inetum

Webinar

Slim patch management voor hybride IT met Azure Update Manager

17/10/2024

Introduction

Mathias Vansevenant
Cloud Engineer

Rik Delva
Microsoft Alliance Manager

What is Azure Update Manager?

Chapter 01

What is it

Update Manager is a unified service to help **manage and govern updates for all your machines**.

You can monitor Windows and Linux update compliance across your deployments **in Azure, on-premises, and on other cloud platforms** from a single dashboard.

You can also use Update Manager to make real-time updates or schedule them within a defined **maintenance window**.

Replaces **Azure Automation Update management**

Microsoft Azure | Search resources, services, and docs (G+/) | Copilot

Home >

Azure Update Manager

Microsoft

Search

- Overview
- Get started
- Manage
- Manage Azure Stack HCI
- Monitoring
- Support + troubleshooting

Refresh | Check for updates | One-time update | Schedule updates | Settings | Feedback

7 out of 150 machine(s) don't have update data. Enable periodic assessment using Azure Policy or Update settings to regularly check for updates. Enable now →

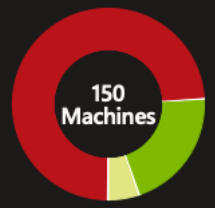
Automation Update Management has retired on 31st August, 2024. New VM onboarding is no longer supported. Migrate to Azure Update Manager to continue patching. Refer to guidance on migrating to Azure Update Manager here. Migrate Now. →

Subscription : **23 selected** | Resource group : **All** | Resource type : **All** | Workloads : **All** | Location : **West Europe** | OS : **All** | Tags : **All**

Total machines	Azure virtual machines	Arc enabled machines
150	106	44

Update status of machines

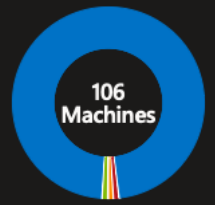
Update classifications : All



Pending updates	No pending updates
111	31
Pending reboot	**No updates data**
11	8
Unsupported	
0	

Open query >

Patch orchestration configuration of Azure virtual machines



Customer Managed Sc...	Image default
103	1
Azure Managed - Safe ...	**Windows automatic u...**
1	1
Manual updates	**Not available**
0	0

Open query >

Update installation status

Last 30 Days

Total installation runs	Failed	Completed with warnings
98	12	6
	Completed	**In progress**
	80	0

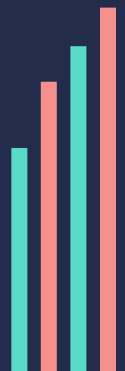
Open query >

Installation runs by operation type

Customer Managed Schedules	42
Azure Managed - Safe Deployment	0
Manual updates	56

Azure Update Manager
Vs
Automation Update
Management

Chapter 02



Difference (support)

What	Azure Automation Update management	Azure Update Manager
Patching Linux	✅	✅
Patching Windows (2008 - ...)	✅	✅
Patching SQL	❌	✅
Pre/Post scripts	✅	✅
Migrated VMs	✅	✅
Arc-enabled servers	❌	✅ (5$/server/month)
Host patching	❌	✅
Windows Client	❌	❌
Virtual Machine Scale Set	❌	❌
AKS	❌	❌

Difference (components)

Azure Automation Update management	Azure Update Manager
Automation Account	Maintenance configurations
Automation runbooks	Pre and post events
Log Analytics Workspace for storing updates data	Azure Resource Graph for data storage

Implementation

Chapter 03

Maintenance Configurations
Update Settings
Monitor

Maintenance Configurations
Update Settings
Monitor

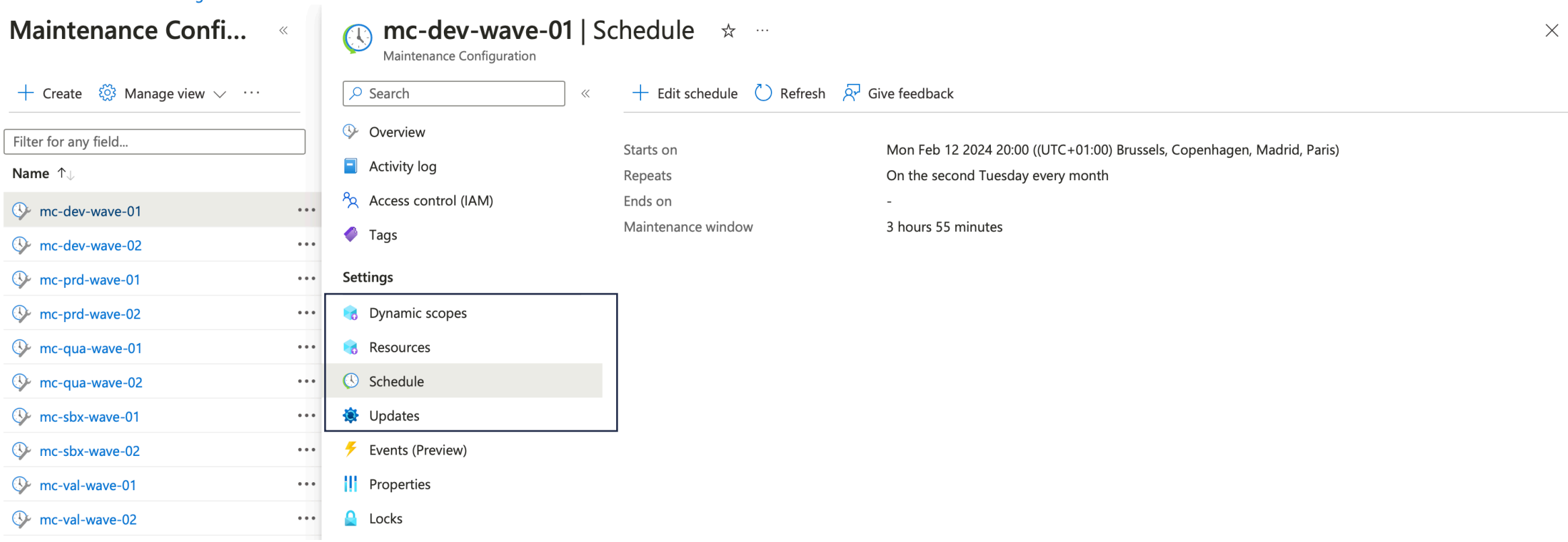
Maintenance Configurations

Maintenance configurations

Patching schedules

Scope

Update types


Home > Maintenance Configurations > mc-dev-wave-01
Maintenance Confi...
Create
Manage view
Filter for any field...
Name
mc-dev-wave-01
mc-dev-wave-02
mc-prd-wave-01
mc-prd-wave-02
mc-qua-wave-01
mc-qua-wave-02
mc-sbx-wave-01
mc-sbx-wave-02
mc-val-wave-01
mc-val-wave-02
mc-dev-wave-01 | Schedule
Maintenance Configuration
Search
Overview
Activity log
Access control (IAM)
Tags
Settings
Dynamic scopes
Resources
Schedule
Updates
Events (Preview)
Properties
Locks
Edit schedule
Refresh
Give feedback
Starts on
Mon Feb 12 2024 20:00 ((UTC+01:00) Brussels, Copenhagen, Madrid, Paris)
Repeats
On the second Tuesday every month
Ends on
-
Maintenance window
3 hours 55 minutes

Add resources

Option 1: Add resources directly

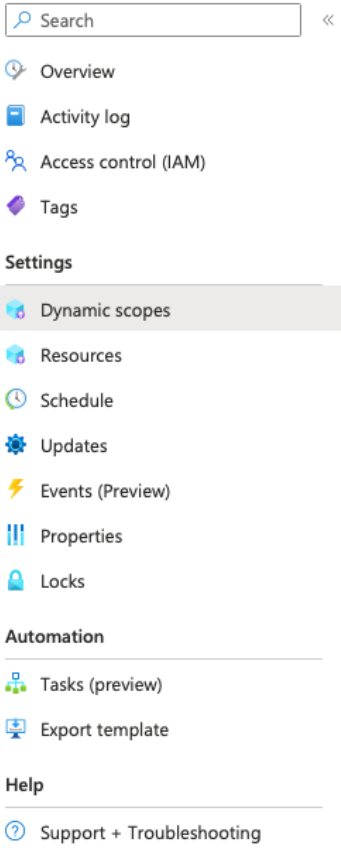
- Any subscription
- Any Resource Group
- Any location
  - Does not cover new Virtual Machines

Option 2: Dynamic scope, add resources based on

- Subscription
- Resource Group
- Resource type: Virtual Machine / Arc enabled server
- Location
- OS type: Linux / Windows
- Tags: any of / all of

mc-dev-wave-01 | Dynamic scopes

Maintenance Configuration



Add a dynamic scope | Remove dynamic scope | Refresh | Give feedback

Manage dynamic scopes assigned to this maintenance configuration. You can assign new dynamic scopes, see the status of all dynamic scopes currently assigned to the configuration, and by selecting dynamic scopes belo either apply pending maintenance or remove them from this configuration.

Subscription	Resource group	Resource type	Location	OS type	Tags	Actions
Subscription- 1	-	-	-	windows, linux	(All) patching:development-1	
Subscription- 2	-	-	-	windows, linux	(All) patching:development-1	
Subscription- 3	-	-	-	windows, linux	(All) patching:development-1	
Subscription- 4	-	-	-	windows, linux	(All) patching:development-1	

Home > Maintenance Configurations > mc-dev-wave-01 | Dynamic scopes >

Add a dynamic scope

Define a dynamic scope

Use filters below to define a dynamic scope which will be resolved at run time. You can preview the machines in the dynamic scopes now, but the final list of machines may change when the schedule starts. Azure machines in the preview below may not be configured for Schedule patching. Click on Save to select the required configuration.

Subscriptions *: All items selected

Filter by: Select

Select filter by

Resource groups: No items selected

Resource types: All items selected

Locations: No items selected

OS types: All items selected

Tags: *No tags selected*

Schedule

Parameters

- Startdate
- Timezone
- Time window
- Repeat every x hours / day / weekday / month
- Offset: update x days after repeat day
- Enddate

Limitations: Max window: 3h 55m

Add/Modify schedule

Start on: 12-02-2024 8:00 PM

(UTC+01:00) Brussels, Copenhagen, Madri...

Maintenance window *: Hours 3 Minutes 55

Repeats: 1 Month

On the: 1st

Second Tuesday

Offset (days after) *: 0

Add end date

Schedule summary

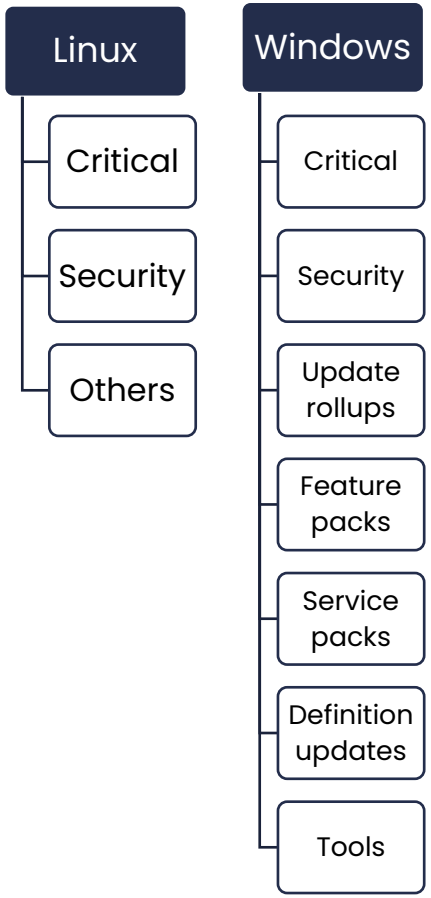
Starts on: Mon Feb 12 2024 20:00 ((UTC+01:00) Brussels, Copenhagen, Madrid, Paris)
Maintenance window: 3 hours 55 minutes
Repeats: On the second Tuesday every month
Ends on: -

If the start date comes before the first scheduled occurrence based on the Repeats value set, the schedule will begin on the first occurrence date, not the start date.

You have a pre maintenance task configured which will not get triggered in the upcoming scheduled run. Please ensure to allocate at least 40 minutes for the pre maintenance task to execute before the maintenance schedule run.

Update types

Classifications



Knowledge Base (KB)

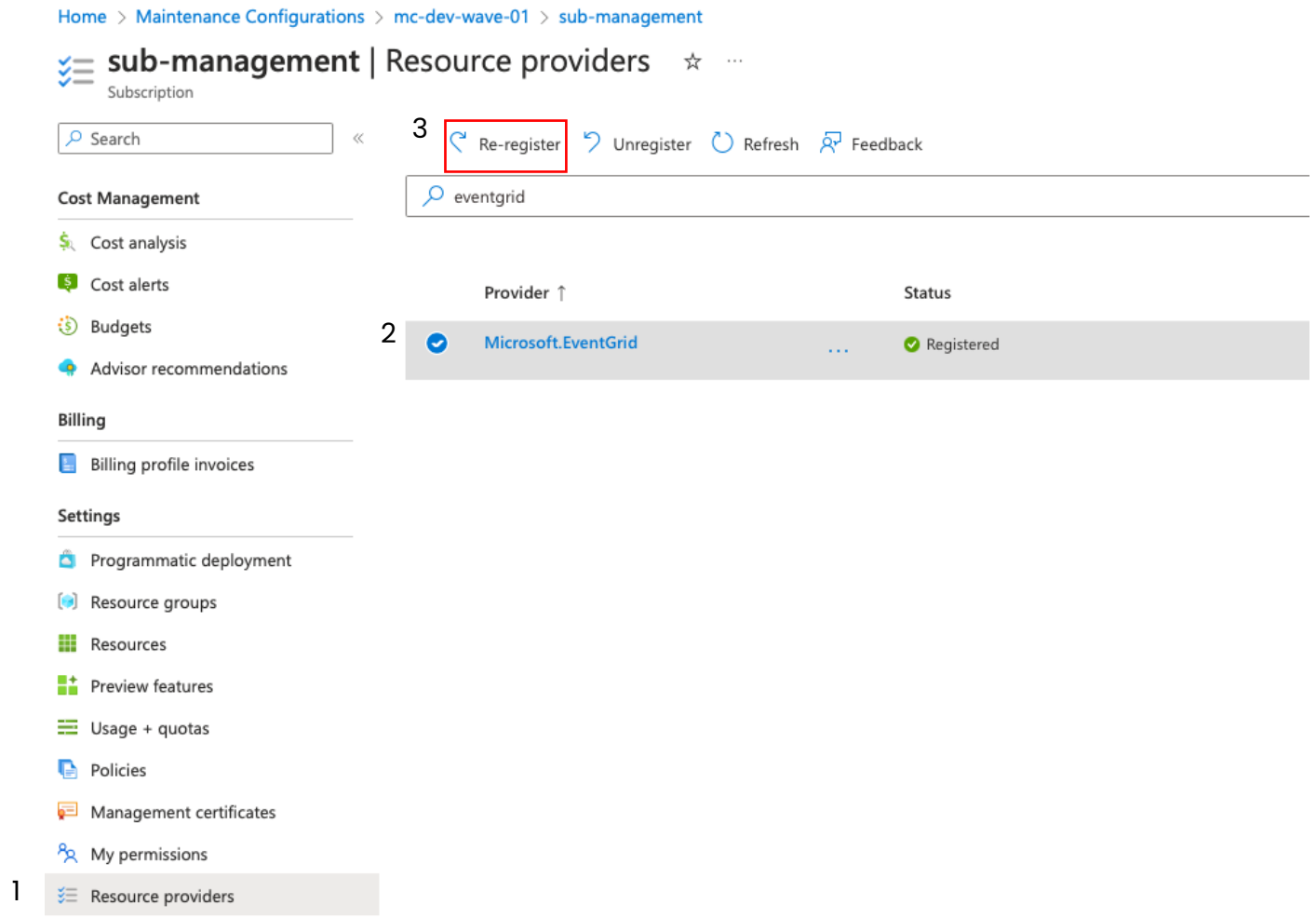
- Include
- Exclude

Pre and Post events

Prerequisites

Prerequisites

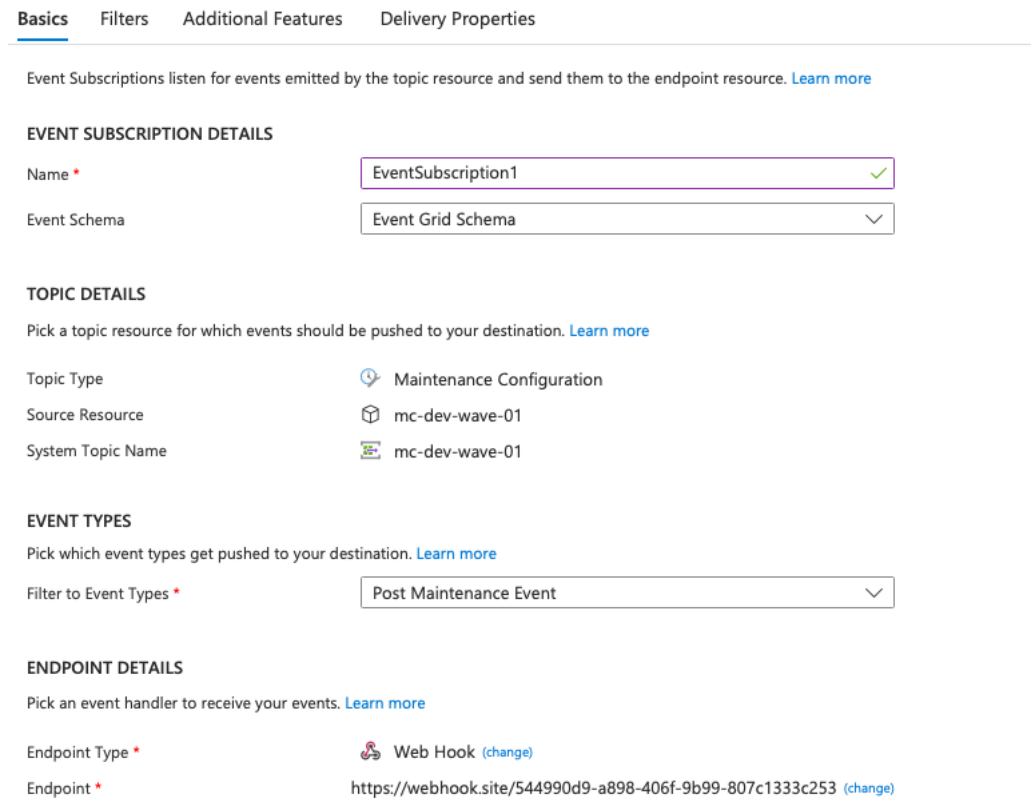
Register resource provider ‘EventGrid’ on Subscription



Subscribe to events

Event Subscription

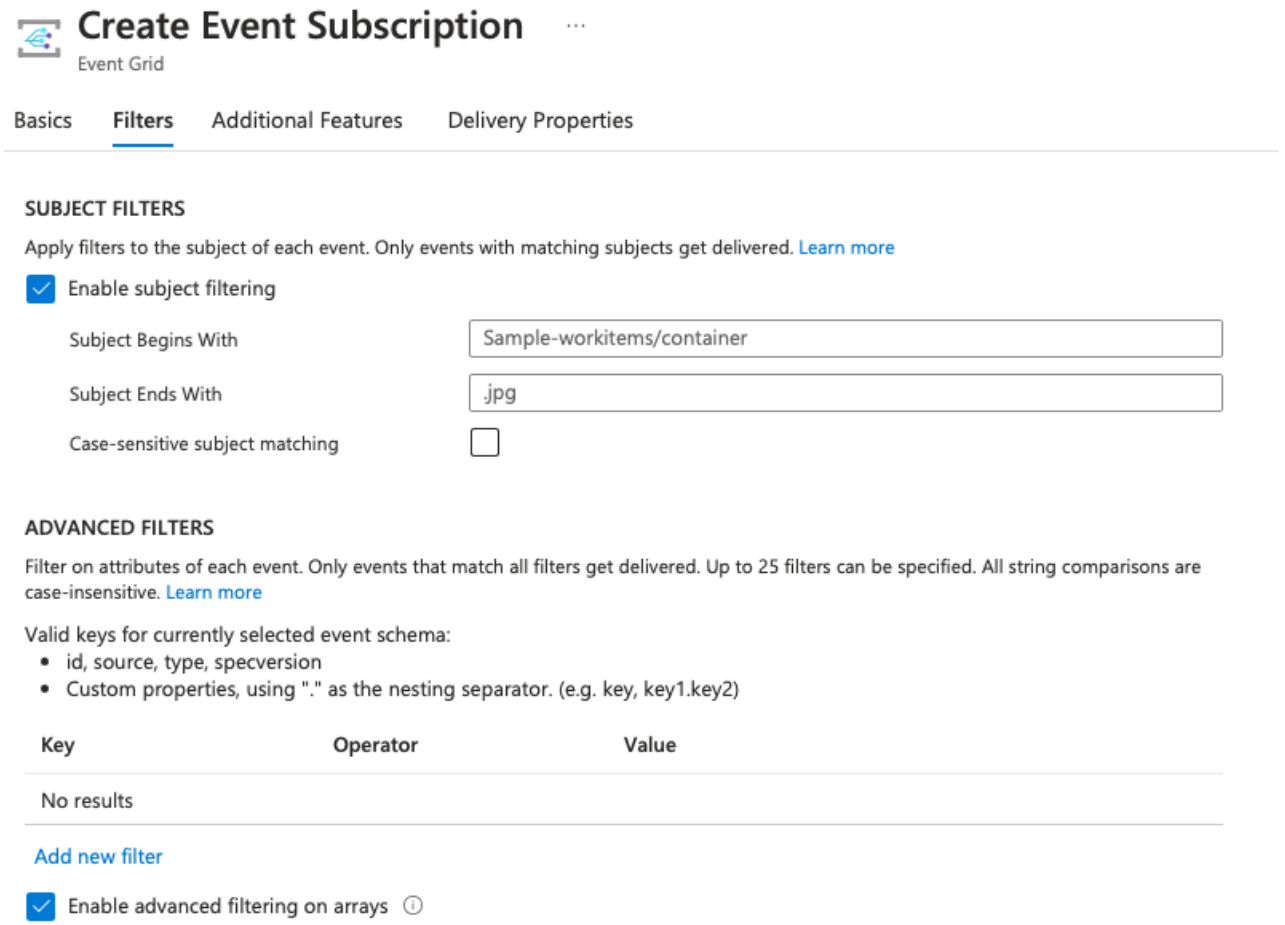
- System Topic
- Event types: pre / post maintenance events
- Different Endpoint types



Subscribe to events

Filter events

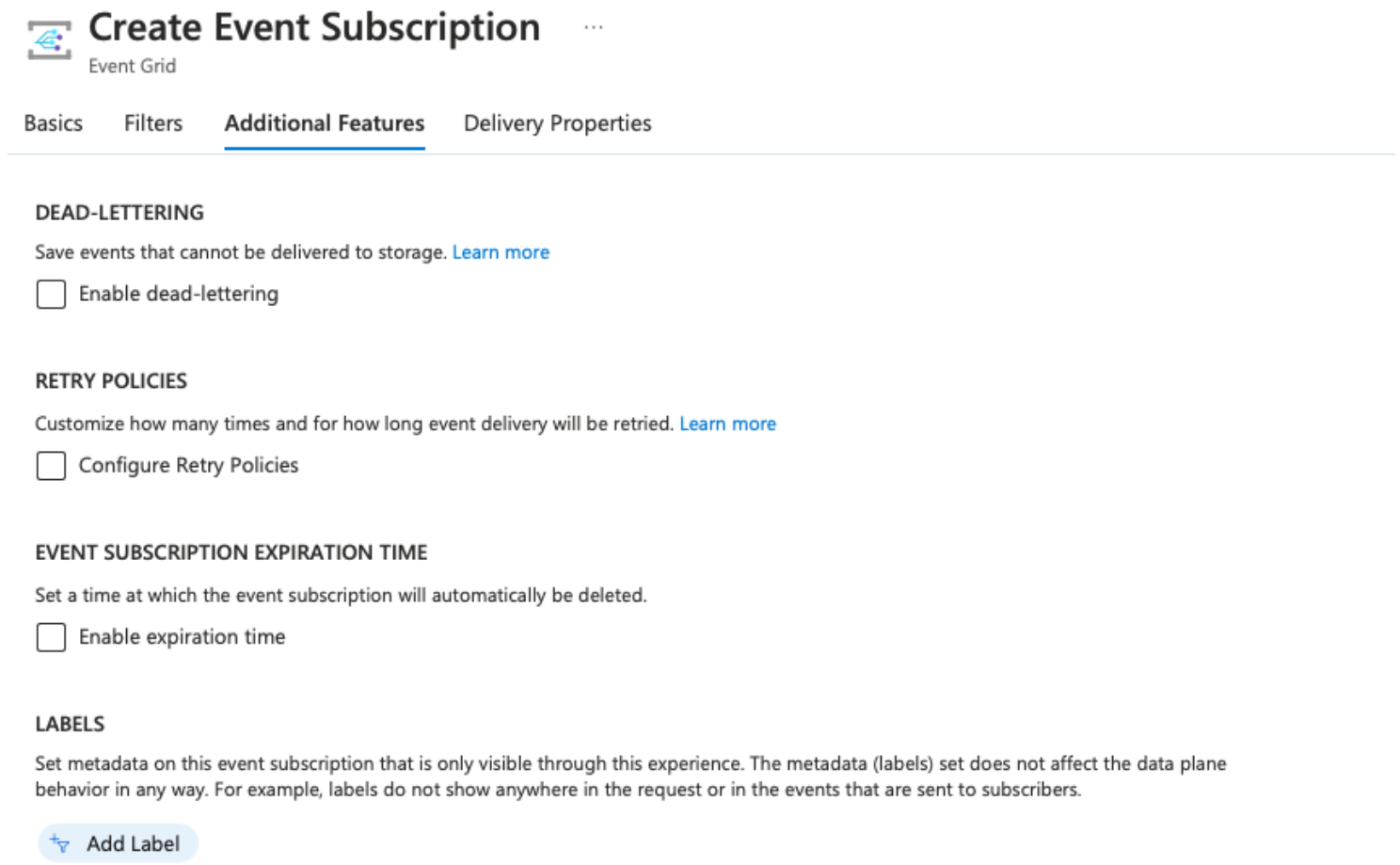
- Specific subjects
- Specific attributes



Subscribe to events

Additional features

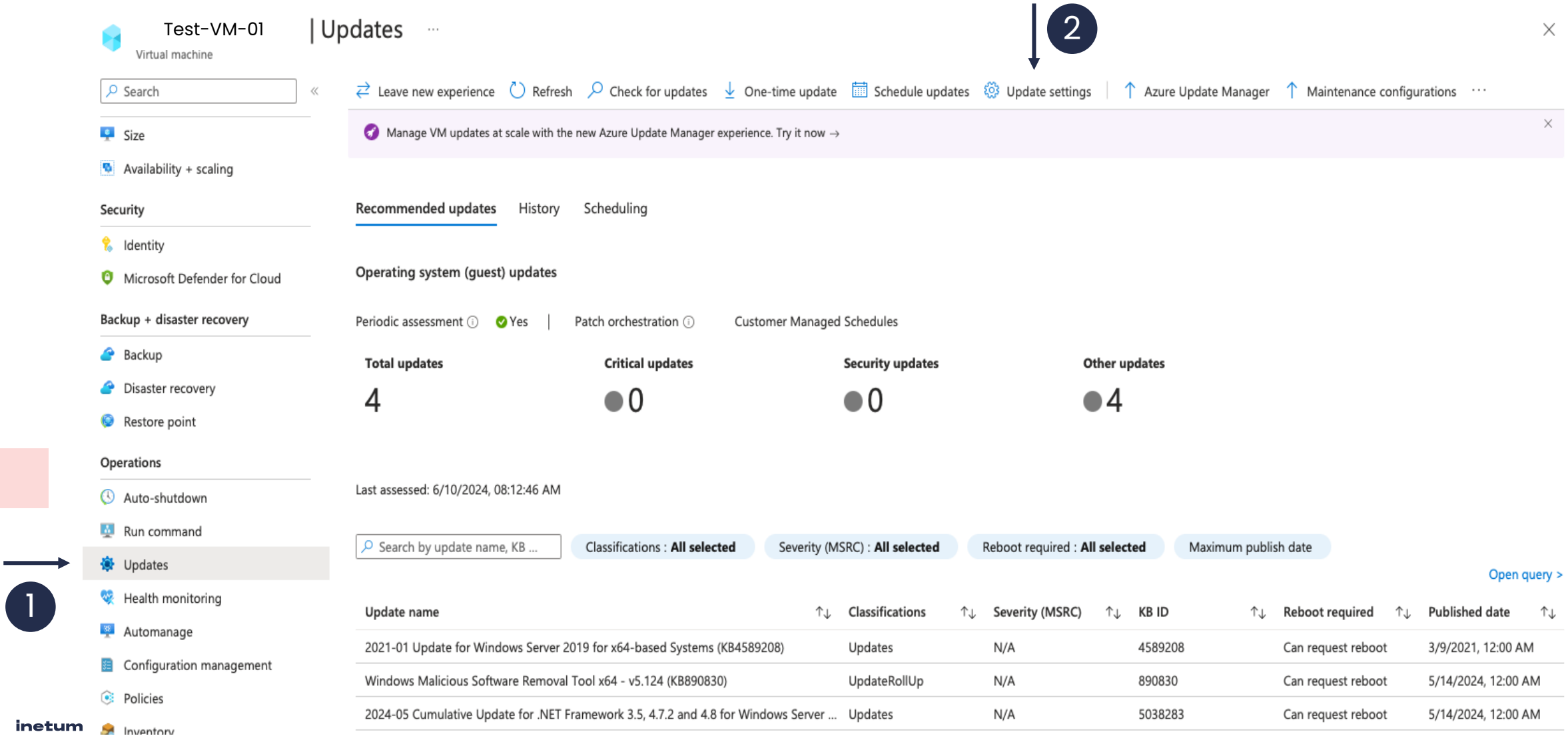
- Dead lettering
- Retry policies
- Expiration time



Maintenance Configurations
Update Settings
Monitor

Maintenance Configurations
Update Settings
Monitor

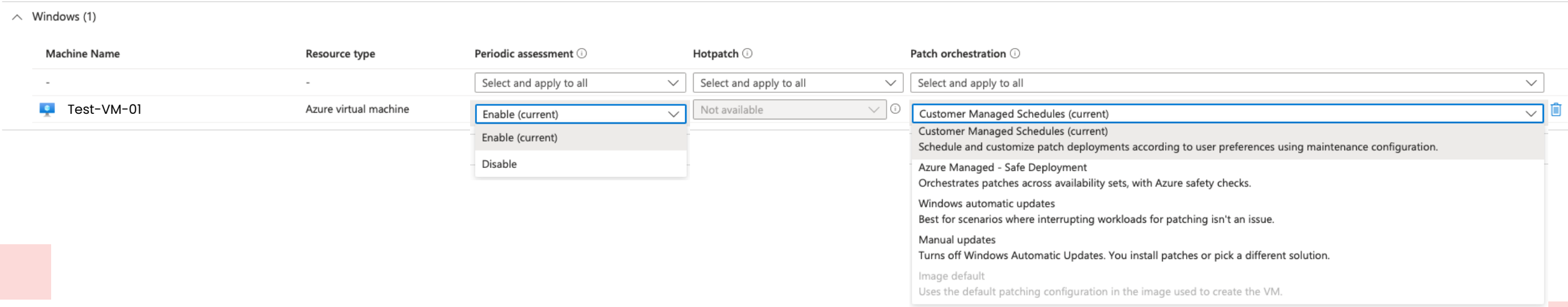
Update settings on Virtual Machines



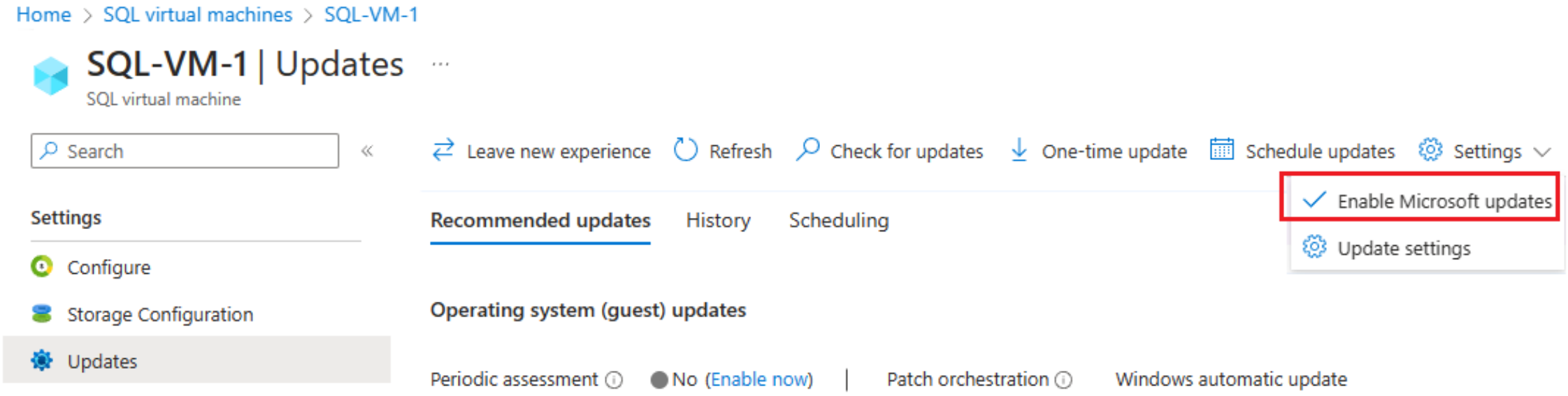
Update settings on Virtual Machines

Periodic Assessment

Patch orchestration

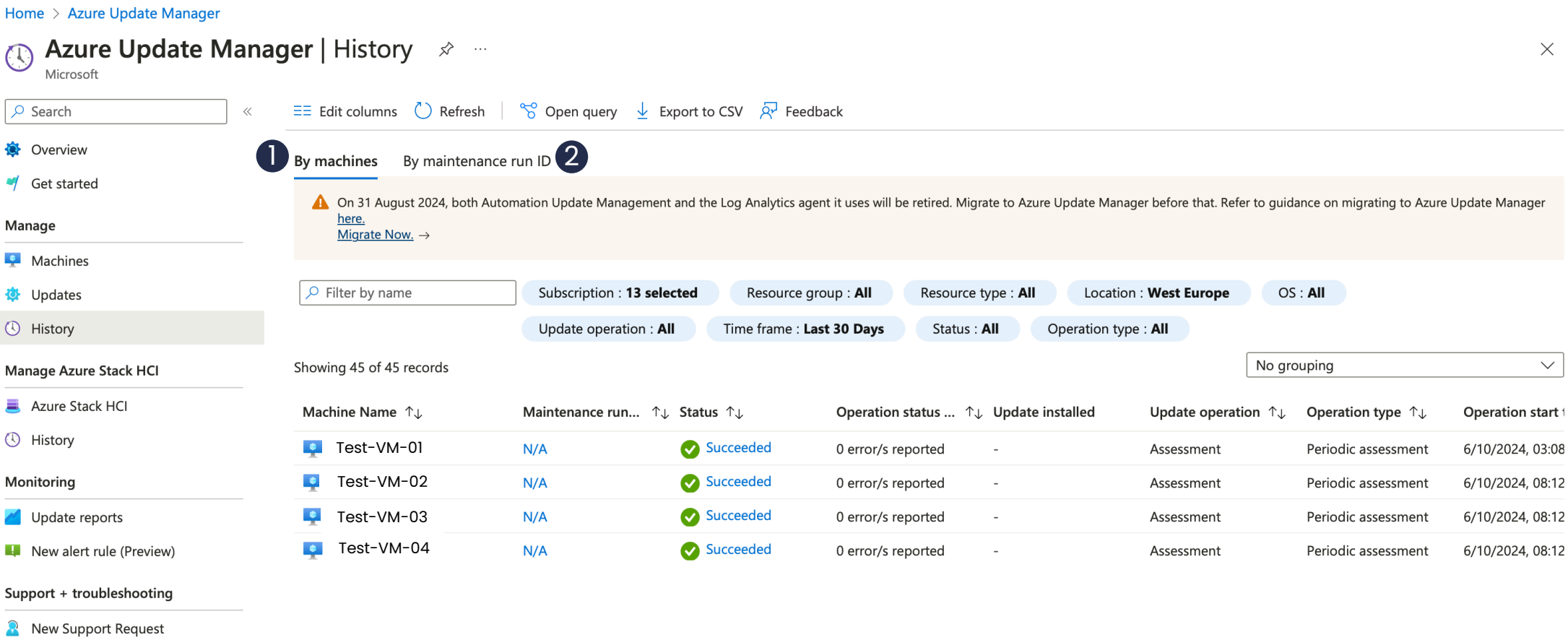

Windows (1)
Machine Name
Resource type
Periodic assessment
Hotpatch
Patch orchestration
-
-
Select and apply to all
Select and apply to all
Select and apply to all
Test-VM-01
Azure virtual machine
Enable (current)
Not available
Customer Managed Schedules (current)
Enable (current)
Disable
Customer Managed Schedules (current)
Schedule and customize patch deployments according to user preferences using maintenance configuration.
Azure Managed - Safe Deployment
Orchestrates patches across availability sets, with Azure safety checks.
Windows automatic updates
Best for scenarios where interrupting workloads for patching isn't an issue.
Manual updates
Turns off Windows Automatic Updates. You install patches or pick a different solution.
Image default
Uses the default patching configuration in the image used to create the VM.

Update settings on SQL Virtual Machines

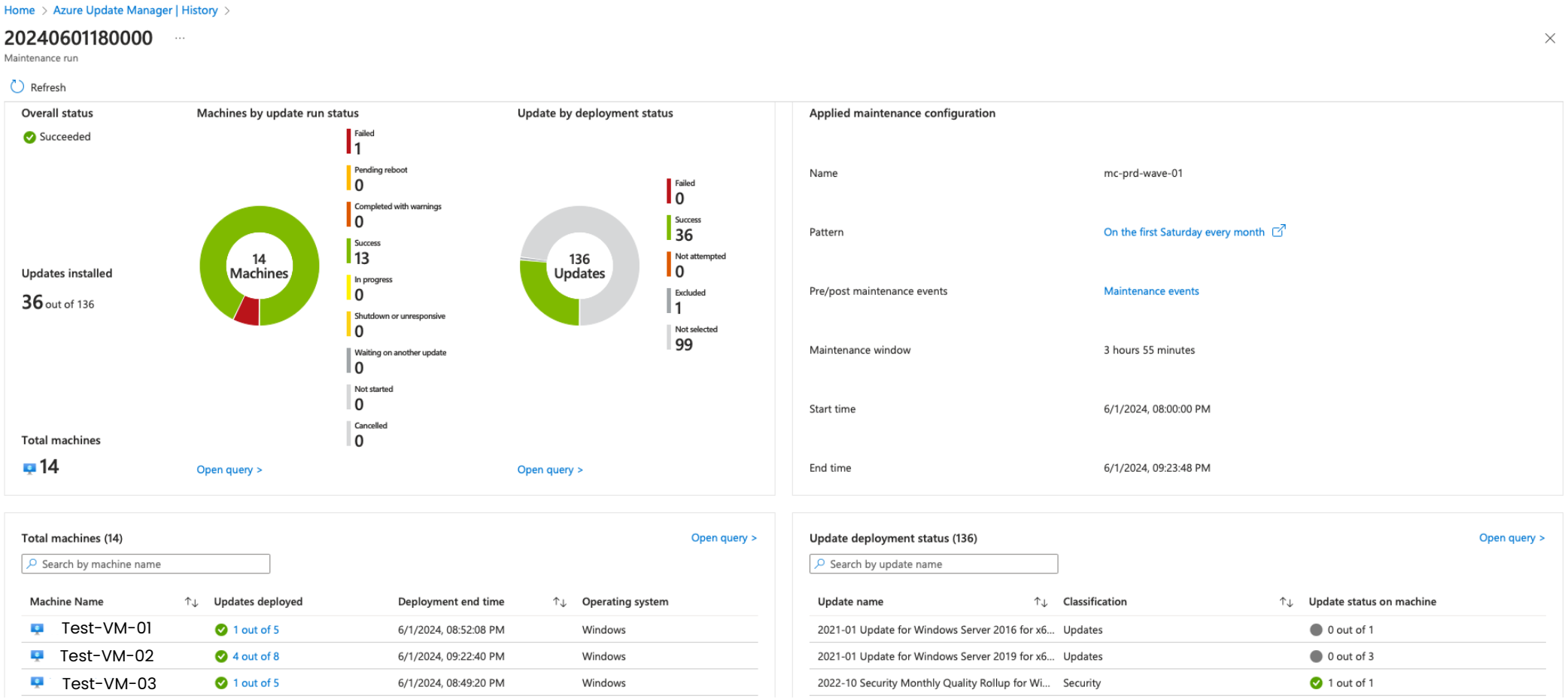


Maintenance Configurations
Update Settings
Monitor

Built-in dashboard

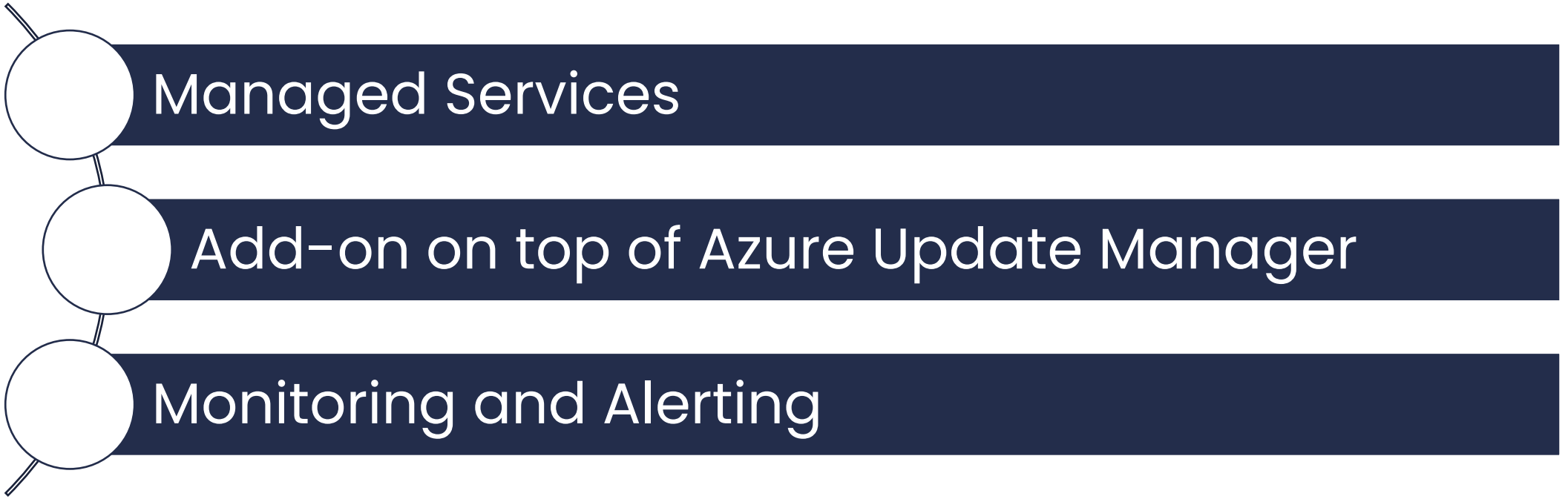


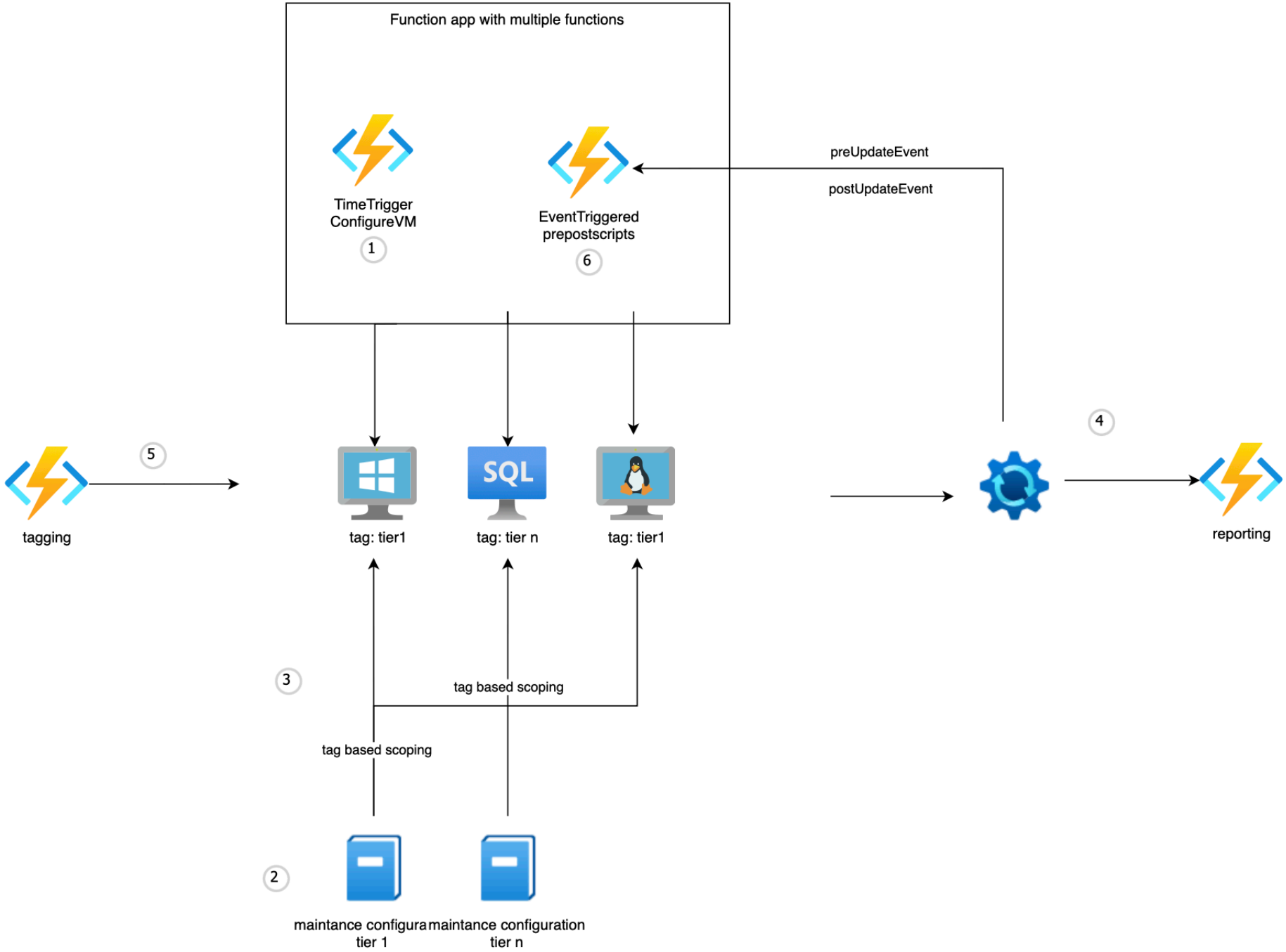
Built-in dashboard



Managed Services by Inetum

Azure Platform Solutions

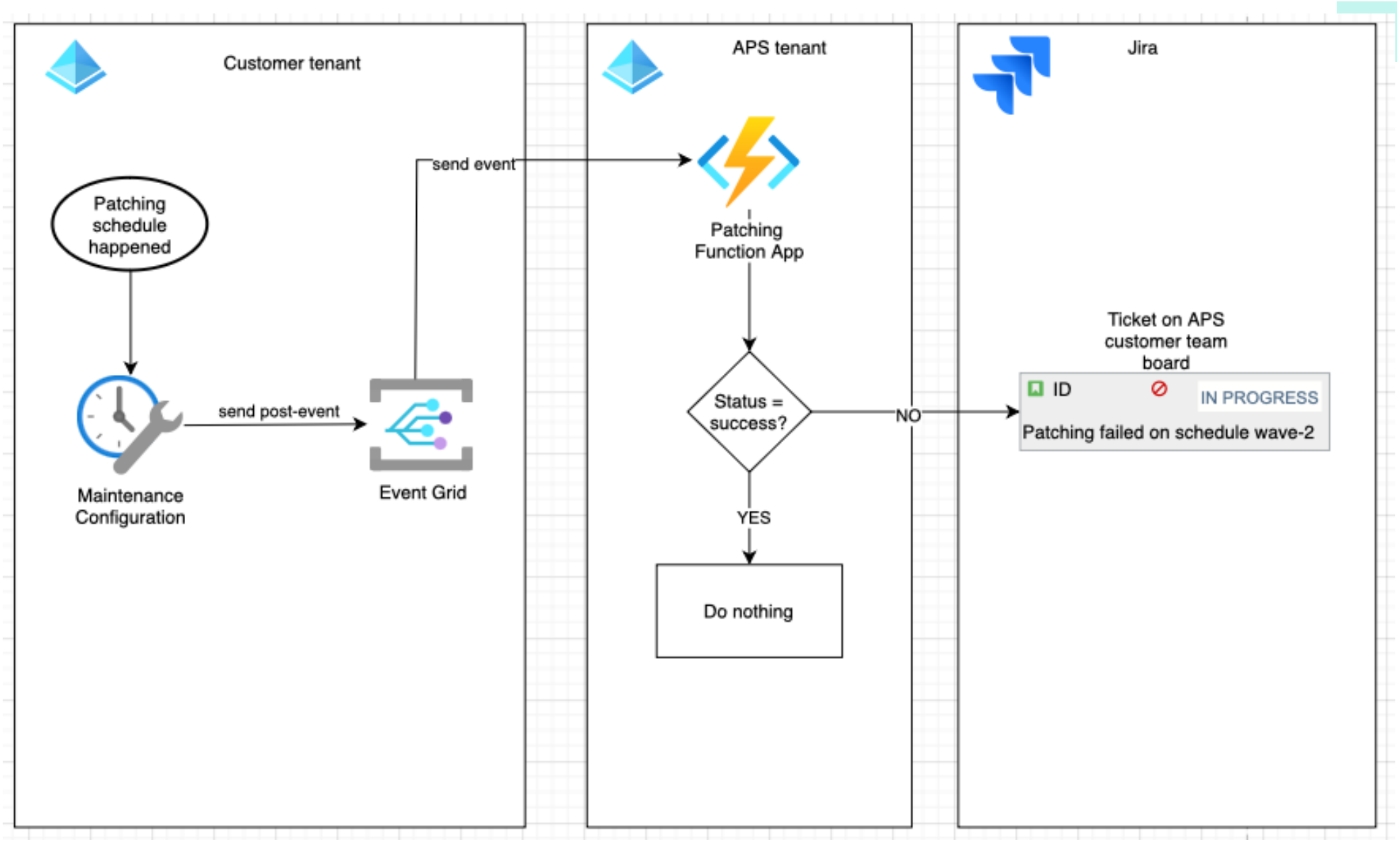



Function app with multiple functions
TimeTrigger
ConfigureVM
1
EventTriggered
prepostscripts
6
preUpdateEvent
postUpdateEvent
4
5
tagging
tag: tier1
tag: tier n
tag: tier1
reporting
3
tag based scoping
tag based scoping
2
maintance configura
tier 1
maintance configuration
tier n

Alerting on failed patching schedules (APS)

Function App in APS tenant

- Receive post event
- Check status
- Create ticket


Customer tenant
APS tenant
Jira
Patching schedule happened
send event
Patching Function App
Maintenance Configuration
send post-event
Event Grid
Status = success?
NO
YES
Do nothing
Ticket on APS customer team board
ID
IN PROGRESS
Patching failed on schedule wave-2

What is the cost of Azure Update Manager?

Chapter 04

Cost

Azure Automation Update management	Azure Update Manager
Automation Account: cost for runtime - First 500 minutes free – then $0.002/minute	Maintenance configurations: free resources
Automation runbooks	Pre and post events: free resources
Log Analytics Workspace for storing updates data: - $2.76/GB log ingestion - $0.12/GB/month for retention	Azure Resource Graph for data storage: built-in
	Azure Arc enabled servers: 5$/server/month

What's next?

Azure Update Management Kickstart

- **2,5 day engagement**
  - Day 1:
    - Server inventory
    - Patching schedules – scope – update types
  - Day 2:
    - Configuration
  - Day 3:
    - Monitoring, followup, finetuning

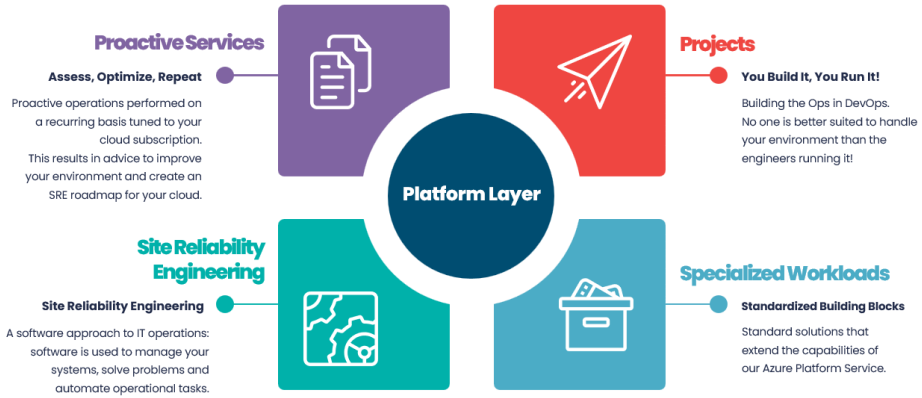
- **Fixed price: 2500€**

- **Contact us:**
  rik.delva@inetum-realdolmen.world
  info@inetum-realdolmen.world

What’s next ?

Azure Platform Solution (APS)

- **APS Specialized Workload for Update Management**



- **Contact us for more information :**
  Jonathan.vanbeneden@inetum-realdolmen.world
  info@inetum-realdolmen.world

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Hoe *cybersecurity* en *cloud* gebruiken als drivers voor innovatie en groei?

19/11, De Waerboom te Dilbeek

- Full day event
- i.s.m. Beltug
- 6 business en IT-sessies

Q&A

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