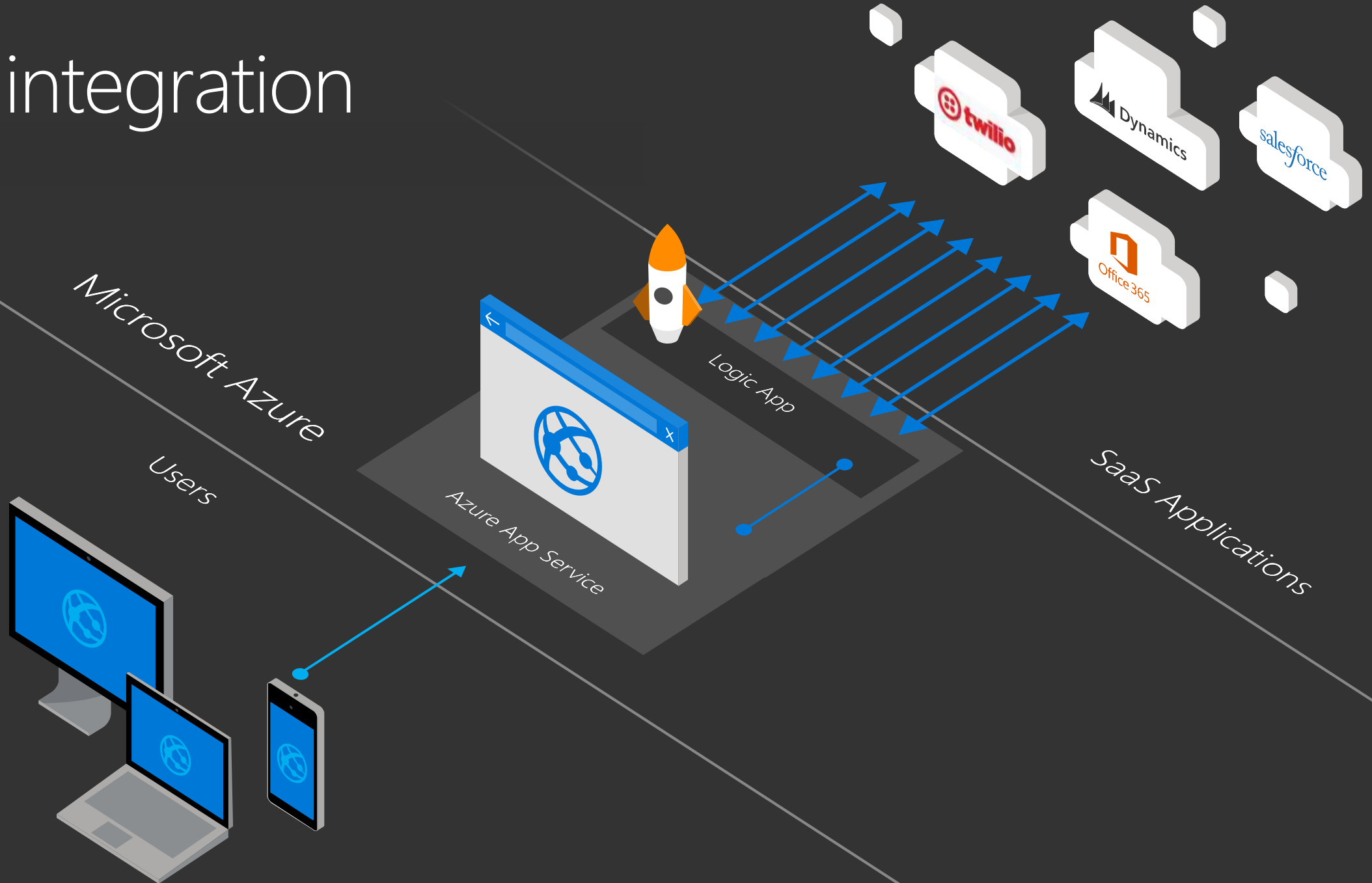
LOGIC APPS

Automate SaaS and
on-premises systems

New Logic Apps for easy automation

- No code designer for rapid creation
- Dozens of pre-built templates to get started
- Out of box support for popular SaaS and on-premises apps
- Use with custom API apps of your own
- Biztalk APIs for expert integration scenarios

SaaS integration



Built-in API Connectors



Connectors

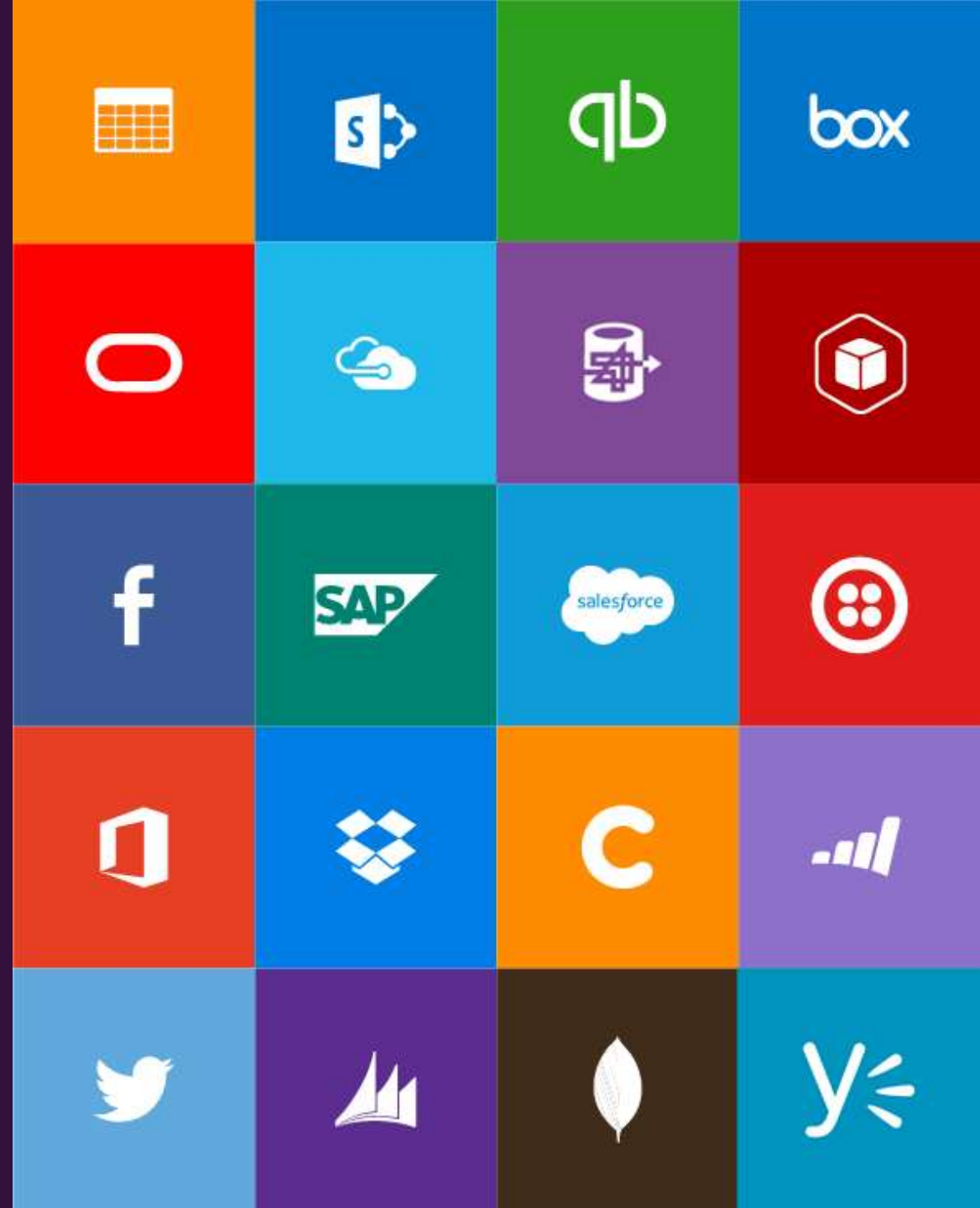
- Box
- Chatter
- Delay
- Dropbox
- Azure HD Insight
- Marketo
- Azure Media Services
- OneDrive
- SharePoint
- SQL Server
- Office 365
- Oracle
- QuickBooks
- SalesForce
- Sugar CRM
- SAP
- Azure Service Bus
- Azure Storage
- Timer / Recurrence
- Twilio
- Twitter
- IBM DB2
- Informix
- Websphere MQ
- Azure Web Jobs
- Yammer
- Dynamics CRM
- Dynamics AX
- Hybrid Connectivity

Protocols

- HTTP, HTTPS
- File
- Flat File
- FTP, SFTP
- POP3/IMAP
- SMTP
- SOAP + WCF

BizTalk Services

- Batching / Debatching
- Validate
- Extract (XPath)
- Transform (+Mapper)
- Convert (XML-JSON)
- Convert (XML-FF)
- X12
- EDIFACT
- AS2
- TPMOM
- Rules Engine



Target audience is *anyone* who can use Azure

... but not necessarily business users or consumers

Mobile Apps



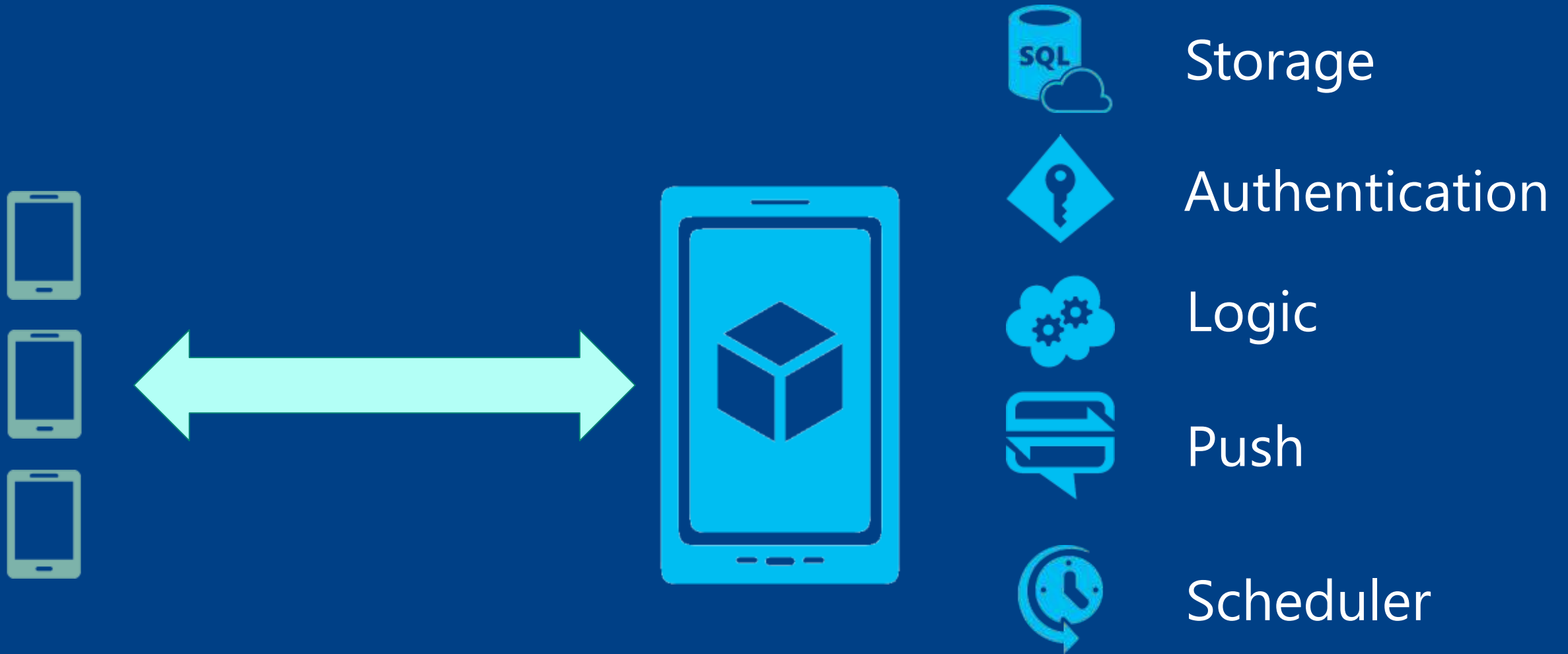
MOBILE APPS

Mobile services plus
a whole lot more

New capabilities for Mobile apps:

- Webjobs for long running tasks
- CI with GitHub, BitBucket, VSO
- Auto-load balance, Autoscale, Geo DR
- Virtual networking and hybrid connections
- Site slots for staged deployments

Azure Mobile Services



Structured Storage

- Powered by SQL Database
- Supports rich querying capabilities
- Dynamic Schematization
- Data management in:
 - Azure Portal
 - SQL Portal (Silverlight)
 - SQL Management Studio
 - REST API
 - Azure CLI Tools
 - SQL CLI



Node.js scripts

.NET Web API
backend in
Visual Studio

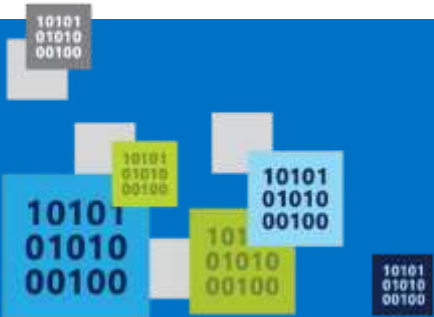
Passes through to SQL by
default

MongoDB, Table Storage,
SQL out of the box

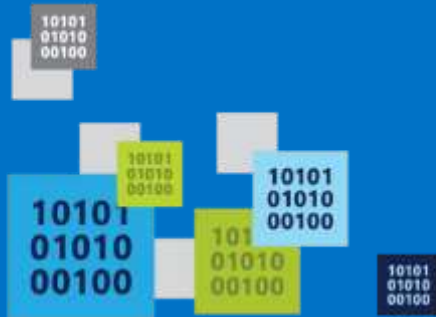
Intercept CRUD requests
to tables

Fully customizable

Server Side Table Scripts



Demo: Basic Mobile App with Validation



Custom API

- Non-table based endpoints
- Accessible from
 - GET
 - POST
 - PUT
 - PATCH
 - DELETE
- For node.js logic in scripts like table endpoints
- For .NET delivered through a WebAPI
- Expose any functionality you want



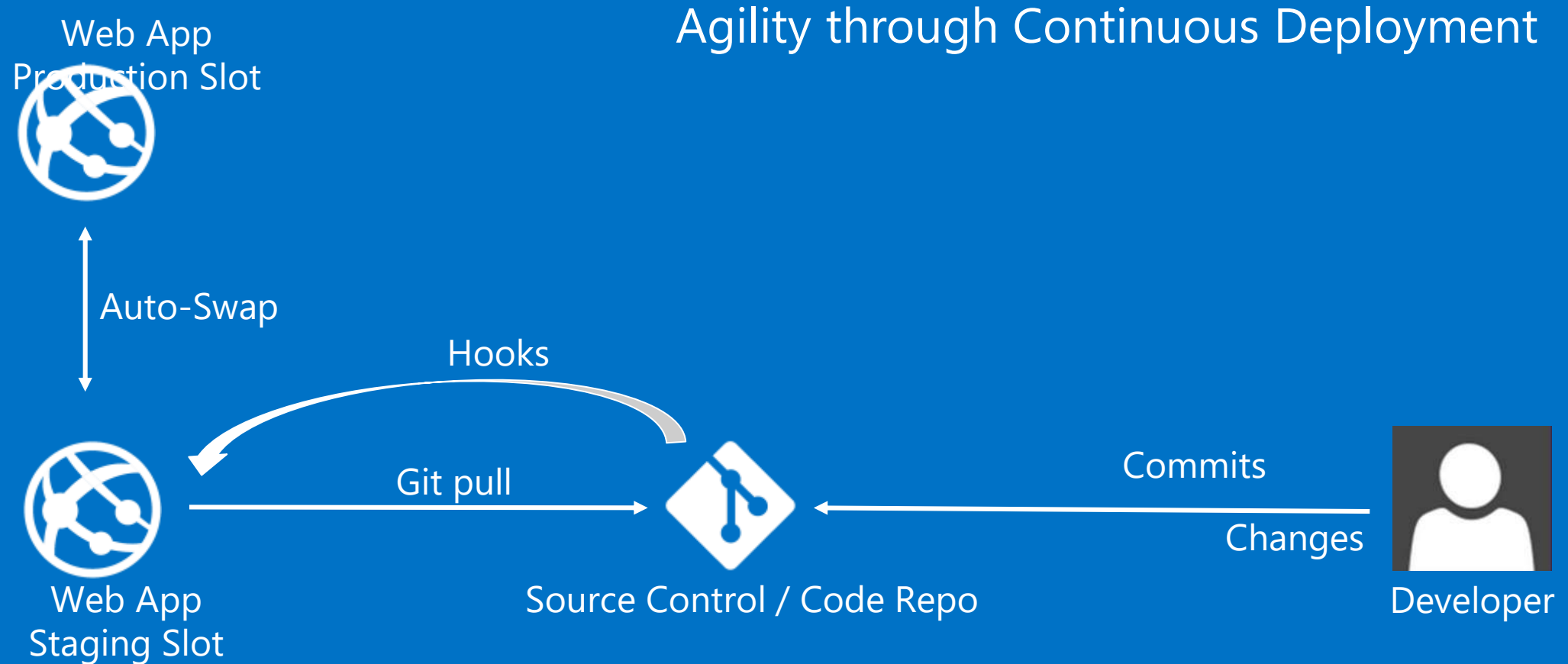
Continuous Delivery with App Service

Continuous integration



Continuous Deployment for Web Apps

Microsoft Azure





Git



Visual Studio
Online



CodePlex



GitHub



BitBucket



DropBox



FTP

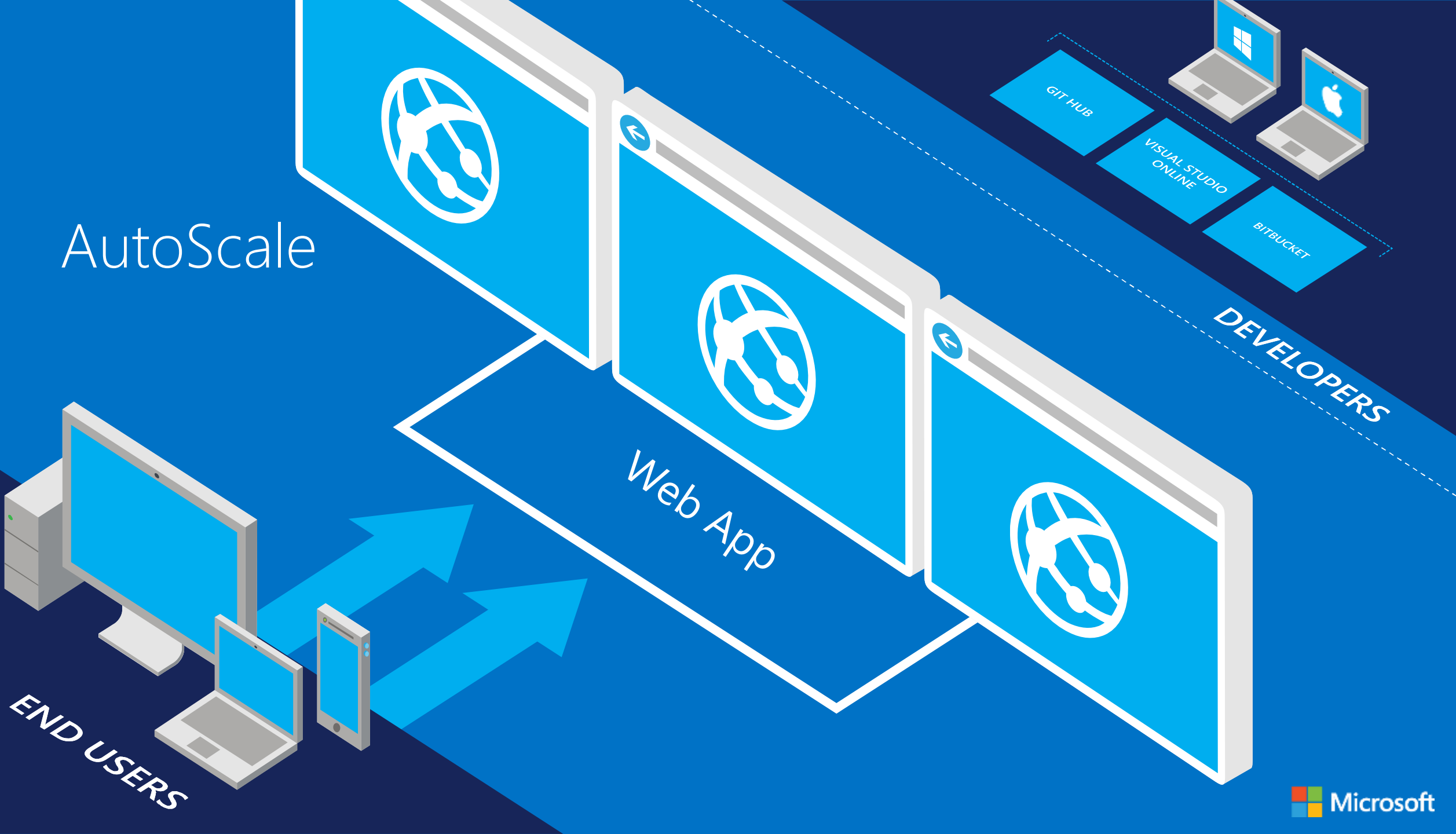
Choose your own adventure!

AutoScale

AutoScale



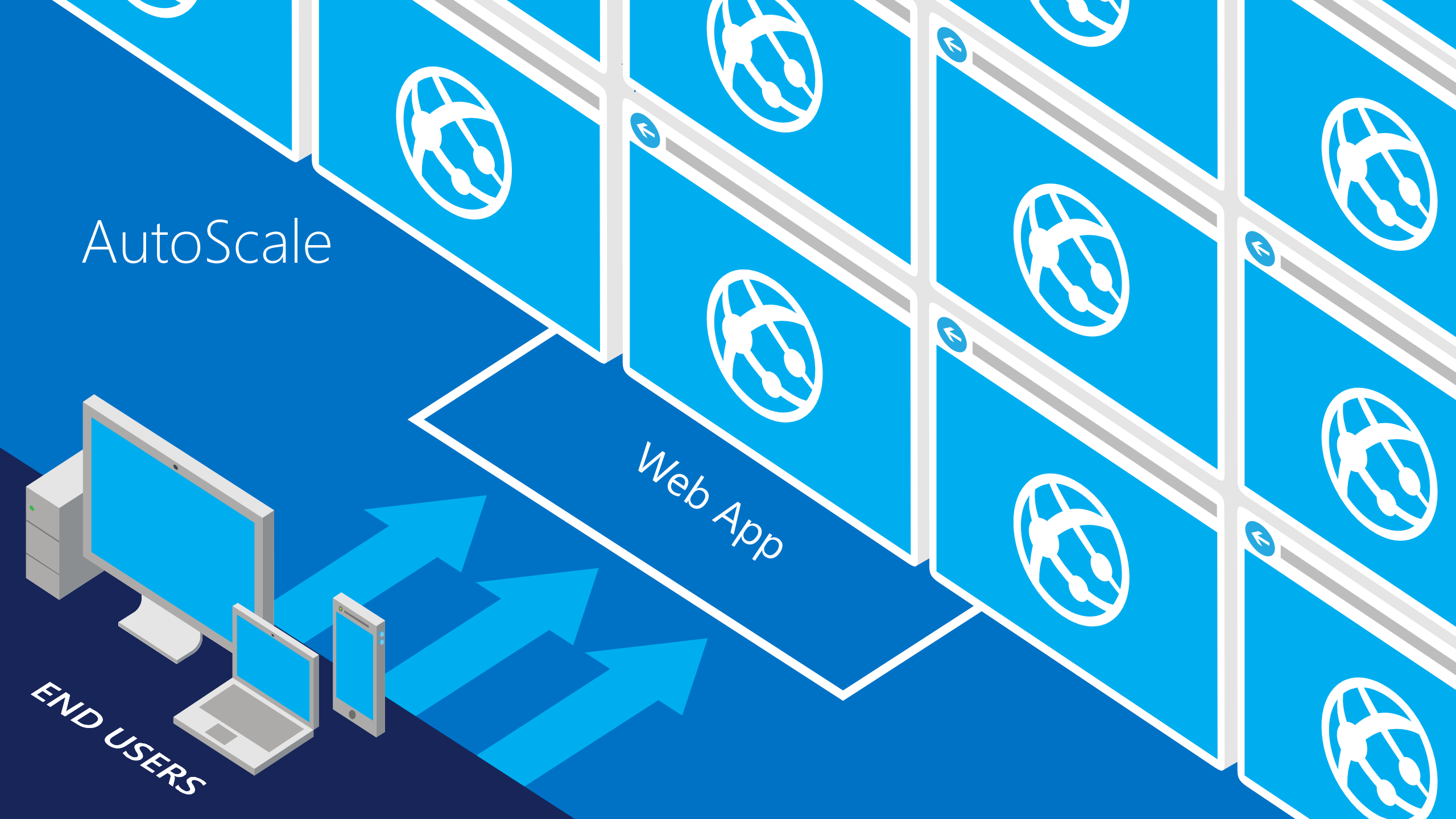
AutoScale



AutoScale

Web App

END USERS



App Service Environment

App Service Environment (ASE)

- New Premium Tier Feature
- Dedicated compute resources and network resources
- Increased Scaling Options
- Directly created in a Virtual Network
- Support all Web App features and capabilities
- Support Web, Mobile and API Apps
- Global Scale



Conceptual Model



App Service
App



App Service
App



App Service
App

App Service Plan

SKU: Premium (# of sites, storage, slots...)

Compute Resource: P4 (8 cores, 14 GB memory)

Scale: 8



App Service
App



App Service
App



App Service
App

App Service Plan

SKU: # of sites, storage, slots...

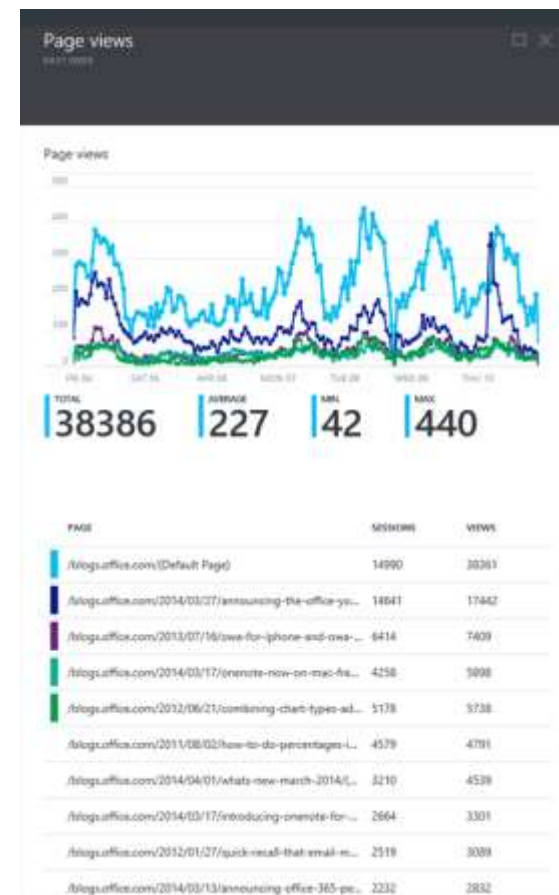
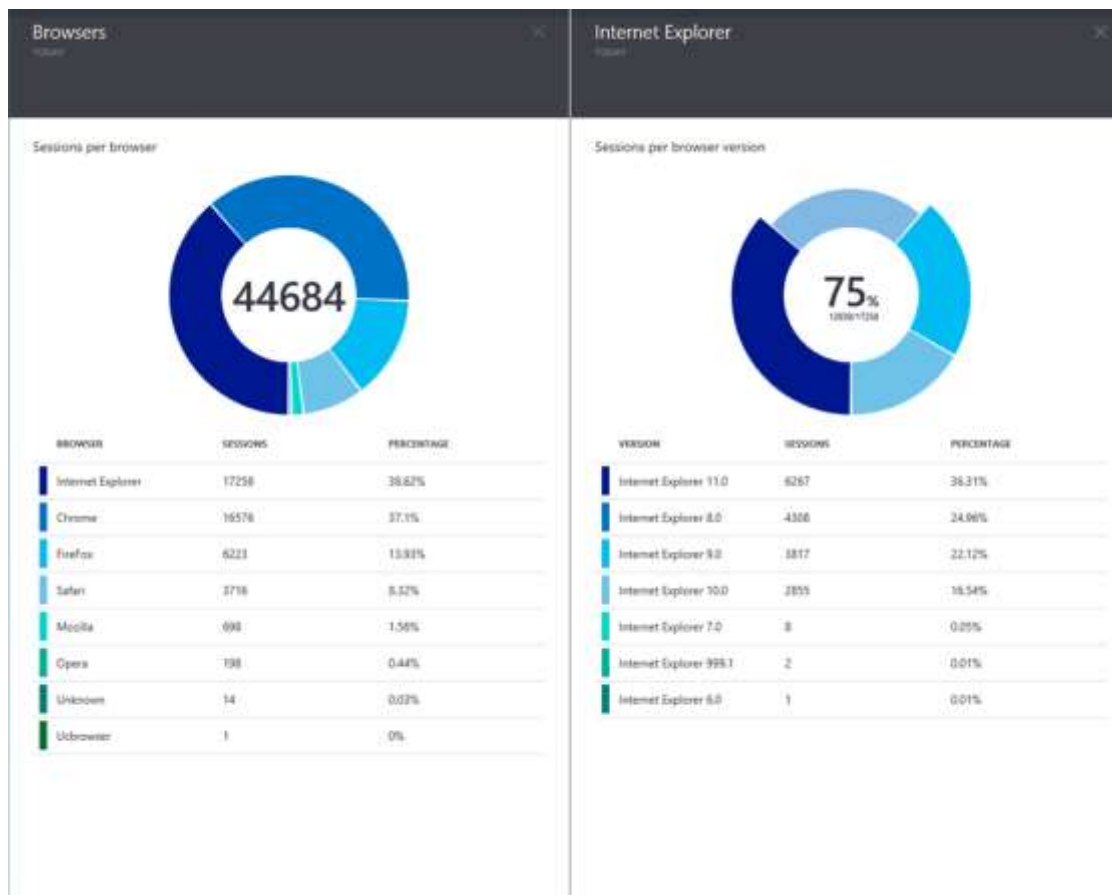
Compute Resource: cores, memory

Scale: number of instances

Note: For App Service Environment the SKU will always be Premium

Application Insights

Application Insights



Try App Service: Web Apps today

<https://tryappservice.azure.com>

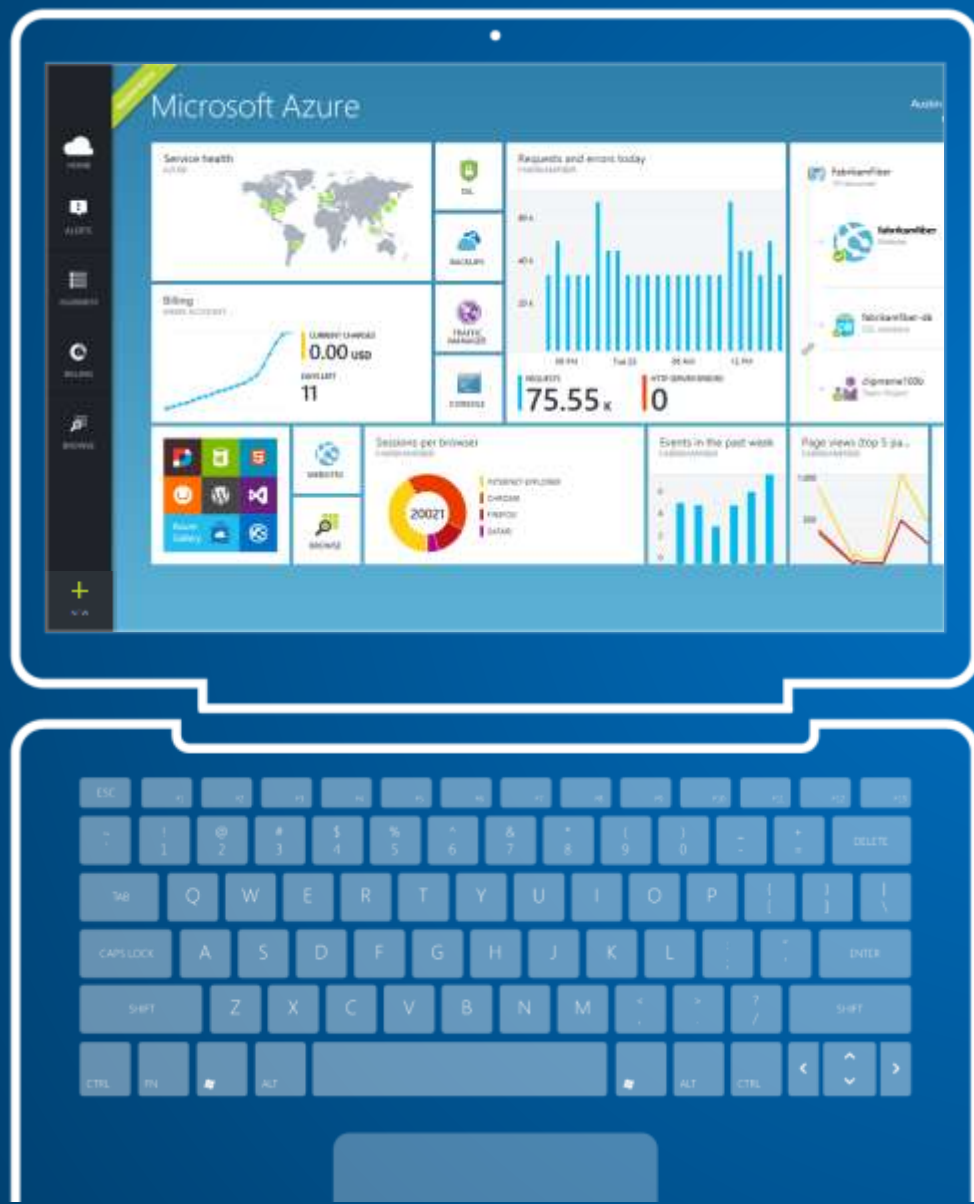
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