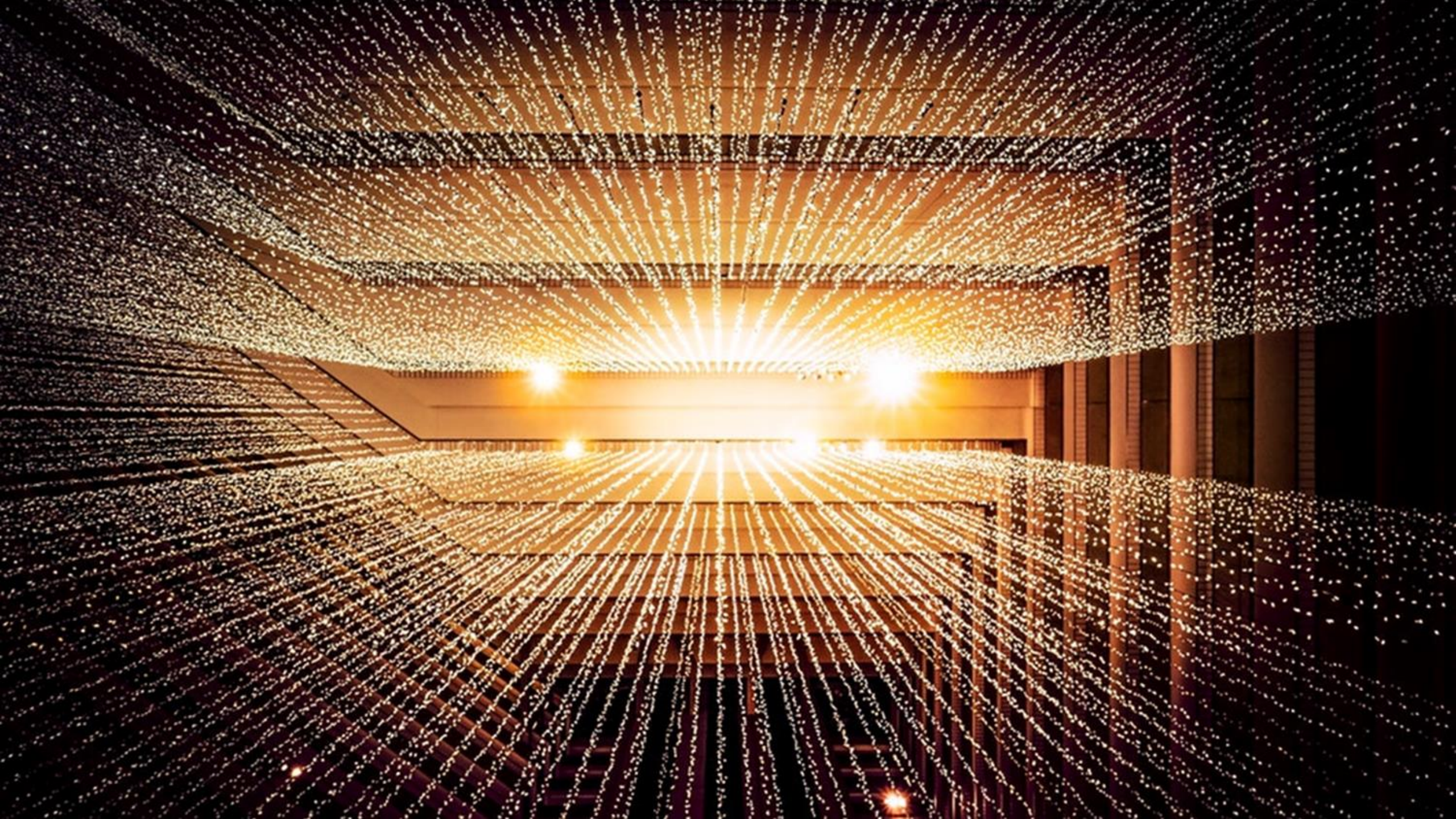


PowerShell and Azure Functions v2: What is New?

Jaap Brasser
@jaap_brasser





Jaap Brasser

Tweets @ jaap_brasser
Blogs @ jaapbrasser.com
Works Tech Marketing @ Rubrik.com
Does Blogger, Speaker, Tech Enthusiast
Likes Cloud Automation, Scripting & Security





Agenda

01

Intro to
Cloud
Automation

02

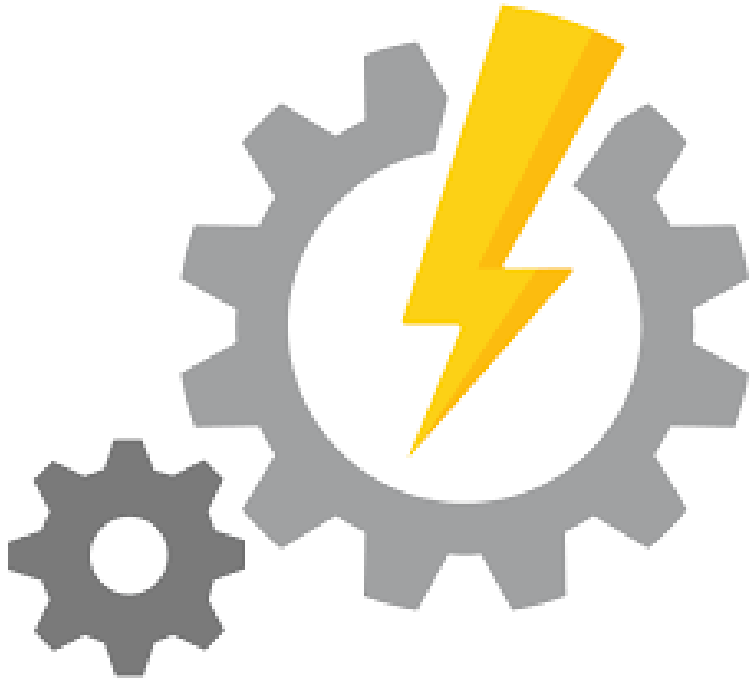
Azure
Functions v2

03

Demos!

04

Questions?



Cloud Automation

Azure Automation

Azure Automation Capabilities

Runbook Authoring in Azure:

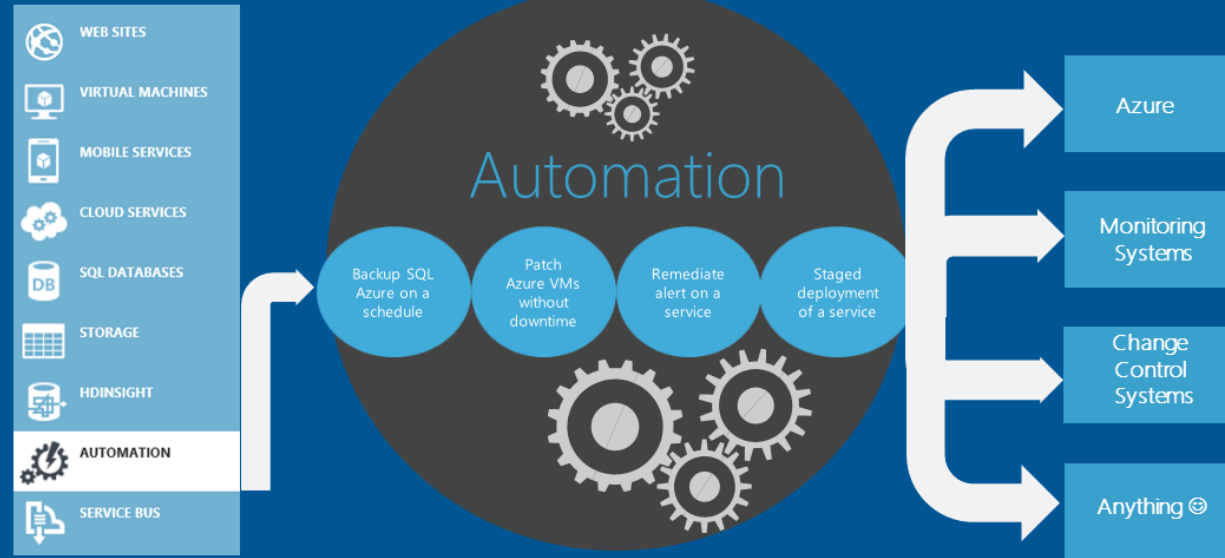
Create runbooks to automate all aspects of cloud operations, from deployment, monitoring, and optimizations

Highly Available Engine:

Support requirements for scale and H/A. Built on PowerShell Workflow. Isolation for runbook jobs

Integration into other systems:

Import PS modules and create additional modules and runbooks for Azure services or to connect into 3rd party systems





Azure Automation Summary

Automate processes

Cross-platform conf mgmt

Download runbooks & scripts

Event grid integration

Hybrid Runbook Worker

500 free minutes

What is
Microsoft
Flow



Microsoft Flow

Connectors



Office 365 Outl...



OneDrive for B...



Office 365 Users



SharePoint



Twitter



Notifications



RSS



Outlook.com

Recently added connectors



AtBot Admin



Marketing Cont...



Pitney Bowes T...



Excel Online (B...




Excel Online (O...




Azure SQL Data...

Flow Templates




Save Office 365 email attachments to OneDrive for Business

By Microsoft
Used 235650 times




Get a push notification when you receive an email from your...

By Microsoft
Used 136809 times




Send myself a reminder in 10 minutes

By Microsoft
Used 95634 times




Get today's weather forecast for my current location

By Microsoft
Used 83902 times



Save Outlook.com email attachments to your OneDrive

By Microsoft Flow Community
Used 64359 times



Get a push notification with updates from the Flow blog

By Microsoft
Used 47714 times

Templates

Find a template or connector to start with



Featured template collections



11 templates to help your sales team



12 templates that keep you informed when on-the-go



12 templates that improve your productivity



11 templates that make software development easier

Popular services

See all 218 >








Flows

My flows

Team flows

Business process flows

	Name	Modified	Type
	Save Outlook.com email attachments to your OneD...	3 wk ago	Automated
	Hey PowerShell!	1 mo ago	Instant
	Get today's weather forecast for my current locati...	2 mo ago	Instant
	Sheep on Mac	3 mo ago	Instant

+ New ▾ ← Import

+ Create from blank

+ Create from template



Send myself a
reminder in 10
minutes

By Microsoft
Used 126626 times



Get today's weather
forecast for my
current location



By Microsoft
Used 123456 times



PowerApps button



By Microsoft
Used 90541 times

Templates

Start approval
when a new item is
added

By Microsoft
Used 64388 times



Get a push
notification with
updates from the
Flow blog



By Microsoft
Used 62066 times



Save Office 365
email attachments
to OneDrive for
Business

By Microsoft
Used 57462 times

Flow Summary

Use Connectors to get data

Create triggers based on data

Build workflows

Integrate and combine services

Approval flows

Long runtime of flows

Bash

FILES

- .local
- clouddrive
- .bash_history
- .bash_logout
- .bashrc
- .profile
- tmux.conf
- ps1
- Shell.md
- Cloud Shell - The potential of a Cloud-based Sh
- preview.3-win-x64.zip
- preview.4-win-x64.msi
- preview.4-win-x642.msi
- ump
- test.bmp
- test.ps1
- testupload.log
- testupload2.log
- testupload3.log

```

132 test.ps1
133 [Parameter(ParameterSetName='Credential',Mandatory=$true,Position=1)]
134 [Alias('C')]
135     [PSCredential] $Credential,
136 [Alias('A')]
137     [switch]      $Admin,
138 [Alias('MM')]
139     [switch]      $MultiMon,
140 [Alias('F')]
141     [switch]      $FullScreen,
142 [Alias('Pu')]
143     [switch]      $Public,
144 [Alias('W')]
145     [int]         $Width,
146 [Alias('H')]
147     [int]         $Height,
148 [Alias('WT')]
149     [switch]      $Wait
150 )
151
152
153
154 begin {
155     [string]$MstscArguments = ''
156     switch ($true) {
157         {$Admin}      {$MstscArguments += '/admin '}
158         {$MultiMon}   {$MstscArguments += '/multimon '}
159         {$FullScreen} {$MstscArguments += '/f '}
160         {$Public}     {$MstscArguments += '/public '}
161         {$Width}      {$MstscArguments += "/w:$Width "}
162         {$Height}     {$MstscArguments += "/h:$Height "}
163     }
164 }
165
166 
```

Azure Cloud Shell

Type "az" to use Azure CLI 2.0
 Type "help" to learn about Cloud Shell

```

jcjbrasser@Azure:~$ code ~
jcjbrasser@Azure:~$
    
```

Requirements



AZURE
SUBSCRIPTION



BROWSER,
EXTENSION, APP



STORAGE
ACCOUNT



SHELL SKILLS

Browser Support



Chrome



Edge



Firefox

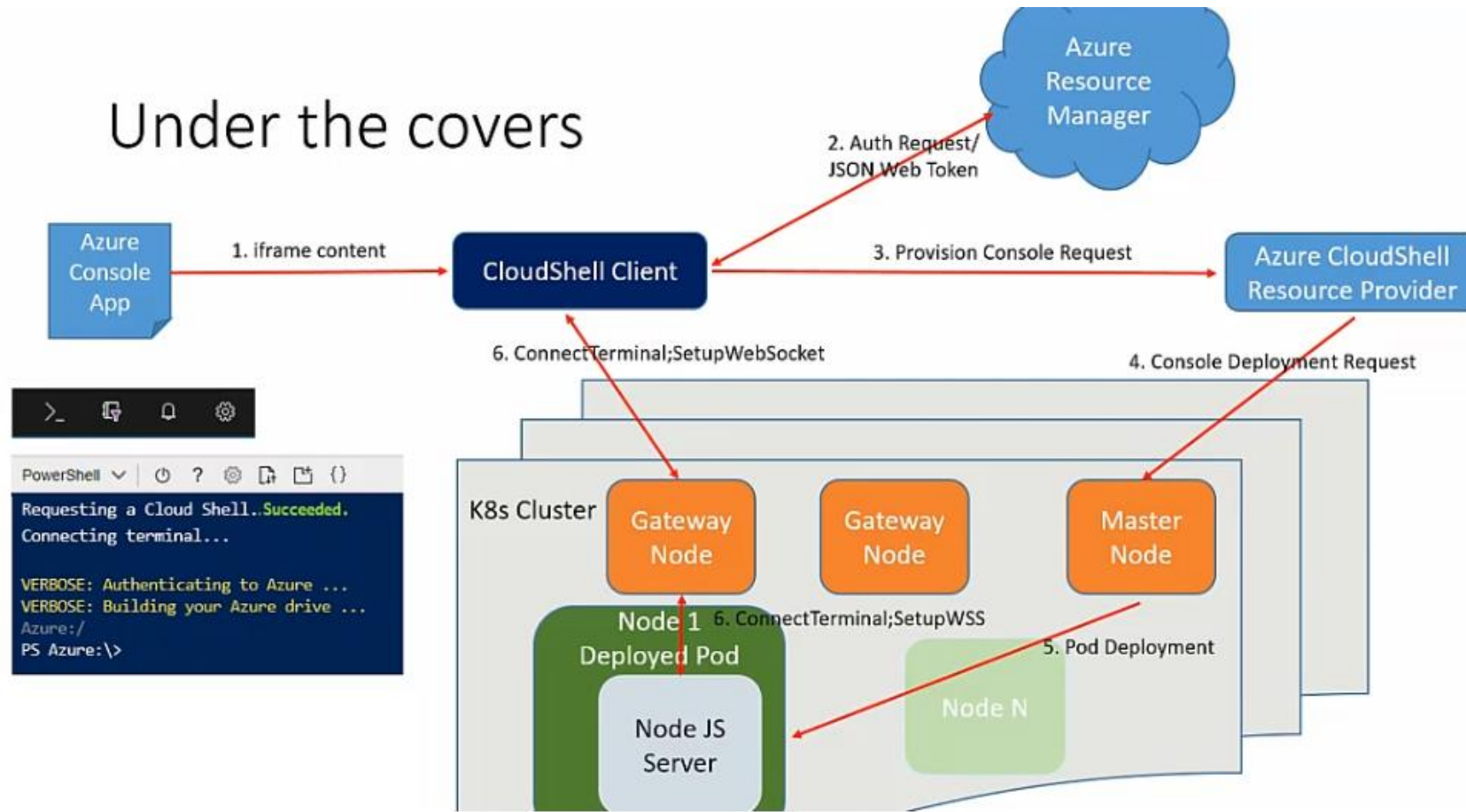


Safari



IE

Components of Cloud Shell



Pricing?

Cloud Shell pricing

- ✓ **No** upfront cost
- ✓ **No** termination fees
- ✓ Pay only for what you need



Cloud Shell Summary

Interactive Shell

All tools

Always up-to-date

Cloud Drive

Platform Agnostic

What are Azure Functions

Code

Events + data

Azure Functions



Microsoft Serverless

Microsoft Serverless



Storage



Functions



Logic App



Media Services



Cortana
Management Suite



App Service



Document DB



CDN



Machine Learning



OMS
Management Suit



Visual Studio
Services



Traffic
Manager



Active Directory



Key Vault



App Insights



Cognitive Services



Embedded Power BI



Search



IoT Hub



Service Bus



Notification Hub



Stream Analytics



Hockey App



Scheduler



Azure Web Apps

Advantages of Azure Functions



Pay for what you use



No Infrastructure to manage



No maintenance of servers



Can be placed in existing subscriptions



Simplify code writing

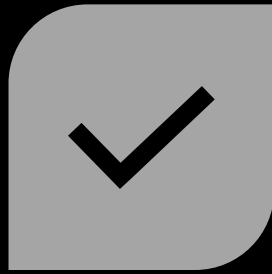


WAIT. HOLD UP. HOLD UP.

What are we trying to solve?



RE-USING EXISTING
SKILLS



RE-USING EXISTING
CODE / SCRIPTS



FASTER
DEPLOYMENT



CLOUD NATIVE

demo

The background of the slide is a digital landscape. In the center, a large sun or moon is depicted with horizontal stripes in shades of purple and blue. Below it, a range of jagged mountains is rendered as a wireframe mesh in a teal color. The foreground consists of a grid of lines that recede into the distance, creating a sense of perspective. The sky is a dark purple with small white dots representing stars.

Working with Azure Functions

Alternative Deployment methods



Run from
Package



GitHub CD



FTP Upload



PowerShell /
CLI



Visual Studio



Azure Functions Summary

Use existing PowerShell skills

Develop serverless code

Interact with other services

Free tier

functions.azure.com

Questions?

