



#GlobalAzure

#CloudGenVerona

@cloudgen_verona

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PREMIUM SPONSOR

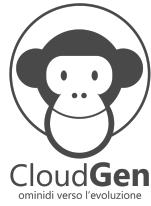


BASIC SPONSOR



CODICEPLASTICO

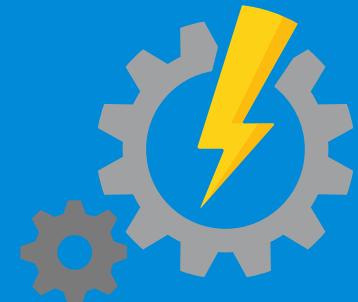
dgroove
Tecnologia emozionale.



TOPIC



Track, Inventory and
patch VMs in Azure
(Windows or Linux)
without SCCM and with
zero infrastructure



Sam - Journey so far?



**Cloud Solutions Architect
Black Box Learning Guru
Author and Tech Explorer
Gadget freak and kitchen beast**



Florent - Journey so far?



@florent_app

Microsoft MVP

Speaker

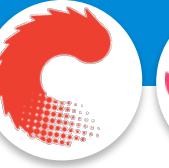
CSA/Team Lead Azure @ Devoteam CloudOps

<https://cloudyjourney.fr>



devoteam | CloudOps

About this session



Where to
Begin

Change
Tracking

Preparing the
environment

Inventory

Patch
Management

Executing
Scenarios

Where to Begin

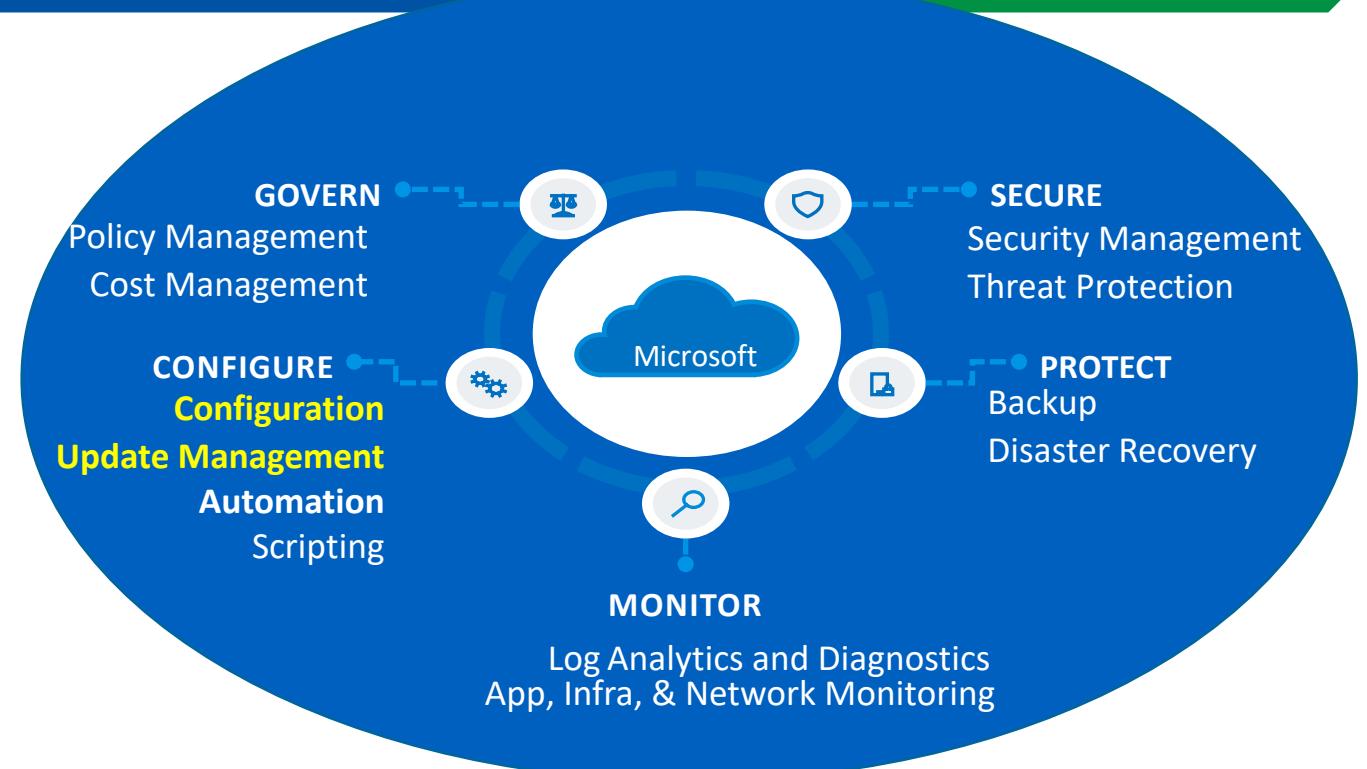


Start with Why

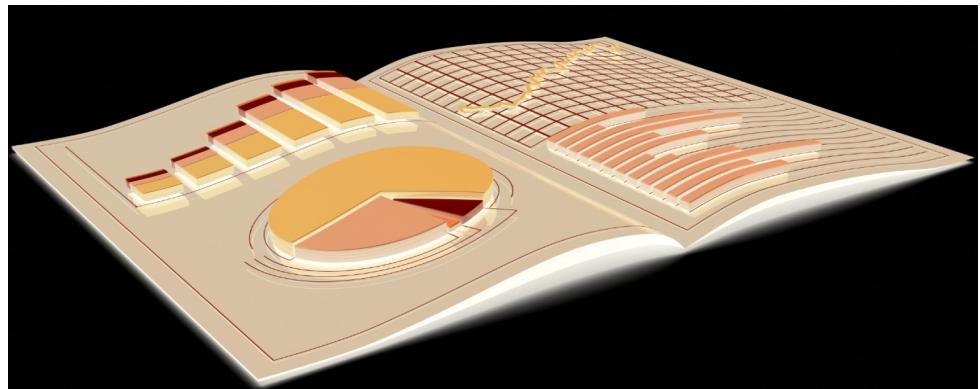
Overview

Planning
and
Scenarios

- Managing Azure IaaS and Hybrid
- Why would you buy milk from a bar?
- Use the native Azure services



About Inventory



✓ Collect and view inventory

- ✓ Software
- ✓ Files
- ✓ Linux daemons
- ✓ Windows Services
- ✓ Windows Registry keys on your computers.
- ✓ Create Machine Groups

Inventory



New software i

8

Last 24 hours

Machines reporting i

10

Last 24 hours

[Machines\(10\)](#)

[Software\(350\)](#)

[Files\(0\)](#)

[Windows Registry\(0\)](#)

[Windows Services\(298\)](#)

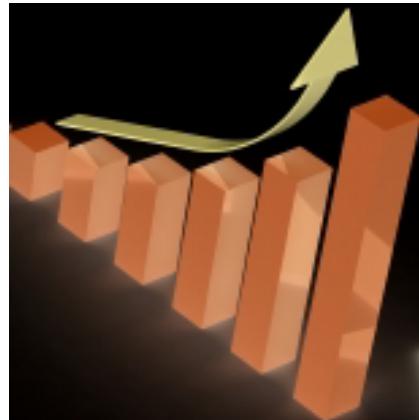
[Linux Daemons\(0\)](#)

[Machine Groups\(2\)](#)

i Search to filter items...

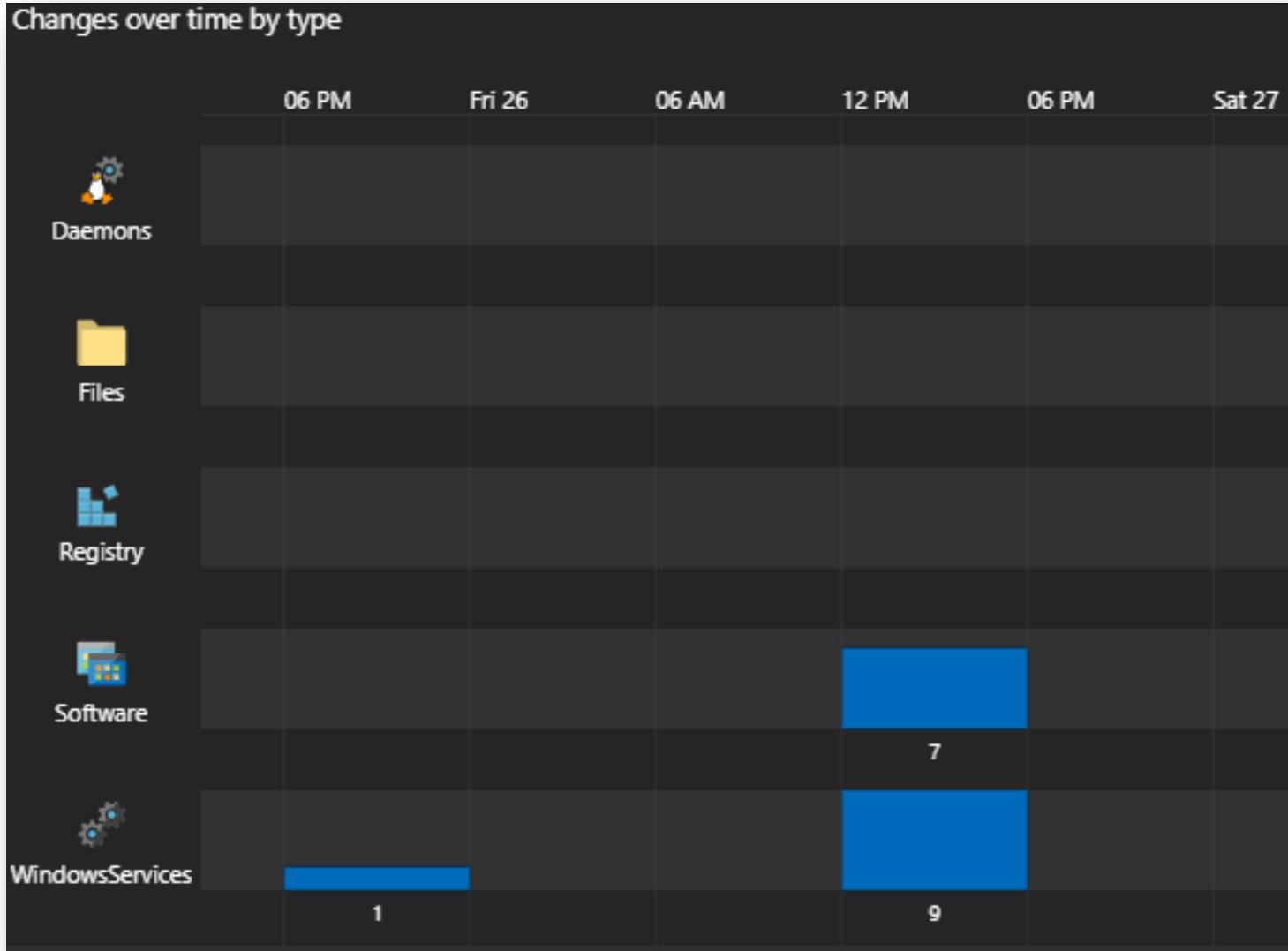
MACHINE	OPERATING SYSTEM	VERSION	PLATFORM
GBDEVVM111	Windows	6.3	Azure
GBDEVVM112	Windows	6.3	Azure
GBDEVVM113	Windows	6.3	Azure
GBPPVM121	Windows	10.0	Azure
GBPPVM122	Windows	10.0	Azure
ITPSCLI05.CORP.ITPROCESSED.COM	Windows	10.0	Non-Azure
ITPSCLI06.CORP.ITPROCESSED.COM	Windows	10.0	Non-Azure

About Azure Change Tracking

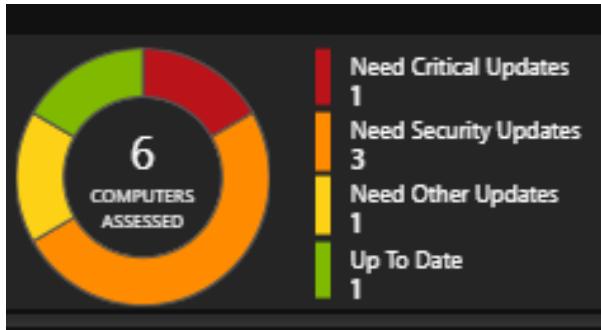


- ✓ Identify changes in your environment
 - ✓ Windows and Linux software,
 - ✓ Windows and Linux files, Windows registry keys, Windows services, and Linux daemons.
 - ✓ Changes on the monitored servers are sent to the Azure Monitor service
 - ✓ Logic is applied to the received data and the cloud service records the data.

Change Tracking

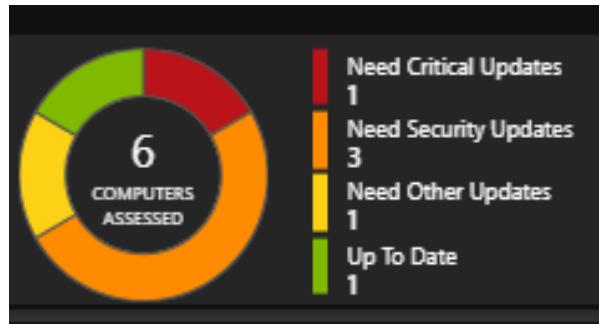


Azure software update



- ✓ Checks update compliance of your Windows and Linux computers, both on-prem and in Azure IaaS
- ✓ Can deploy and install software updates to Windows and Linux computers, both on-prem and in Azure IaaS
- ✓ Avoids having to use different products depending on operating system or where the computer is located within the hybrid deployment

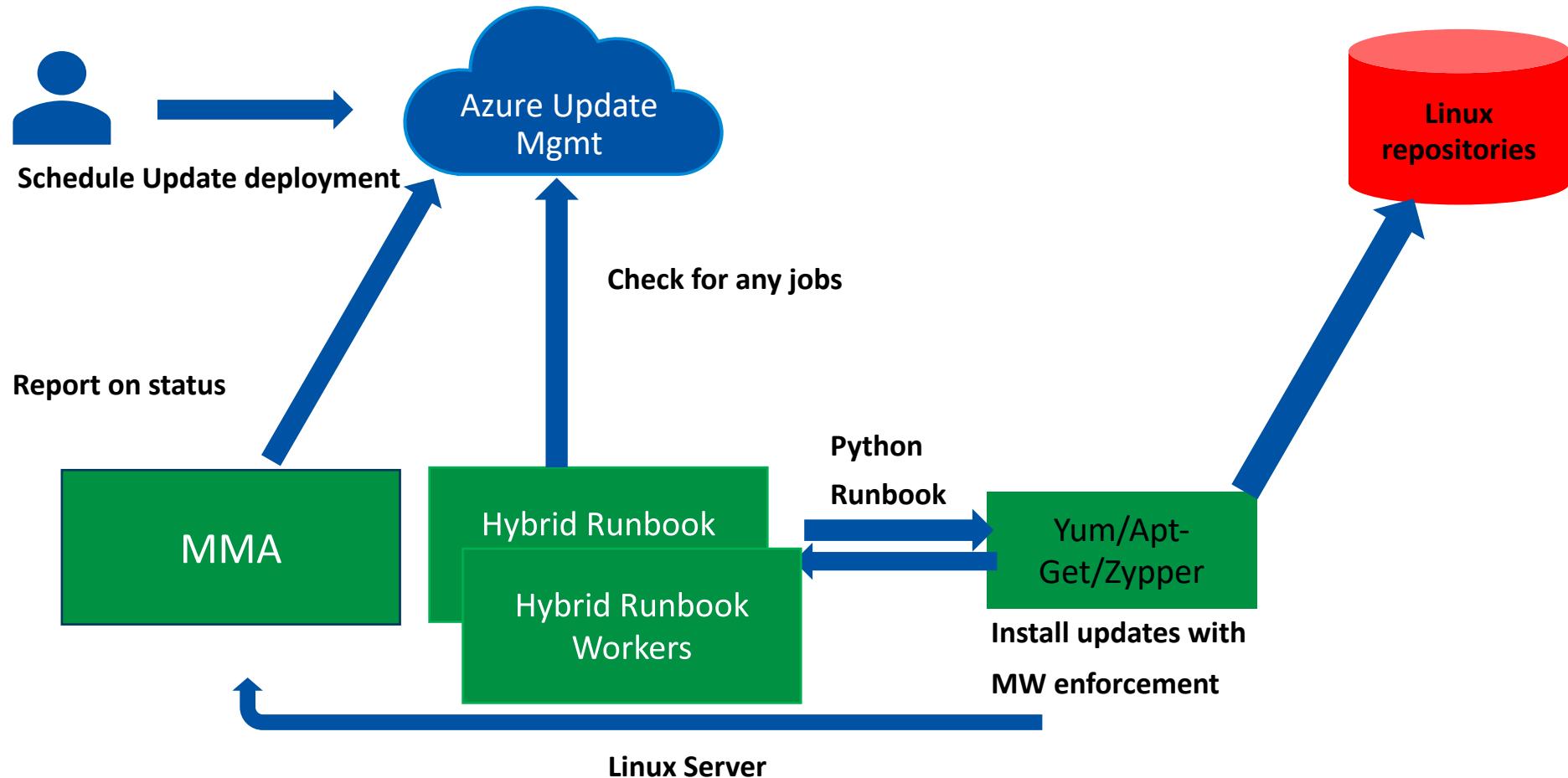
Azure software update



- ✓ Update Azure & non-Azure
- ✓ Windows & Linux
- ✓ Update Insights
- ✓ Pre/Post steps
- ✓ Update Deployments

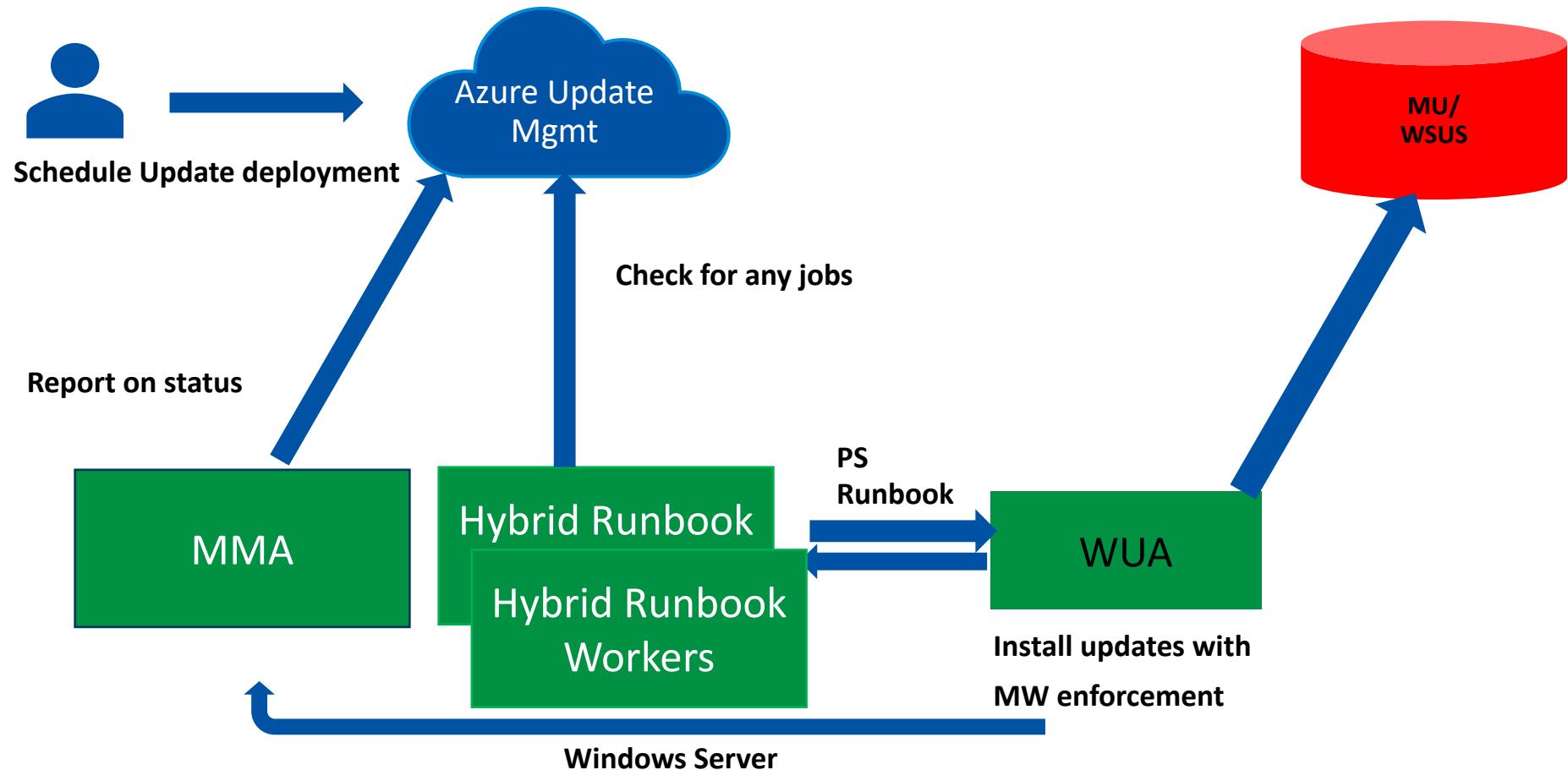
About Azure Update Management

High-level architecture Linux

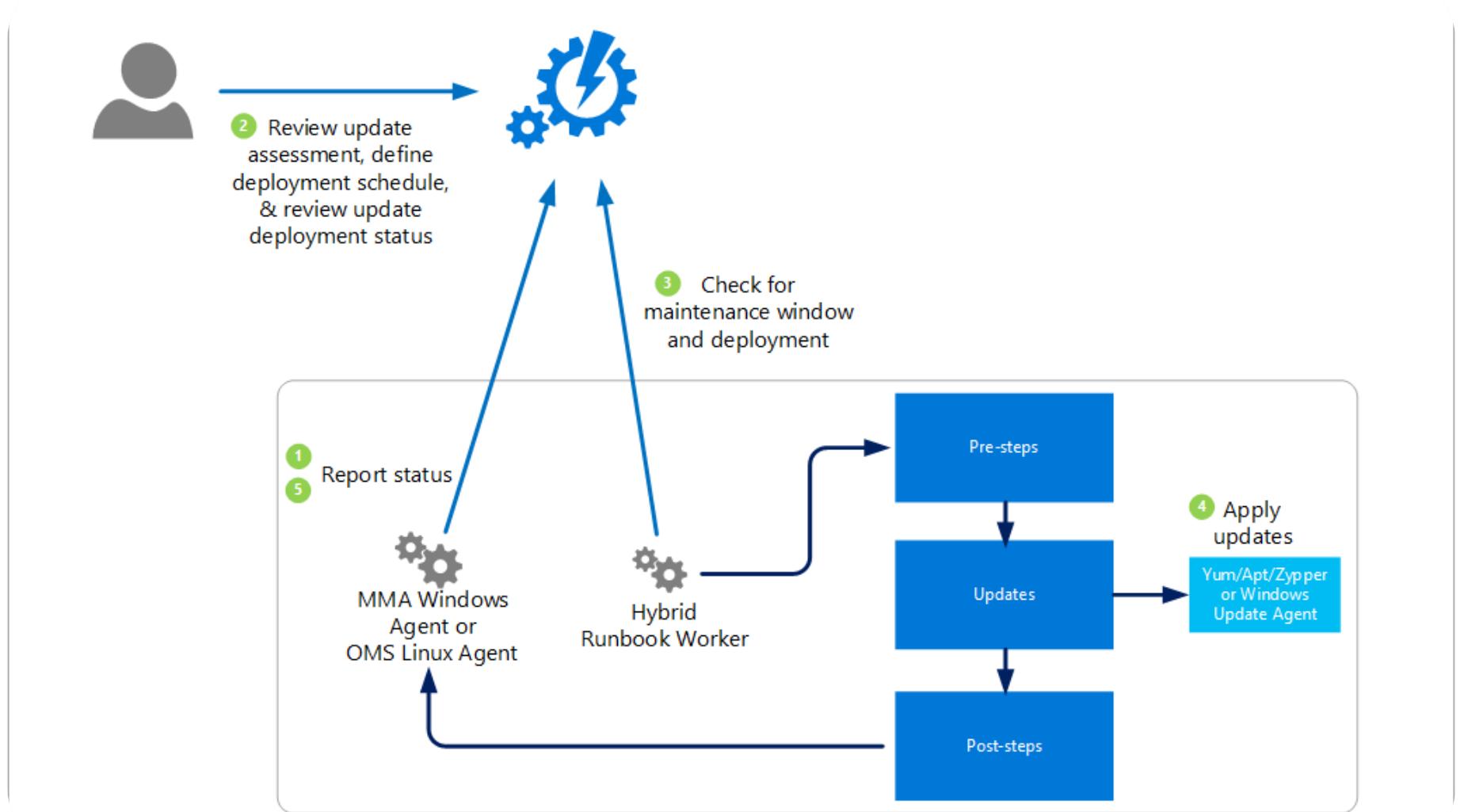
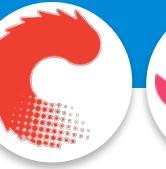


About Azure Update Management

High-level architecture Windows



About Azure Update Management



Azure Update Management

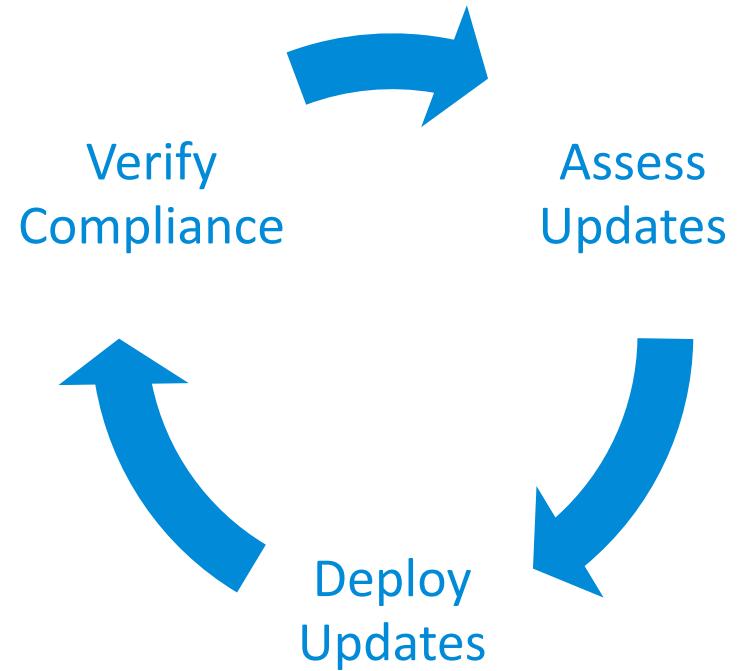


Assess update status of servers across your environment

- Windows, Linux
- Azure, other cloud, on-prem

Deploy updates

- Custom approval criteria
- Single pane of glass
- Automated periodic deployments





Compliance Scan:

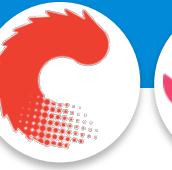
- Windows: Every 12 hours
- Linux: Every 3 hours (every 15 minutes if MMA agent is deployed)

Update Deployment:

- Linux computers can check against a local repo or public repo
- Windows computers can check against MS Update or WSUS

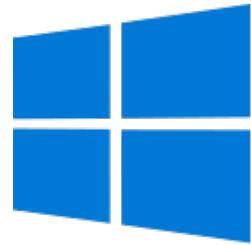


Supported operating systems



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Windows
Server 2008, 2008
R2, 2012, 2012 R2,
2016, 2019



Red Hat Enterprise
Linux 6 (x86/x64)
and 7 (x64)



SUSE Linux
Enterprise Server
11 (x86/x64)
and 12 (x64)



Ubuntu
Server
14.04 LTS &
16.04 LTS

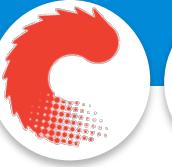


CentOS 6
(x86/x64)
and 7 (x64)

Preparing the environment



- ✓ Automation Account
- ✓ Log Analytics workspace
- ✓ Enable Inventory and Change Tracking
- ✓ Enable Update Management
- ✓ Manage Machines
- ✓ Schedule and Manage Deployments



- Update Management : FREE
 - You only pay for log data stored in Log Analytics
- Change Tracking : FREE
 - You only pay for log data stored in Log Analytics
- Inventory : FREE
 - You only pay for log data stored in Log Analytics





Its all about the demos no slides

But wait, some DBS before ☺



Update Management in Action

Automation Account



Home > Automation Accounts > Add Automation Account

Automation Accounts << ⌂ X

ITPROCESSED Limited

+ Add Edit columns ... More

1 Filter by name...

NAME ↑

2 SystemsManagement

3 TestDev Subscription

4 DevEnvDemo

5 Create new

6 West Europe

7 Create

* Name ⓘ
SystemsManagement

* Subscription
TestDev Subscription

* Resource group
DevEnvDemo

* Location
West Europe

* Create Azure Run As account ⓘ

The Run As account feature will create a Run As account and a Classic Run As account. [Click here to learn more about Run As](#)

Home > Automation Accounts

Automation Accounts

ITPROCESSED Limited

+ Add Edit columns Refresh Assign tags

Subscriptions: 1 of 4 selected – Don't see a subscription? [Open Directory + Subscription settings](#)

Filter by name... TestDev Subscription All resource groups

2 items

NAME ↑ TYPE ↑

8 SystemsManagement Automation Account

Update Management in Action - Workspace



Home > Log Analytics > Log analytics workspace

Log Analytics
ITPROCESSED Limited

Log analytics workspace
Create new or link existing one created in OMS Po...

1

2 Create New Link Existing

3 * OMS Workspace

4 * Subscription

5 * Resource group Create new Use existing

6 * Location

7 * Pricing tier

OK

This screenshot shows the 'Log Analytics workspace' creation dialog. Step 1 shows the search bar. Step 2 shows the 'Create New' radio button selected. Step 3 shows the 'OMS Workspace' dropdown set to 'SystemsManagementWorkspace'. Step 4 shows the 'Subscription' dropdown set to 'TestDev Subscription'. Step 5 shows the 'Resource group' dropdown set to 'DevEnvDemo'. Step 6 shows the 'Location' dropdown set to 'West Europe'. Step 7 shows the 'Pricing tier' dropdown set to 'Per GB'. Step 7 also indicates a next step with a chevron icon.

Home > Log Analytics

Log Analytics
ITPROCESSED Limited

+ Add Refresh

Subscriptions: 1 of 4 selected – Don't see a subscription? Open Directory + Subscription settings

Filter by name... TestDev Subscription All resource groups

2 items

NAME ↑	RESOURCE GROUP ↑
<input type="checkbox"/> DefaultWorkspace-ed9e8df9-6541-43c8-8f2b-000000000000	TestDev Subscription
<input type="checkbox"/> SystemsManagementWorkspace	DevEnvDemo

This screenshot shows the list of log analytics workspaces. It highlights the 'SystemsManagementWorkspace' entry with a green box, indicating it was successfully created and linked.

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Update Management in Action – Enable UM



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Home > Automation Accounts > SystemsManagement

Automation Accounts « X

ITPROCESSED Limited

+ Add Edit columns More

Filter by name...

NAME
SystemsManagement
TestEnvPatchManagement

SystemsManagement Automation Account

Search (Ctrl+ /) «

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

Configuration Management

- Inventory
- Change tracking
- State configuration (DSC)

Update management

- Update management

Process Automation



Update Management

Enable consistent control and compliance of your VMs with Update Management.

This service is included with Azure virtual machines. You only pay for logs stored in Log Analytics.

This service requires a Log Analytics workspace and this Automation account.

Location ⓘ West Europe

Log Analytics workspace subscription ⓘ TestDev Subscription

* Log Analytics workspace ⓘ Select Workspace... Select Workspace... ←

Select Workspace...

Automation account ⓘ SystemsManagement

Home > Automation Accounts > SystemsManagement - Update management

SystemsManagement - Update management

Search (Ctrl+ /) «

Update Management

Enable consistent control and compliance of your VMs with Update Management.

This service is included with Azure virtual machines. You only pay for logs stored in Log Analytics.

This service requires a Log Analytics workspace and this Automation account.

Location ⓘ West Europe

Select Workspace... 1

Create New Workspace

DefaultWorkspace-ed9e8df9-6547-4288-a3eb-58318a3689e0-WEU

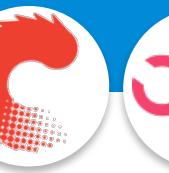
SystemsManagementWorkspace

SystemsManagementWorkspace SystemsManagementWorkspace 2

Automation account ⓘ SystemsManagement

Enable

Update Management in Action – Enable UM



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Home > Automation Accounts > SystemsManagement - Update management

SystemsManagement - Update management

Search (Ctrl+ /)

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Configuration Management
 - Inventory
 - Change tracking
 - State configuration (DSC)
- Update management
 - Update management
- Process Automation
- Runbooks

Enable

1

2

The Update Management solution was enabled. Please reselect the menu item to open the solution.

Update Management

Enable consistent control and compliance of your VMs with Update Management. This service is included with Azure virtual machines. You only pay for logs stored in Log Analytics. This service requires a Log Analytics workspace and this Automation account.

Location: West Europe

Select Workspace... Create New Workspace DefaultWorkspace-ed9e8df9-6547-4288-a3eb-58318a3689e0-WEU SystemsManagementWorkspace SystemsManagementWorkspace

Automation account: SystemsManagement

The Update Management solution was enabled. Please reselect the menu item to open the solution.

Update Management

Enable consistent control and compliance of your VMs with Update Management. This service is included with Azure virtual machines. You only pay for logs stored in Log Analytics. This service requires a Log Analytics workspace and this Automation account.

Location: West Europe

Log Analytics workspace subscription: TestDev Subscription

* Log Analytics workspace: SystemsManagementWorkspace

Automation account: SystemsManagement

Enable

Home > Automation Accounts > SystemsManagement - Update management

SystemsManagement - Update management

Schedule update deployment Add Azure VMs Add non-Azure machine Manage machines

Non-compliant machines: 0 out of 0

Critical and security	0	Critical	0
Other	0	Security	0
Not assessed	0	Others	0

Machines need attention (0): 0

CRITICAL MISSING UPDATES	SECURITY MISSING UPDATES	OTHER MISSING UPDATES	UPDATE AGENT READINESS
0	0	0	0

Missing updates (0): 0

Failed update deployments (0): 0 out of 0 in the past six months

Learn more: Update Management | Provide feedback

Machines (0): Filter by name Compliance: All Platform: All Operating system: All

Missing updates (0): Filter by name Compliance: All Platform: All Operating system: All

Update deployments (0): Filter by name Compliance: All Platform: All Operating system: All

Scheduled update deployments (0): Filter by name Compliance: All Platform: All Operating system: All

No machines currently appear assessed. For the machines connected just recently it might take a few minutes to start reporting first data. Turned-off machines do not report any data.

Update Management in Action - DBS



Home > Virtual machines > EUDemoSrv01 - Update management

Virtual machines <> ✎ X ITPROCESSED Limited

+ Add Reservations ... More

Filter by name...

NAME ↑

EUDemoSrv01

EUDemoSrv01 - Update management

Virtual machine

The 'Update Management' solution is being enabled on this virtual machine. This can take a few minutes. You can do other work while this is in progress.

Update Management

The 'Update Management' solution is being enabled on this virtual machine. This can take from a few minutes up to 15 minutes.

While this is in progress you can take the opportunity to learn more about Update Management and about other Azure solutions like Backup, Security Center, and Monitoring that are useful for managing your virtual machines.

Location ⓘ West Europe

Log Analytics workspace ⓘ SystemsManagementWorkspace

Automation account subscription ⓘ TestDev Subscription

Automation account ⓘ SystemsManagement

Enable

Update Management in Action – Azure VM



The screenshot shows the Microsoft Monitoring Agent Setup wizard, specifically the 'Agent Setup Options' step. A green box highlights the 'Azure Log Analytics' section, which contains fields for 'Workspace ID' (4f647b...), 'Workspace Key' (redacted), and 'Azure Cloud' (Azure Commercial). The 'Connected' checkbox is checked. Below this, there is a note about workspace ID and key availability in the Azure Log Analytics portal, a link to the portal for Azure Commercial, and an 'Advanced' button for proxy configuration. At the bottom, there are 'Next >' and 'Cancel' buttons.

Microsoft Monitoring Agent Setup

IMPORTANT NOTICE

Microsoft Software License Terms

MICROSOFT SOFTWARE LICENSE TERMS

MICROSOFT MONITORING AGENT

These license terms are an agreement (or based on where you live, one of them). They apply to the software and media on which you received it, if any. Microsoft

- updates,
- supplements.

Print License

Disk Usage

Destination F

Select the installation folder.

Agent Setup Options

Specify setup options.

Enable iTrace (optional). This installs a local iTrace file.

Connected

Connects the agent to an Azure Log Analytics workspace. Choose the workspace ID and key from the Azure Log Analytics portal at <https://www.microsoft.com/oms/>.

Connected

This connects the agent to an on-premises management endpoint.

Workspace ID: 4f647b...

Workspace Key: [REDACTED]

Azure Cloud: Azure Commercial

Your workspace ID and key are available within the Azure Log Analytics portal. The Log Analytics portal for Azure Commercial is at <https://www.microsoft.com/oms/>.

Click Advanced to provide HTTP proxy configuration.

Advanced

When you click Next, these properties will be validated by the Azure Log Analytics service.

< Back

Next >

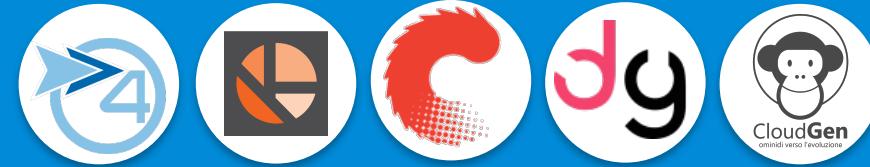
Cancel



No more DBS, but real demo now 😊



Thank you Questions?



“

