Retirement of Azure Public IP Basic SKU

19 Juni 2025

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Microsoft

Praktische afspraken

1 Vragen via questions

2 Iedereen op mute

3 Evaluatie met link naar presentaties worden bezorgd

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Introduction

Service lifecycle management

Basic/Standard SKU

Risk & Takeaways

Azure Platform Services

01 Introduction

Who am I

- Wouter Lippens
- wouter.lippens@inetum-realdolmen.world
- Cloud Solution Architect
- 12Y @ Inetum
- Assist customers with their Cloud Journey
    - Training & workshops
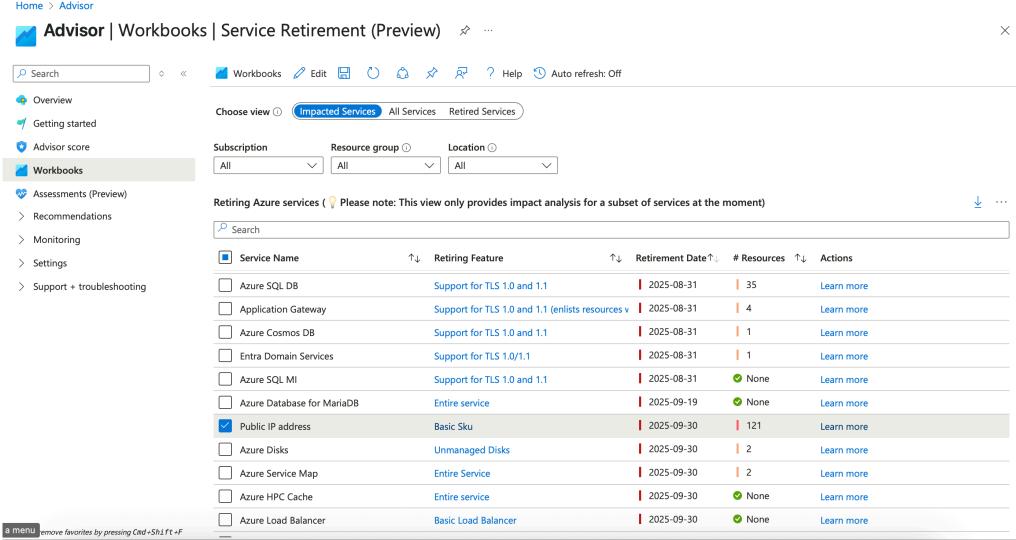   - Design & governance
    - Project implementation

02 Service Lifecyle Management

Service Lifecycle Management

- Azure services follow a **lifecycle**:
  - *Preview → General Availability (GA) → Retirement.*
  - Microsoft provides **advance notice** before retirement.
- Managing this lifecycle is essential to avoid downtime, risks, and inefficiencies.
- In Azure, this includes resources like:
  - Public IP SKUs (e.g. Basic → Standard)
  - VM sizes (e.g. Dv2, A-series deprecation)
  - TLS versions (1.0/1.1)
  - Deprecated APIs or runtime stacks (e.g. Python 3.7, .NET 3.1)
  - Unsupported Kubernetes versions in AKS
- End-of-Life = Microsoft ends support for a resource or feature

Follow up on retirement of services

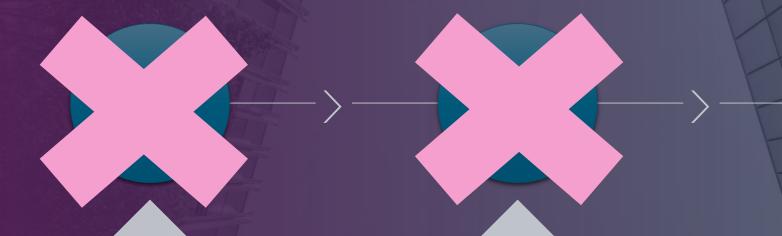- Azure Advisor – Retirement Workbook

Follow up on retirement of services

- Azure Advisor – Alerts

Create Advisor Alerts ...

Create an alert to trigger an action any time you have a new recommendation that meets the criteria you specify below.

Scope
Tell us the subscription and resource group you want to receive new recommendation alerts for.

Subscription *	Azure subscription 1 ⌄
Resource Group ⓘ	Select existing item... ⌄

Condition
Configure your alerts to only show for the recommendation type or category and impact level that you care about.

Signal ⓘ	New recommendation is available (recommendations)
Configured by ⓘ	⦿ Category and impact level ○ Recommendation Type
Category	Select category (optional) ⌄
Impact level	Select an impact level (optional) ⌄

ACTION GROUPS
Notify your team via email and text message or automate actions using webhooks, runbooks, functions, logic apps or integrating with external ITSM solutions each time you have a new recommendation. Learn more

ACTION GROUP NAME	ACTION GROUP TYPE

*Required Select an existing action group or create a new one

[Select existing] [Create new]

Alert details
Provide details on your alert so that you can identify and manage it later.

Alert rule name *	Specify alert rule name

03 Basic/Standard SKU

Timeline

10 july 2022: Announcement of retirement.

31 march 2025: Last date to create new Basic SKU Public IPs.

30 september 2025: Basic SKU Public IPs will be fully retired.

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Basic SKU vs Standard SKU

Feature	Basic SKU	Standard SKU
IP Allocation	Dynamic or Static	Static
Availability Zones	Not Supported	Supported (Zonal & Zone-redundant)
Security	Open by default, NSG optional	Secure by default, NSG required
NAT Gateway Support	Not Supported	Supported
Azure Firewall Support	Not Supported	Supported
Standard Load Balancer Support	Not Supported	Supported

Resources linked to Basic SKU public IP's

- Virtual Machines
- Virtual Machine Scale Sets
- Load Balancer – Basic SKU (also retiring 30/09/2025)
- VPN Gateway
- Expressroute Gateway
- Application Gateway (v1 SKU)
- Azure Databricks

Migration plan

1. **Identify Basic SKU Public IPs**
   Use Azure CLI, PowerShell, or Azure Resource Graph to list all Public IP addresses using the Basic SKU in your environment.
2. **Plan the Migration**
   Review dependencies and plan for any required downtime. Some services may need to be reconfigured.
3. **Provision or Upgrade to Standard SKU IPs**
   - Create new Public IP addresses with the Standard SKU.
   - Upgrade existing Basic IPs and reassign them to your resources.
   - Alternatively: Upgrade the associated resource (e.g., Load Balancer, Application Gateway) to a version that supports the Standard SKU.
4. **Test & Validate**
   Ensure all services are functioning correctly with the new Standard SKU IPs.
5. **Decommission Basic SKU IPs**
   Once validated, remove the old Basic IPs (if new Standard IPs were created) to avoid unnecessary costs or confusion.

Migration approach

Resource Type	Decision path
Virtual Machines	Upgrade supported, scripts available.
Virtual Machine Scale Sets	Replace.
Load Balancer – Basic SKU	Migrate to Standard load balancer SKU
VPN Gateway	Migrate to new AZ VPN Gateway SKUs Migration tool available.
Expressroute Gateway	Migrate to new Expressroute Gateway SKU
Application Gateway – v1 SKU	Replace, AppGW v2 SKU required. Migration script available.
Azure Databricks	Automatic replacement.

In order to upgrade a public IP, it must not be associated with any resource.
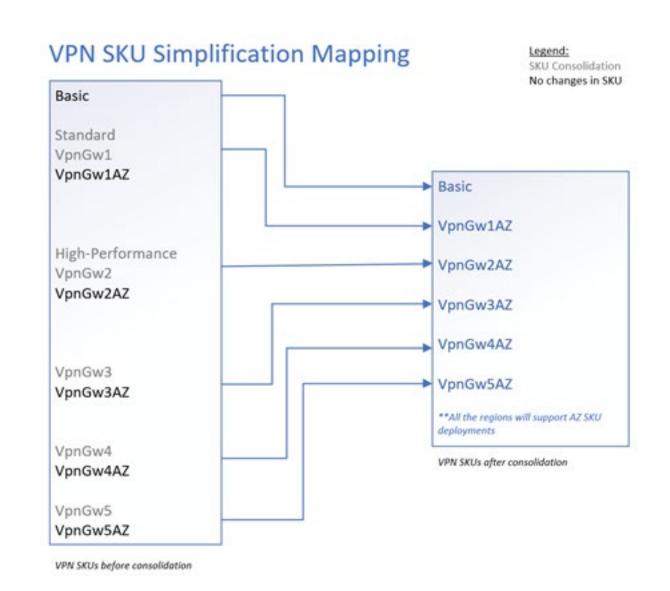
VPN Gateway – SKU consolidation

Zone Redundancy Becoming Standard
- Effective: 16 September 2026
- All SKUs (except Basic) will become Zone Redundant (AZ support)
- Enhances resiliency and availability across regions

Public IP Migration: What to Know
- Migrating a Public IP will also migrate legacy VPN SKUs
- Ensures compatibility with Zone Redundant infrastructure
- Migration tool supports:
  - Retention of the same IP address
  - Seamless migration path with minimal downtime

VPN SKU Simplification Mapping

Legend:
SKU Consolidation
No changes in SKU

Basic

Standard
VpnGw1
VpnGw1AZ

High-Performance
VpnGw2
VpnGw2AZ

VpnGw3
VpnGw3AZ

VpnGw4
VpnGw4AZ

VpnGw5
VpnGw5AZ

VPN SKUs before consolidation

Basic

VpnGw1AZ

VpnGw2AZ

VpnGw3AZ

VpnGw4AZ

VpnGw5AZ

**All the regions will support AZ SKU deployments*

VPN SKUs after consolidation

Expressroute Gateway

Gateway SKUs
- **Az-enabled SKUs**: These include ErGw1Az, ErGw2Az, ErGw3Az, and ErGwScale (Preview). They support deployment across multiple availability zones, enhancing resiliency.
- **Non-Az-enabled SKUs**: These include Standard, HighPerformance, and UltraPerformance SKUs, which do not support availability zone distribution.

Supported Migration Scenarios
- From non-Az SKU + Basic IP → non-Az SKU + Standard IP
- From non-Az SKU + Basic IP → Az-enabled SKU + Standard IP
- Migration can be done via **Azure portal** or **PowerShell**

Migration tool:
1. **Validate** – Ensures all resources are in a "Succeeded" state; stops if prerequisites aren't met.
2. **Prepare** – Creates a second gateway, public IP, and connections in the same subnet; first gateway is locked. Can take ~45 min; you can abort to revert.
3. **Migrate** – Swaps traffic to the new gateway (~15 min), brief interruptions possible.
4. **Commit** – Deletes old gateway and its connections

Application Gateway – SKU migration

Retirement Date: Azure Application Gateway v1 will be retired on April 28, 2026.

Important: V1 and V2 SKUs cannot coexist within the same subnet.
This requires a redesign of the network and IP plan, with potential impact on firewall rules.

Why Migrate to Application Gateway v2?
The v2 SKU introduces several enhancements over v1:
- Auto-scaling to dynamically adjust capacity based on traffic.
- Higher instance limits: from 32 (v1) to 125 (v2).
- Larger HTTP payload support: from 2 GB to 4 GB max.
- Azure Key Vault integration:
  - Centralized SSL certificate management.
  - Automated certificate rotation.

Prepare for Changes in Public SSL Certificate Lifespan
The maximum validity period for public SSL/TLS certificates is being shortened:
From 398 days to as little as 100 or even 47 days.

Use Key Vault integration to manage and automate certificate rotation efficiently in response to this change.

04 Risk & Takeaways

Risks of using retired or legacy Azure services

Security Vulnerabilities:

No patches, updates, or security fixes provided after end-of-life.

Higher Costs:

Legacy services may incur premium pricing or require custom support.

Compliance Risks:

May no longer meet industry or regulatory standards (e.g., ISO, NIS2).

Performance & Compatibility:

Older SKUs might not work with modern Azure services or features.

Operational Risk:

Higher chance of service disruption, outages, or unsupported configurations.

Final takeaways

- Proactively monitor lifecycle status of all Azure services
- Use IaC and policy-driven governance to enforce standards
- Upgrade early—avoid last-minute disruptions
- 3rd party involvement
  - Application vendors/integrators that set up the solution in the past > fire & forget !
    - Contact, support contract, planning
- Change management
  - Plan for change
  - Plan for downtime
  - Plan for testing
  - Business impact estimation
  - Cost (who will implement these changes?)

EOL is not just an IT issue—it's a business continuity risk. Stay ahead, stay compliant.

05 Azure Platform Services

Our solution for proactive Azure Platform Services

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The Azure Platform Solution

Specialized Workloads

Proactive Services

Service Reliability Engineering

Platform layer

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The Platform Layer

We take operational responsibility, monitor your environment and report about costs and events.

Transitioning towards Azure Platform Services

We take over the **operational responsibility** and capture your **requirements** to become your **partner** in the cloud.

We **MONITOR** your environment

Our platform monitors your cloud environment as a swift **catch & dispatch** system delivers critical alerts to your support team

We **SUPPORT** your business

You gain access to a **24x7** support system

We deliver **INSIGHT** into your environment

Our security, financial and service **reports** deliver the correct insights into your environment.

Service Reliability Engineering

We use a software approach to IT operations where software is used to manage your systems, solve problems and automate operational tasks.

We handle your **INCIDENTS**, **CHANGES** & **REQUESTS**

We handle your incidents, changes and requests based on your priorities and needs.

We **FOCUS** on **AUTOMATION** to improve our services.

Our team will continuously **improve your service** by focusing on automation. In order to **deliver** your **operational requests** more **quickly** and **efficiently**.

We **OPTIMIZE** your environment to better suit your needs

Your environment will be optimized to fit your needs, with a focus on **reliability**, **security**, **cost** and **performance**.

We empower **FLEXIBILITY**

Change is the only constant within the IT landscape, That's why our **service** will **scale** to fit your needs.

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Specialized Workloads

Our Specialized workloads are standard solutions that extend the capabilities of our Azure Platform Service.

ADVANCED Virtual Machine Monitoring

Are you migrating to the cloud and have a lot of **virtual machines**? Let's also monitor inside of these Virtual Machines with our **monitoring platform**!

Easy **BACKUP** & **RESTORE***

Do you have **critical** services that need extra attention? Remove stress with our **Backup** & **Restore** service.

Let's focus on **PATCHES***

Let's keep your virtual environment **up-to-date** with the Patching workload.

We'll create extra **WORKLOADS** to better suit your needs

Our team will focus on **creating** the right puzzle pieces in order to better **support** your environment.

(*) These features require Advanced VM Monitoring

Proactive Services

Our proactive operations are performed on a recurring basis and is tuned to your cloud subscription. This will result in advice in order to improve your environment and create an SRE roadmap for your cloud.

Need some **ARCHITECTURE** guidance?

Through **in-depth knowledge** of your business and cloud environment, our **architect** can provide **recommendations** to ensure that you take the right decisions for your **cloud roadmap**.

Correct **POLICIES** can enforce your corporate standards.

Policy Management provides **automated guardrails** to keep **deployments** and **configurations** in line with corporate standards for different scenarios

We will help you **OPTIMISE** your cloud.

Cloud Optimisation Service analyses your resource configurations and usage telemetry to recommend optimisations with a focus on reliability and performance.

Want more control on cloud **COST**?

You will be able to **monitor** your cloud spending and resource usage and receive cost lowering **recommendations**.

Tighten down your **SECURITY**.

Gain more **insight** with our security management solution based on your security **policies** and **remediation** activities.

sitivity: Company

The Azure Platform Solution

Projects

Specialized Workloads

Proactive Services

Service Reliability Engineering

Platform layer

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