Azure App Service
Web Apps & Containers

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- With SoftwareONE / COMPAREX since 2019
- Solutions Architect FDC
- Was Head of IT before
- Microsoft MVP and Speaker in several Communities

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3 major types of App Service

Web Apps

„Build and deploy web apps faster at scale“

Run static and dynamic web sites and apps on different runtime env‘s:

HTMl .NET Java PHP

Python (unter Linux)

Node.js

Web Apps for Containers

„Deploy and run containerized web apps“

Deploy and run existing containers from Docker Hub, Azure Container Registry, a Private Registry or using Docker Compose on Linux and Windows (different features!)

API Apps

„Easy build and consume APIs“

Out of scope in this session…

App Service Plan

- Every App Service runs in an App Service Plan
- The App Service Plan provides the compute power, ressources, storage and more
- Comparable to the webserver farm
- Under the hood: The container where your web app(s) run
- Similar App Services can share an App Service Plan (and it‘s performance and OS)
- App Service Plan is the entity you pay for (the App Service itself as a ressource is „free“)
- There is several tiers of App Service Plans
  - Windows ASP offers „Free“, „Shared“, „Basic“, „Standard“ and „Premium“
  - For Linux ASP, there is no „Shared“ tier
  - Features and options ar different (See later demo)
- Find more here: https://azure.microsoft.com/en-us/pricing/details/app-service/plans/

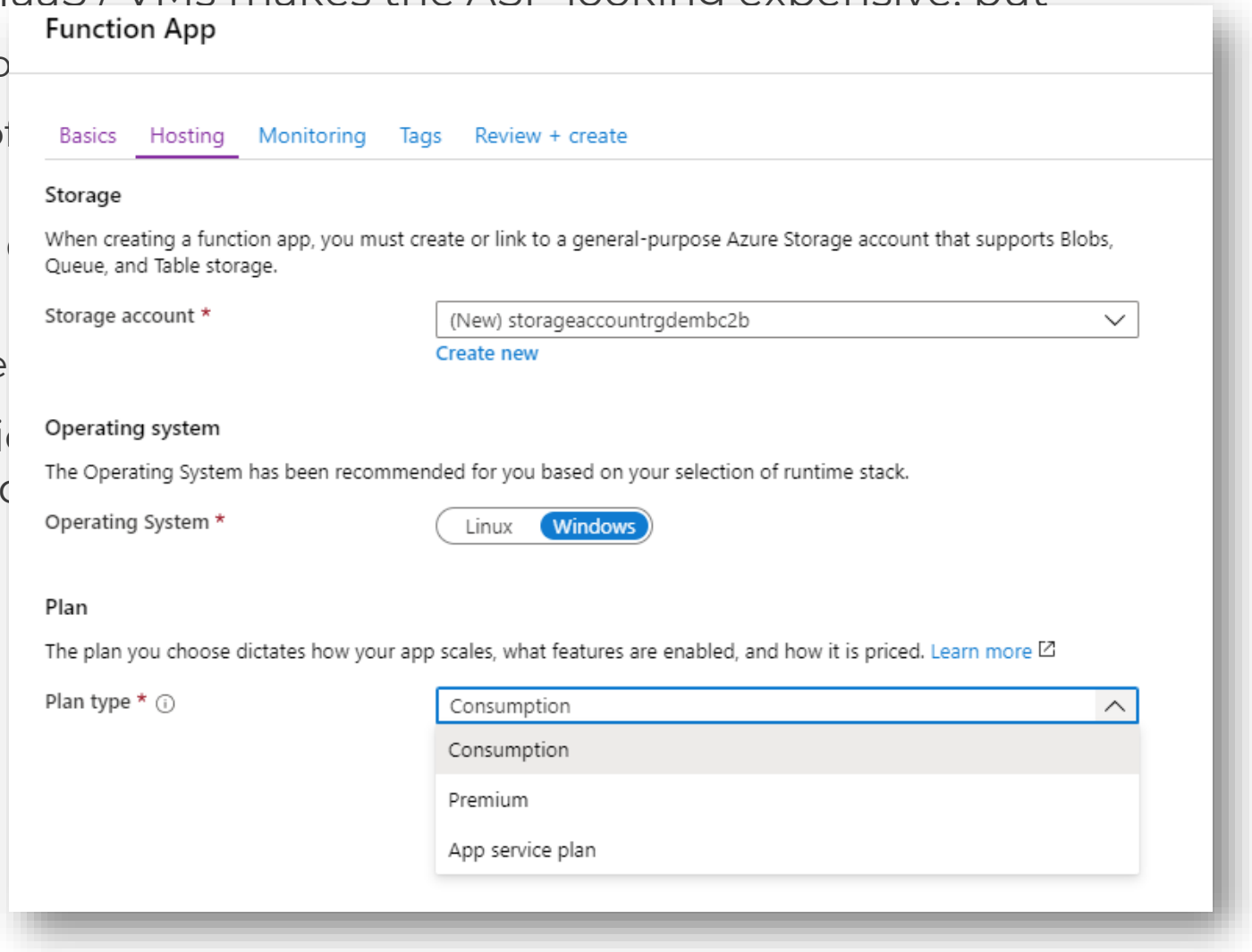
App Service Plan

	FREE Try for free	SHARED Environment for dev/test	BASIC Dedicated environment for dev/test	STANDARD Run production workloads	PREMIUM Enhanced performance and scale	ISOLATED High-Performance, Security and Isolation
Web, mobile, or API apps	10	100	Unlimited	Unlimited	Unlimited	Unlimited
Disk space	1 GB	1 GB	10 GB	50 GB	250 GB	1 TB
Maximum instances	–	–	Up to 3	Up to 10	Up to 30**	Up to 100*
Custom domain	–	Supported	Supported	Supported	Supported	Supported
Auto Scale	–	–	–	Supported	Supported	Supported
VPN hybrid connectivity	–	–	–	Supported	Supported	Supported
Network Isolation						Supported
Price per hour	Free	$0.013	$0.075	$0.10	$0.20	$0.40

Pricing is for smallest SKU type which usually has one 1 vCore

App Service Plan

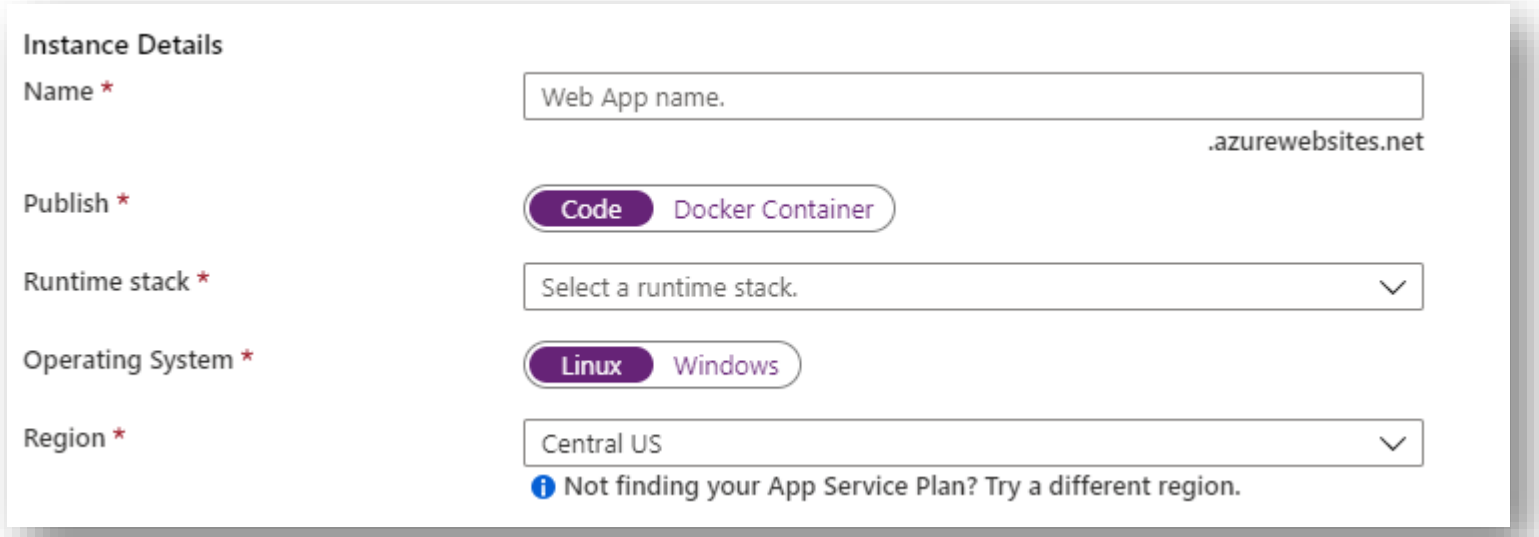
- Compring the App Service Plan prices to IaaS / VMs makes the ASP looking expensive, but
  - You cannot compare IaaS and PaaS solely o
  - For this PaaS service, MS takes over some of management
  - ASP includes all the features of it‘s Tier, like backup, ...
  - App Service has an SLA of 99,95% out of the
- You can also run Azure Functions / Functi consumption plan) to have a predictable



Demo: App Service Plan

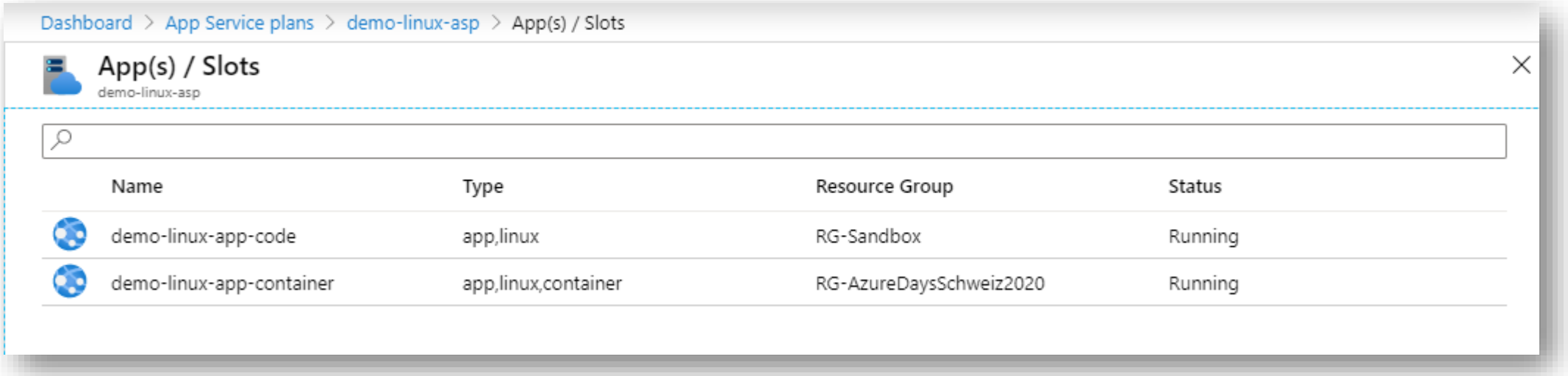
Code vs. Container

- When creating an App Service Plan either by itself or during App Service creation, one hast the option to chose between
  - Operating System
    - Linux
    - Windows
  - SKU & Size
- You don‘t need to decide what to run on it yet
- When creating an App Service, you need to decide about
  - Publishing way
    - Code
    - Docker Container
  - Runtime stack (for Code)
  - Operating system
    (must match the App Service Plan)



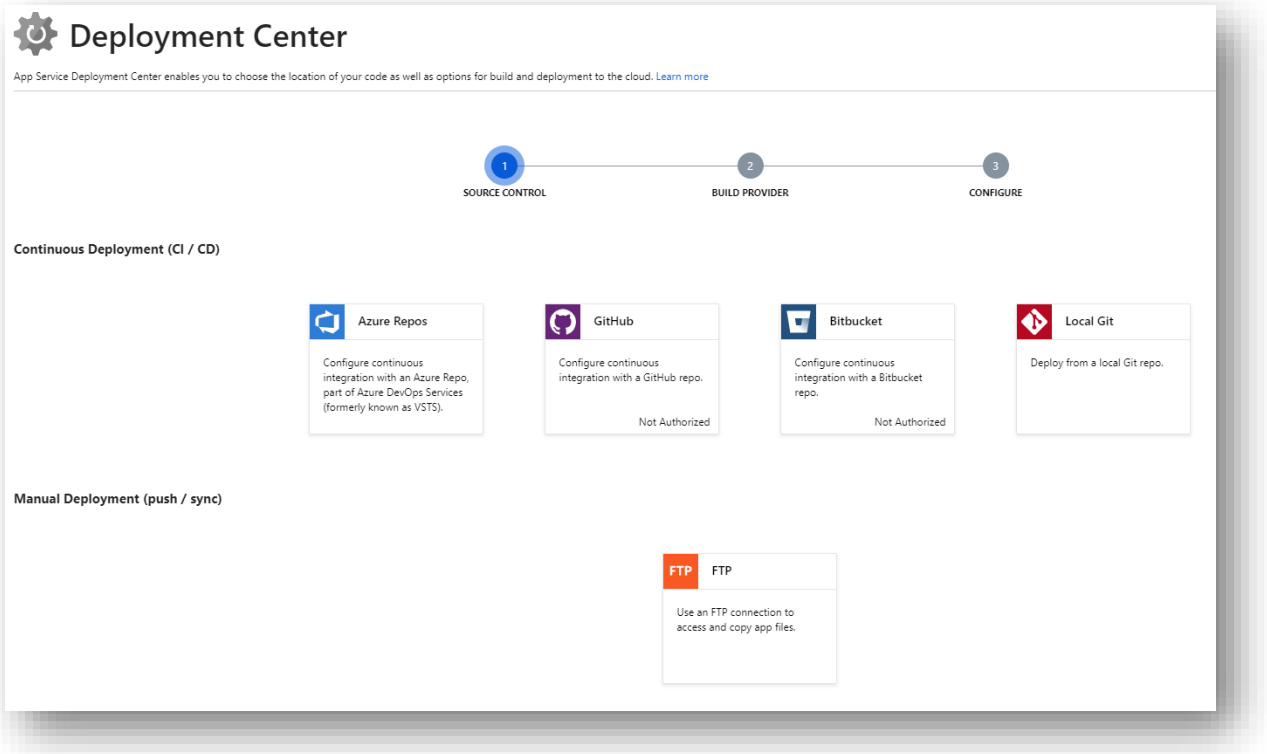
Code vs. Container

- Web Apps based on „Code“ and „Container“ can be run in the same App Service Plan, when their OS is both Linux (they may but do not need to share the same RG)
- Windows based App Service Plans only allow either Code or Container
- You cannot mix Linux and Windows App Service Plans in the same RG!



Code

- When running as „Code“, you can deploy using
  - ZIP
  - WAR
  - CI/CD using
    - Azure Repos / Azure DevOps
    - GitHub
    - Bitbucket
    - Local Git
    - FTP



- Deployment Slots => blue/green deployment

Demo: App Service with Code

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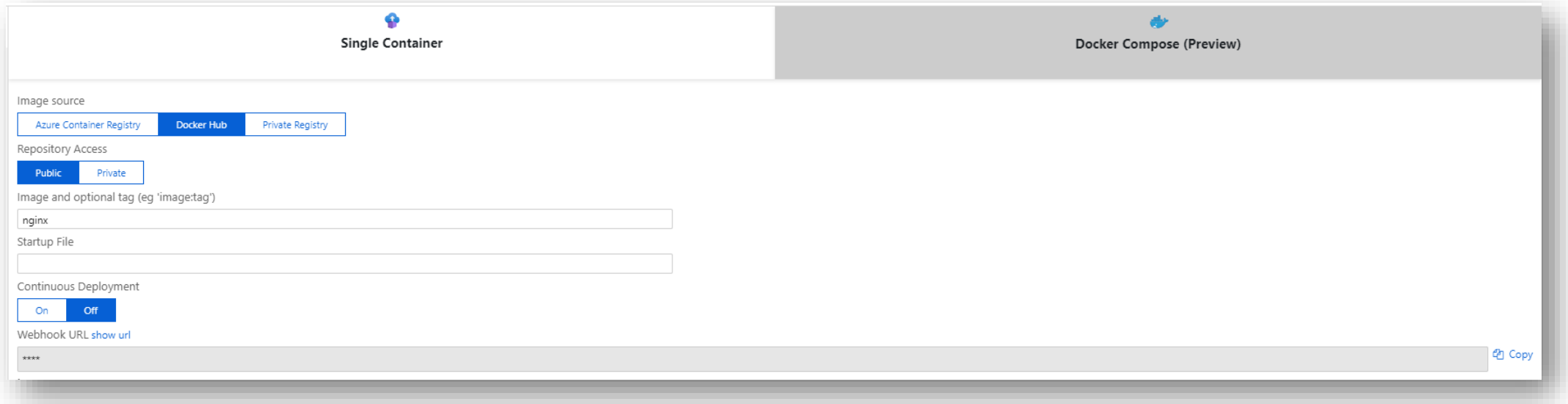
Container

- When running in „Container“ mode, you can deploy using
  - Azure Container Registry (ACR)
  - Docker Hub Images
  - Private Registry
  - Docker Compose (Preview)



- This is NOT what you might know as „Azure Container Instance“ – will talk about that later…

Demo: App Service with Container

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„Hey Joe…

- *… I need RDP/SSH access to that webserver to get my logfiles!“ your Devs are asking.*

- The bad news: There is no RDP/SSH to „that webserver“ as there is no webserver at all!

- The good news: You can either use Kudu console, Web SSH or REST-API to access your container / App Service Plan!

Demo: Kudu Console

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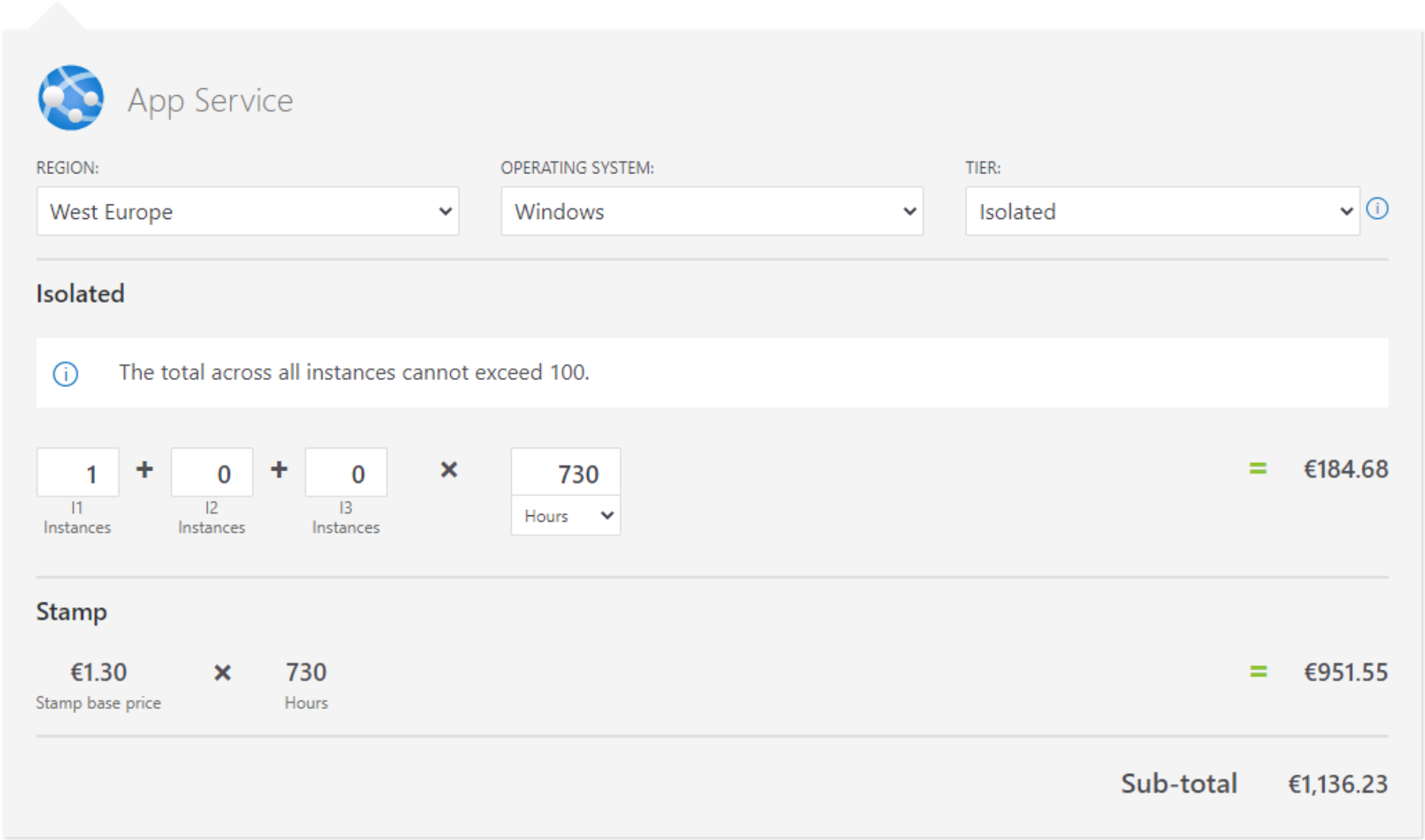
App Service Environment (ASE)

- Default: App Service has an public endpoint and is reachable over the internet directly
- They are running in shared environments with other users
- Some month ago, App Services had no option for Vnet integration
- This is where ASE came into the game:
  - It provides an isolated envornment
  - It deploys an App Service into a Subnet/Vnet and behind an ILB
  - Could also be used as „External ASE“ with public IP
- It works pretty much like an App Service Plan, but is ways more isolated and has no „own“ performance
- With nowadays Vnet integration for App Services, you should check very wisely, if ASE is the right thing for you
- There is a stamp fee for each ASE of approx. 1000€ per month, plus, the cheapest app inside is approx 250€/month on top (per app)

App Service Environment (ASE)

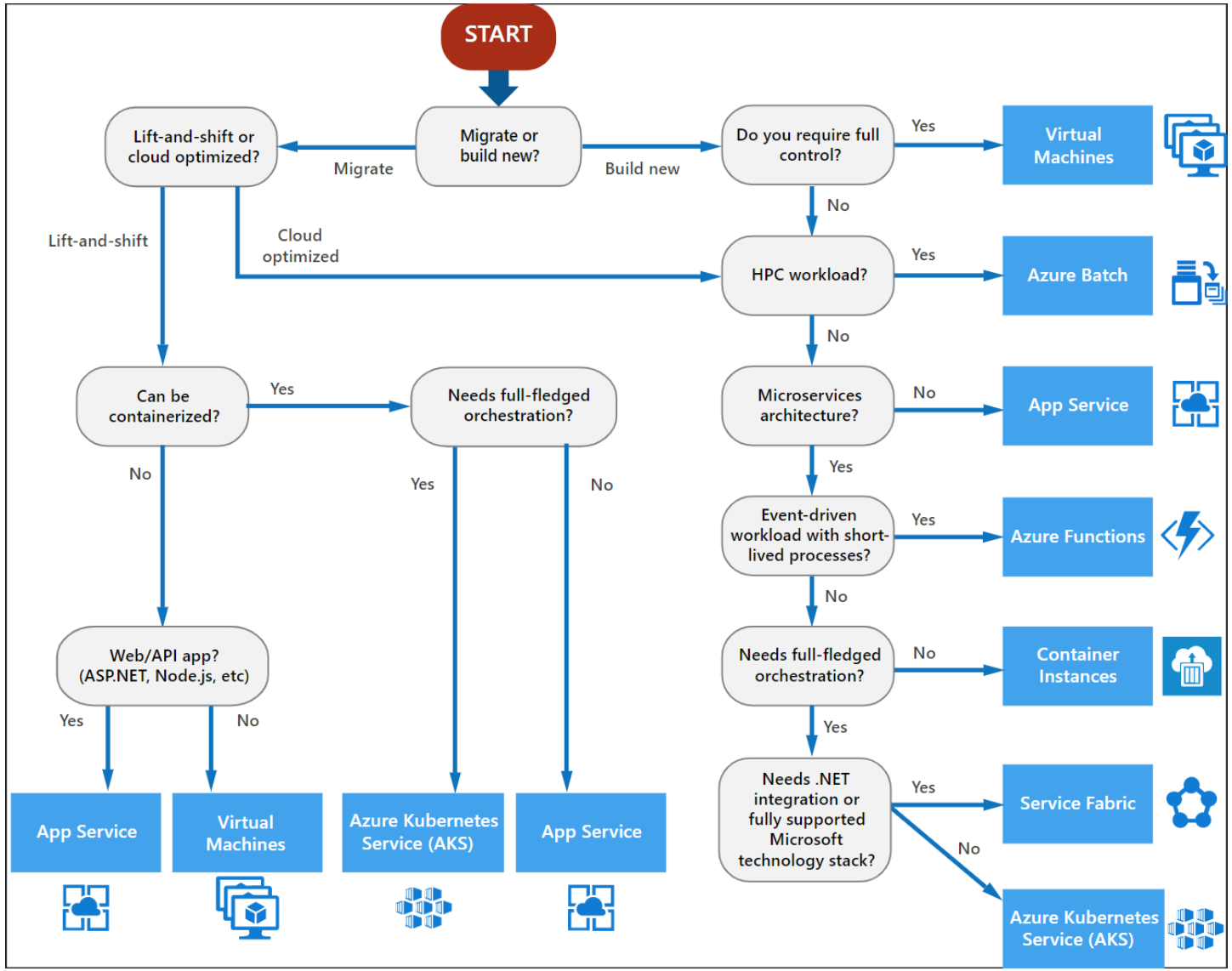


Azure Container Instance

- Run containers „serverlesse“, withouth the need of managing servers or an AKS
- Containers in ACI are using hypervirosr isolation and do not share the kernel with other containers (outside their container group)
- Billing works similar to Azure Functions, based on GB-seconds and vCPU-seconds

Demo: ACI

Now what to use when??



SoftwareONE Azure offerings

Lead generation

Social scraping
Microsoft partnership
End customer referrals
Events

Other partner relationships.

Onboarding, Intake, Workshop

Determine the strategic points of departure for the next steps in the cloud journey. Workshop is a technical workshop on Azure capabilities and features and/or DevOps workshop.

Design

Design extensive bespoke cloud environment for your applications to live on, from the cost, utilization and capacity models to the environment design and governance model

Optimize and modernize

Migrate your application to a cloud-based resource model (lift & shift) and assist you with making your application code cloud-ready to ensure benefits like rapid scaling, higher cost-effectiveness and less overhead.

Innovate and accelerate

We guide you to benefit from state-of-the-art technology like serverless, AI & Machine Learning, IoT, containerization and more.

Managed Services

xSimple offerings

PyraCloud

ONEClub

Managed Infra

UCM offerings

Go-to-Market, geo-expansion and marketplace

Private, partner and public marketplaces

Geo-expansion through global sales team and local ISV BDM

GTM activities

Offerings

Start-up Incubator

- Cloud Kickstarter
- Cloud Advisory Services
- Go-to-market funding and support
- Co-selling support
- General business consulting and industry trends

ONEClub

- SoftwareONE Marketplace
- Professional Services
- SoftwareONE Cloud Support
- xSimple portfolio
- Pyracloud

Pyracloud

- Cost optimization
- Cost management
- Cost allocation
- Cost dashboards

Unified Cloud Management for Azure

- 24/7 Global Support in Local Language
- Expert Advisory on Azure workloads
- Service Management
- ITOM

  Managed Identities
  Managed OS
  Managed DB
  Modern DevOps

AzureSimple for ISV

- Workshop Azure fundamentals
- Workshop Azure DevOps on Azure
- 6 step program
  - Intake
  - Design
  - Optimize
  - Modernize
  - Innovate
  - Accelerate

Go-to-Market as a Service

- EBC
- Co-marketing
  - Social Campaigns
  - Vertical Events
  - Reference / Success Story
- Co-selling
  - Industry Events
  - Roundtables
  - Webinars
  - Match Making

IP co-sell

- Guidance Through Microsoft's ISV Hub
- Guidance Through Partner Sales Connect
- Support on IP Co-sell Campaigns
- **Onboarding on AppSource**
- Support on Microsoft ISV Competency

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Any Questions?

Thank you for your attendance!

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