



March 2, 2023

Start : 9h15

Azure Migrate

Diego Lens
Cloud Technology Strategist
Ingram Micro

Level 200

IMC Develop Course

Azure CLOUD CHAMPION INGRAM MICRO

1



March 2, 2023

Azure Migrate

Diego Lens
Cloud Technology Strategist
Ingram Micro

Level 200

IMC Develop Course

Azure CLOUD CHAMPION INGRAM MICRO

2




Microsoft

INGRAM MICRO CLOUD


InterAct
Making the Data Center work

Ingram Micro Value Services

Diego Lens
diego.lens@ingrammicro.com

Cloud Solutions Strategist

[linkedin.com/in/diegolens](https://www.linkedin.com/in/diegolens)






3

Growth Solutions

INGRAM MICRO CLOUD
More as a Service



Modern Cloud Platforms


Transform Into the New Norm

Go boldly into the future with innovative infrastructure and platform solutions built for driving profitability and growth through key app modernization, data & insights, and cloud strategies.

App Modernization
DevOps, Containers, Microservices, Infrastructure

Data & Insights
DB (PaaS), Analytics, Warehousing, AI/ML, Infrastructure

<http://bit.ly/ingramcloud>



Seamless Security

Build your Business with True Peace of Mind


Move forward towards a bright business future with total asset and data protection including seamless sign-on, endpoint security, identity security, and complete security operations management.

Endpoint
Mobile Endpoint, MDR/XDR, Server Security

Identity
Authentication, Identity & Access Management

Security operations
Vulnerability Mng, Tier 2 SOC Analytics, SIEM

<https://ingram.cloudchampion.nl>



Connected Workplace

Together We Achieve More


Work together, work smarter and stay productive, from anywhere with our comprehensive suite of collaboration apps, digital experiences, and virtual desktops, designed to help you do more.

Collaboration Apps
Productivity Suits, conferencing

Virtual Desktops
Remote Work, Desktop Virtualization, OS

Employee Experience
Workflow insights, resources, learning

<https://ingram.cloudchampion.be>



Business Performance

Work at the Speed of Modern Business

Build a fine-tuned business engine to power your performance with our tailor-made technological approach to equip your teams with CRM, ERP software, and imaginative workforce automation.

CRM
Customer Relationship Management

ERP
Enterprise Resource Planning

Workforce Automation
No low Code, Power Automate

4

Modern Cloud Platforms

Modern Cloud Platforms
Transform Into the New Norm

Go boldly into the future with innovative infrastructure and platform solutions built for driving profitability and growth through key app modernization, data & insights, and cloud strategies.

- App Modernization**
DevOps, Containers, Microservices, Infrastructure
- Data & Insights**
DB (FaaS), Analytics, Warehousing, AI/ML, Infrastructure

16.8 %
App Modernization market to grow by 2025 CAGR

20.7 %
Public Cloud Spending growth in 2023

40%
Firms with a Cloud-Native-First strategy in 2023

Microsoft Azure Story Telling

Subscribe Here

Microsoft Azure Fundamentals

Subscribe Here

Azure Lighthouse & Azure Cost Management

Subscribe Here

Azure Fraud Prevention

Subscribe Here

IN-RAMI CLOUD

5

Seamless Security

Seamless Security
Build your Business with True Peace of Mind

Move forward towards a bright business future with total asset and data protection including seamless sign-on, endpoint security, identity security, and complete security operations management.

- Endpoint**
Modern Endpoint, MDR/XDR, Server Security
- Identity**
Authentication, Identity & Access Management
- Security operations**
Vulnerability Mgt, Tier 2 SOC Analytics, SIEM

\$129B
Cybersecurity Public Cloud Services Spend by 2025 Globally

+50%
organizations will be using MDR by 2025

60%
security deployments are in the Public Cloud

Microsoft 365 Security Story Telling

Subscribe Here

Microsoft 365 Defender for Business

Subscribe Here

Microsoft Entra

Subscribe Here

Microsoft Intune

Subscribe Here

Microsoft 365 Defender Suite


Subscribe Here

Microsoft Purview Information Protection

Subscribe Here

IN-RAMI CLOUD

6



Connected Workplace

Together We Achieve More

Work together, work smarter and stay productive, from anywhere with our comprehensive suite of collaboration apps, digital experiences, and virtual desktops, designed to help you do more.

- Collaboration Apps**
Productivity Suite, conferencing
- Virtual Desktops**
Remote Work, Desktop Virtualization, OS
- Employee Experience**
Workflow Insights, resources, learning

+21%

Virtual Desktop
market CAGR growth
by 2030




+50%

Team collaboration
software growth by
2030.

57%

Reason for digital
investments :
Employee Experience

Connected Workplace






EX + CX = TX

Employee Experience + Customer Experience = Total Experience

IN-GRAM! CLOUD

7



Business Performance

Work at the Speed of Modern Business

Build a fine-tuned business engine to power your performance with our tailor-made technological approach to equip your teams with CRM, ERP software, and imaginative workforce automation.

- CRM**
Customer Relationship Management
- ERP**
Enterprise Resource Planning
- Workforce Automation**
No/low Code, Power Automate

Business Performance

We want to help modernize and transform your business. With a focus on facilitating your team's needs, we are taking a tailor-made technological approach to personalize what strategies work best for you.

CRM:
CRM technology directly aligns with our growth mindset – at the end of the day, the goal of CRM is to foster and sustain existing and future customer relationships. Through this technology, you can generate multichannel marketing campaigns, nurture sales-ready leads and align sales and marketing with planning and tracking tools that integrate with existing apps and services.

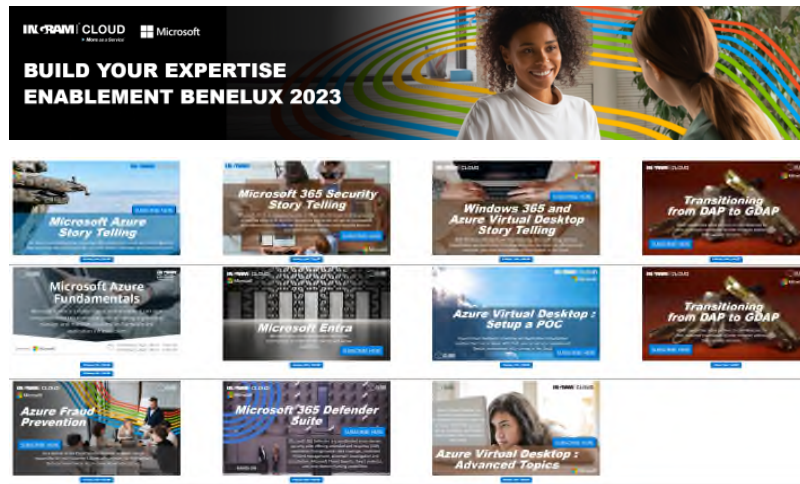
ERP:
In the evolving digital landscape, it is imperative to stay up to date with the latest technologies to move forward. An ERP software suite can help manage day-to-day business processes that push beyond just financial data – discover how you can accelerate your business, grow your customer base and increase your profit margins with ERP.

Workflow Automation:
Workflow Automation is your go-to resource for building custom apps that connect to your existing data and systems, without the need for code. Through low-code platforms, you can build solutions that support workflow automation, AI, secure data access, seamless data analysis and visualization capabilities

IN-GRAM! CLOUD

8

Ingram Micro Cloud Enablement 2023



Enablement
<http://bit.ly/ingramcloud>

Cloud Champion
<https://ingram.cloudchampion.be>
<https://ingram.cloudchampion.nl>

Newsletter
<http://bit.ly/imc-email>

INGRAM CLOUD More as a Service

9

9

Agenda

- DataCenter Migration : Introduction
- Discovery & Assessment
 - Azure Migrate : Server Assessment
- Migrate Workloads
 - Azure Migrate : Server Migration
 - Migration with Veritas
- Migrate Application Database
 - Azure Database Migration Service
- Redesign
- Optimize
 - Azure Cost Optimization – Cloudyn



10

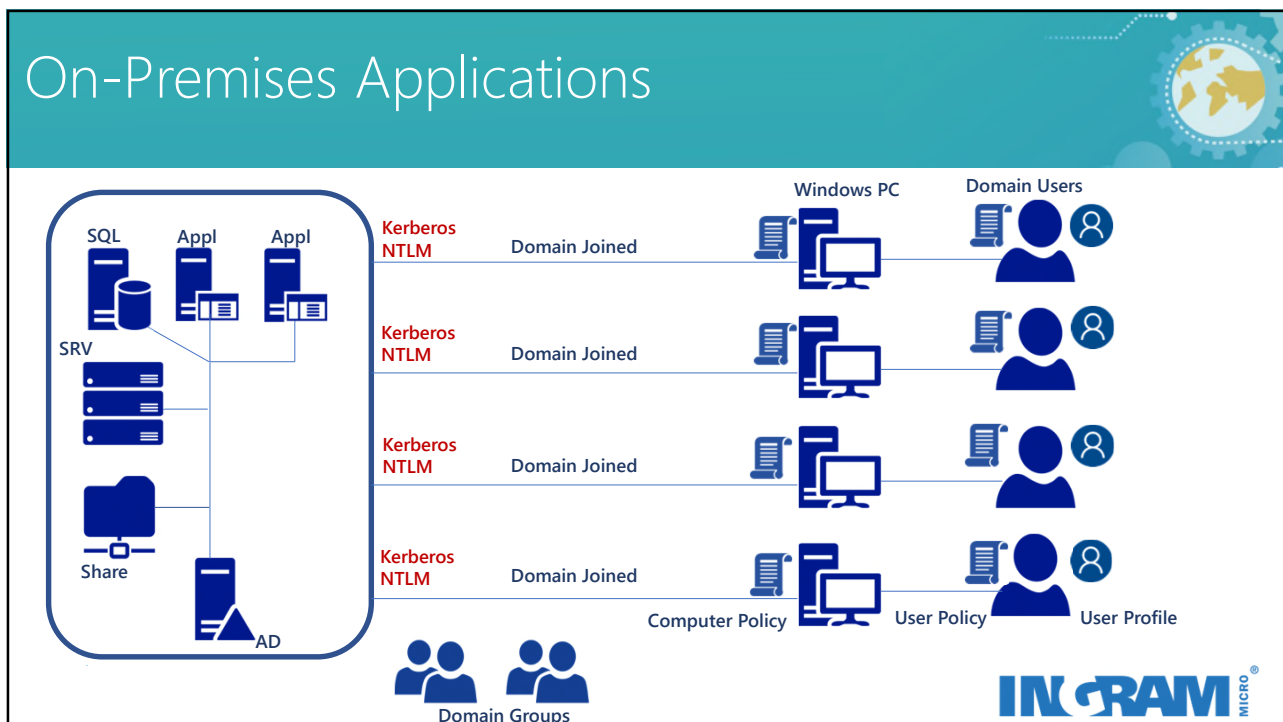


The slide features a blue background with a network of white and yellow gears. A central gear is highlighted with a yellow border. A white cloud shape is positioned in the upper center, containing a smaller gear. A pie chart with yellow and white segments is located on the right side. The text "DataCenter Migration Introduction" is written in white, sans-serif font. The Azure logo is in the bottom left, and the INGRAM MICRO logo is in the bottom right.

DataCenter Migration Introduction

Azure INGRAM MICRO

11



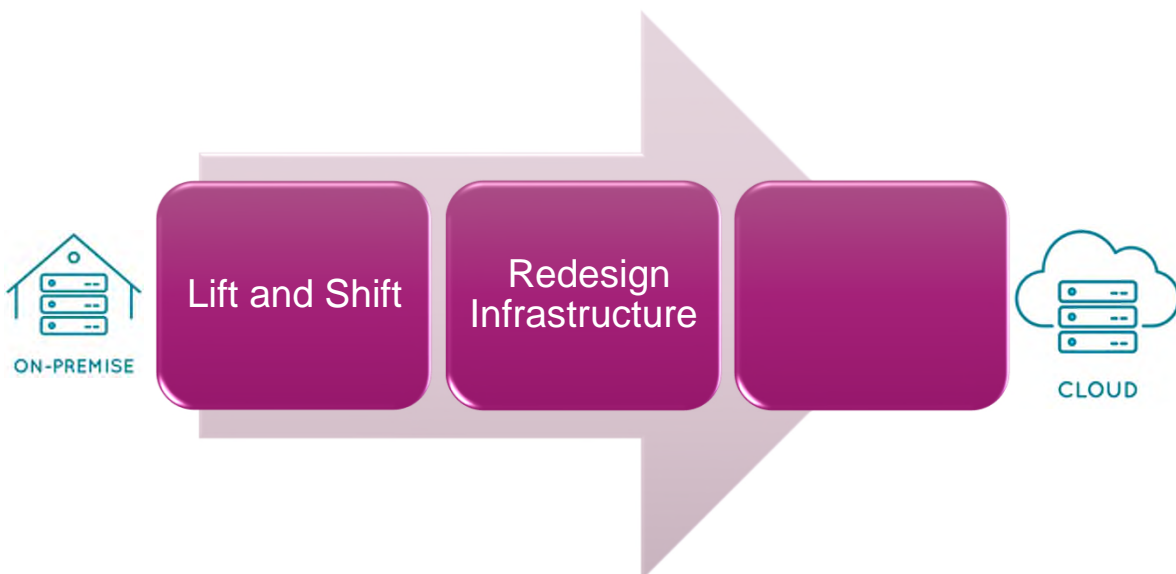
12

Moving your IT Solutions to the Cloud



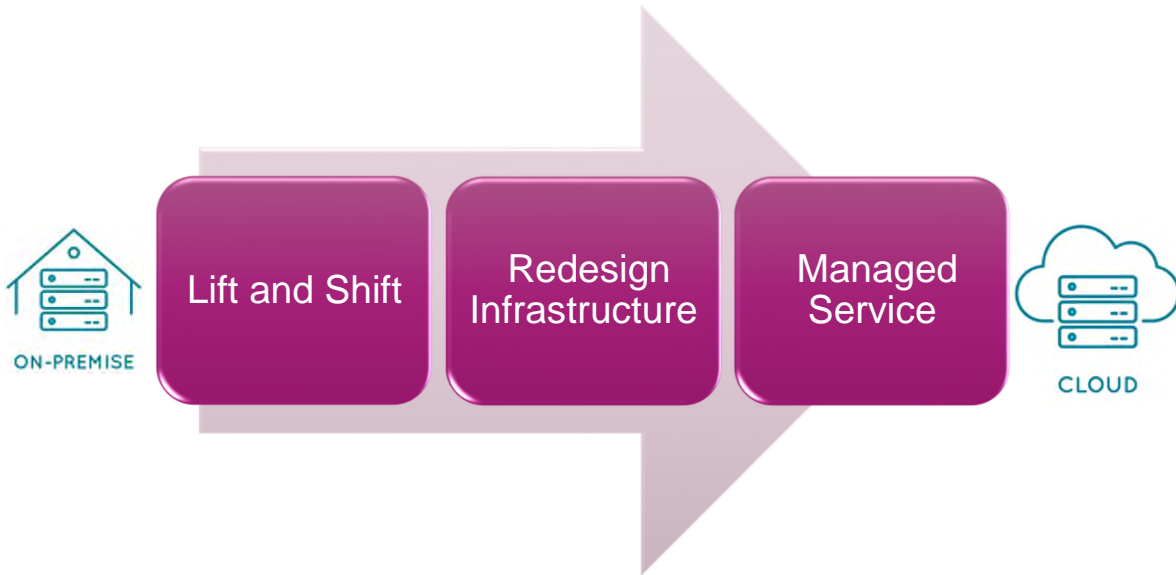
13

Moving your IT Solutions to the Cloud



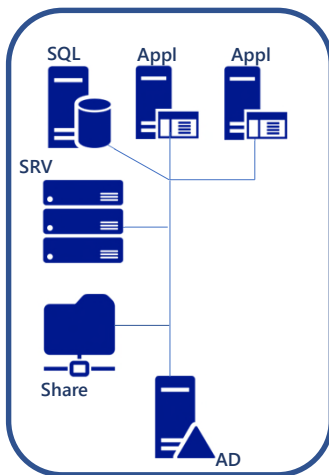
14

Moving your IT Solutions to the Cloud



15

Lift and Shift

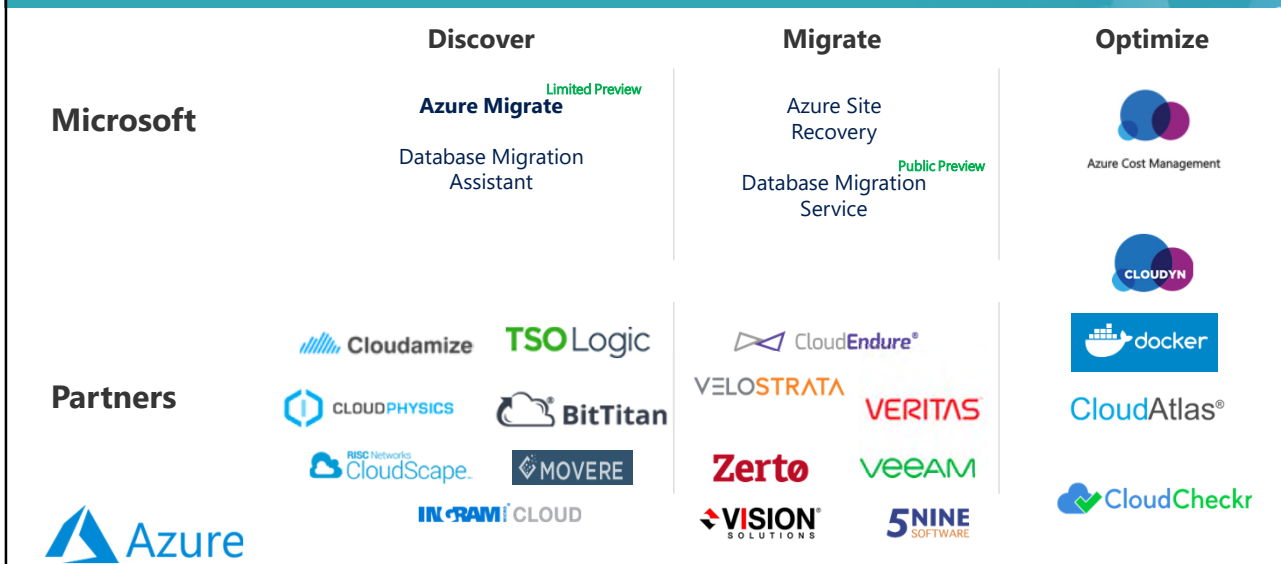


 Azure

IN-GRAM MICRO

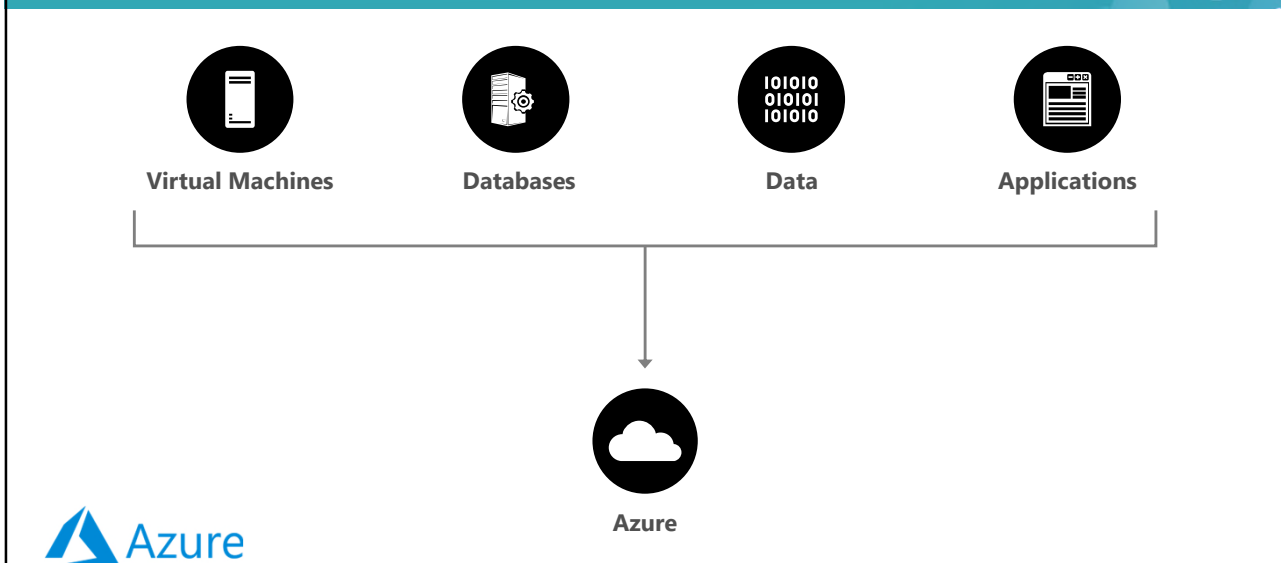
16

DC Migration Tools Landscape



17

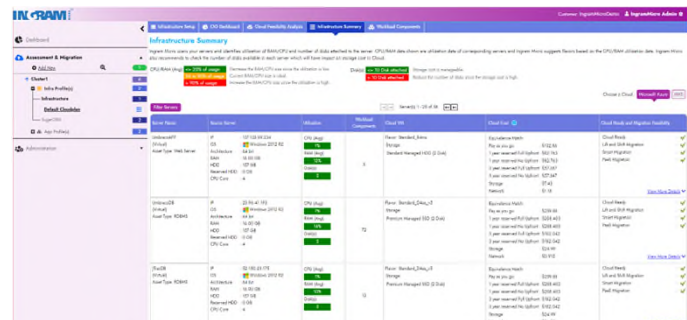
What are Customers looking to migrate to the Cloud?



18

Where Ingram Micro Cloud can help ?

- Current Infrastructure Assessment
- Cloud Infrastructure Design & Sizing
- Cloud Resource Price Estimations
- Help with Resource Migration to the Cloud



Resource Name	Current Config	Recommended Config	Migration Status
VM1 (Ubuntu)	1 vCPU, 1 GB RAM	2 vCPU, 2 GB RAM	Ready to Migrate
VM2 (Ubuntu)	2 vCPU, 2 GB RAM	4 vCPU, 4 GB RAM	Ready to Migrate
Storage1 (HDD)	100 GB	200 GB	Ready to Migrate
Storage2 (SSD)	50 GB	100 GB	Ready to Migrate
Network1 (VLAN)	10.0.0.0/24	10.0.0.0/24	Ready to Migrate
Network2 (VLAN)	10.0.0.0/24	10.0.0.0/24	Ready to Migrate

INGRAM
MICRO
Cloud
More as a Service

19

19

Azure Migrate

- Azure Migrate : Server Assessment
- Azure Migrate : Database Assessment
- Azure Migrate : Server Migration
- Azure Migrate : Database Migration
- Assess and migrate web apps to Azure
- Migrate on-premises data to Azure



20

Azure Migrate on portal.azure.com

The screenshot displays the Azure Migrate portal. The left sidebar contains navigation links: Overview, Migration goals (Servers, Databases, Data Box), Manage (Discovered items), and Support + troubleshooting (New support request). The main content area is titled 'Migrate your on-premises datacenter to Azure' and includes three primary action cards: 'Discover, assess and migrate servers', 'Assess and migrate databases', and 'Assess and migrate web apps to Azure'. Each card has a corresponding icon and a 'Learn more' link. Below these cards is a 'Quick Starts' section with links for onboarding, tools, and help. The Azure logo is in the bottom left, and the INGRAM MICRO logo is in the bottom right.

21

Azure Migrate New Features September 2021

What's new in Azure Migrate

08/04/2021 • 8 minutes to read • 5

Azure Migrate helps you to discover, assess, and migrate on-premises servers, apps, and data to the Microsoft Azure cloud. This article summarizes new releases and features in Azure Migrate.

Update (September 2021)

- Discover, assess, and migrate servers over a private network using Azure Private Link, is now in preview in supported government cloud geographies. [Learn more](#)
- Support to tag and add custom names to resources for agentless VMware VM migrations using PowerShell.
- Azure Migrate appliance: Option to remove servers from the physical servers discovery list.

Update (August 2021)

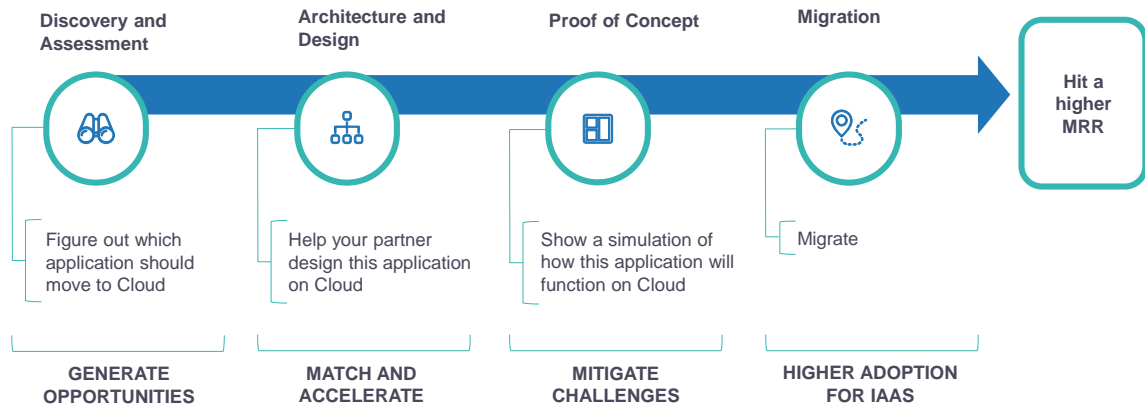
- At-scale discovery and assessment of ASP.NET web apps running on IIS servers in your VMware environment, is now in preview. [Learn More](#). Refer to the [Discovery](#) and [assessment](#) tutorials to get started.

<https://docs.microsoft.com/en-us/azure/migrate/whats-new>



22

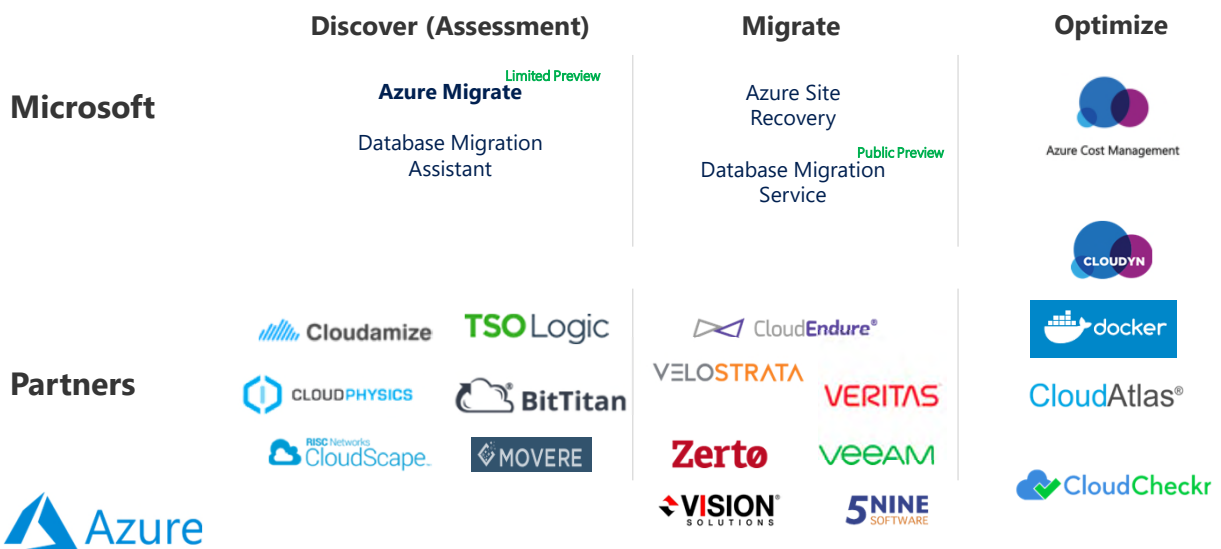
Ingram Micro Cloud can help !



Proprietary information of Ingram Micro Inc. -- Do not distribute or duplicate without Ingram Micro's express written permission.

23

Datacenter Migration Process



24

Azure Migrate

- Azure Migrate : Server Assessment
- Azure Migrate : Database Assessment
- Azure Migrate : Server Migration
- Azure Migrate : Database Migration
- Assess and migrate web apps to Azure
- Migrate on-premises data to Azure

DISCOVER

MIGRATE

- Azure Cost Management

OPTIMIZE



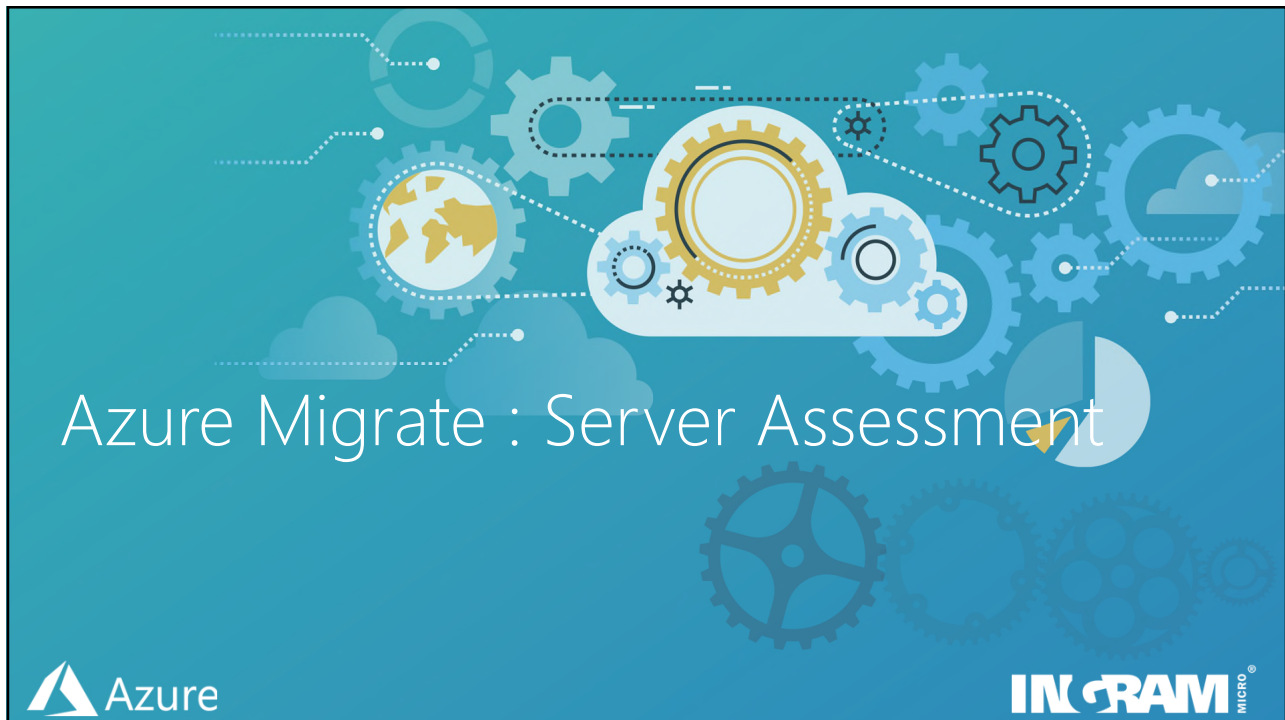
25

DC Migration Kit

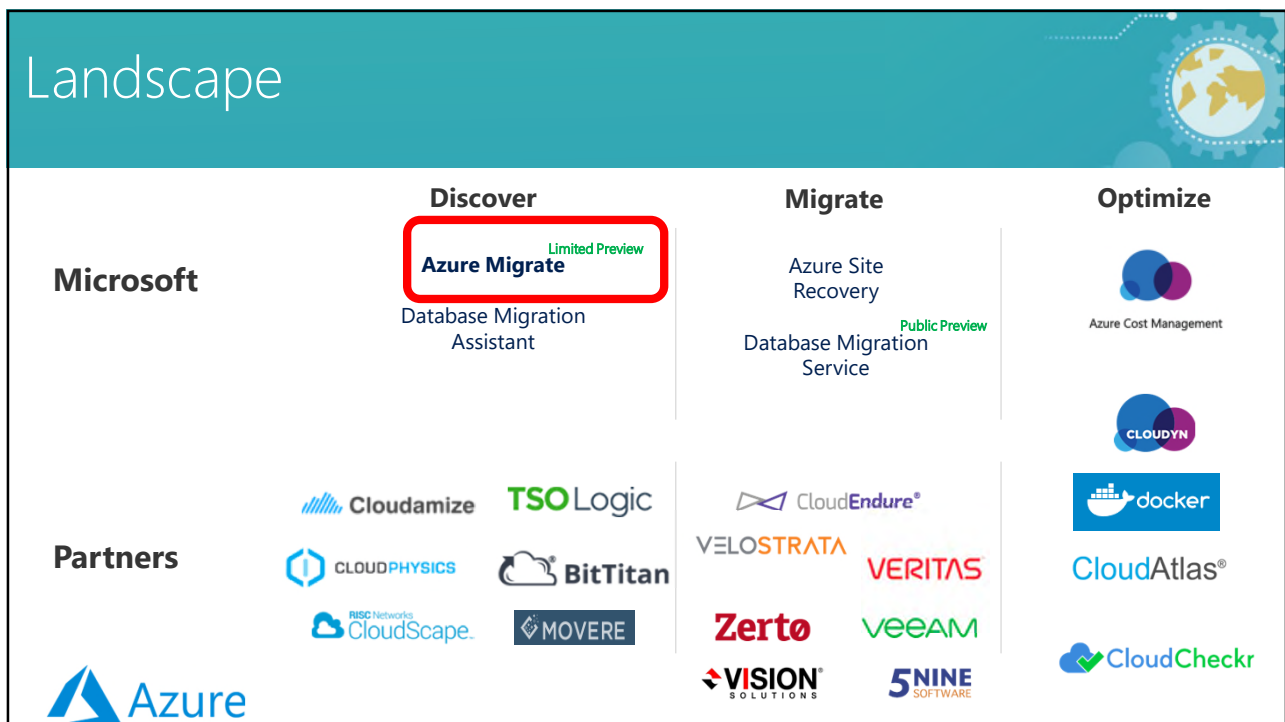
<https://github.com/microsoft/dcmkit>



26

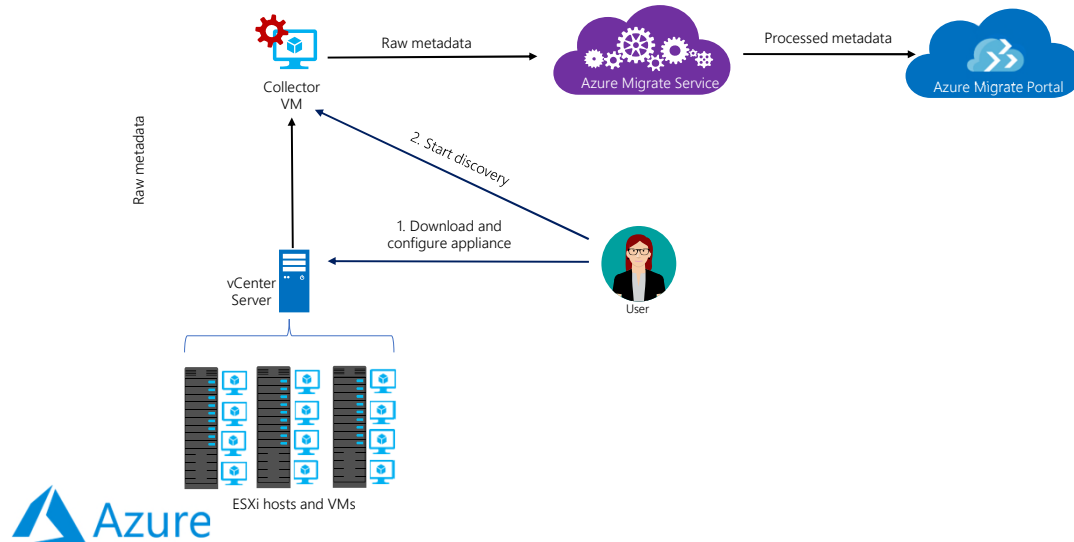


27



28

How does it work ?




29


1a. Create an Azure Migrate Project

Add a tool

Migrate project [Select assessment tool](#) [Select migration tool](#) [Review + add tool\(s\)](#)



An Azure Migrate project is used to store the discovery, assessment and migration metadata reported by your on-premises environment. Select a subscription and resource group in your preferred geography to create the migrate project.


* Subscription 

* Resource group  [Create new](#)

PROJECT DETAILS

Specify the name of the migrate project and the preferred geography.

* Migrate project  

* Geography 





30

1b. Select Assessment Tool

Add a tool

[Migrate project](#) [Select assessment tool](#) [Select migration tool](#) [Review + add tool\(s\)](#)

Start by choosing a server discovery and assessment tool. We recommend that you discover and assess your datacenter to determine migration readiness.

TOOL	PRICING	SUPPORTED WORKLOADS	FEATURES	LEARN MORE
 Azure Migrate: Server Assessment	View	VMware virtual machines Hyper-V virtual machines	Agentless discovery Cost planning and optimal right sizing Application dependency analysis Cloud migration planning	Learn more
 Cloudamize: Cloud Assessment	View	VMware virtual machines Hyper-V virtual machines Physical machines Workloads on other public clouds	Agentless or agent-based discovery Cost planning and optimal right sizing Application dependency analysis Cloud migration planning	Learn more





31

1c. Select Migration Tool

Add a tool

[Migrate project](#) [Select assessment tool](#) [Select migration tool](#) [Review + add tool\(s\)](#)

Choose a tool to migrate your on-premises servers to Azure.

TOOL	PRICING	SUPPORTED WORKLOADS	FEATURES	LEARN MORE
 Azure Migrate: Server Migration	View	VMware virtual machines Hyper-V virtual machines Physical machines Migration from other public clouds	Supports Windows and Linux Agentless and agent-based migration Cutover in seconds Minimal application downtime	Learn more
 Carbonite: Carbonite Migrate	View	VMware virtual machines Hyper-V virtual machines Physical machines Migration from other public clouds	Supports Windows and Linux Agent-based migration Cutover in seconds Minimal application downtime	Learn more



32

1d. Review & Add Tool

Add a tool

[Migrate project](#)
[Select assessment tool](#)
[Select migration tool](#)
[Review + add tool\(s\)](#)

Settings

Subscription	Visual Studio Enterprise – MPN
Resource group	(new) AzureMigrateRG
Geography	Europe
Assessment tool	Azure Migrate: Server Assessment
Migration tool	Azure Migrate: Server Migration
Migrate project	(new) SmartHotelMigration

Add tool(s)

Previous

33

2. Physical – Vmware VM's – Hyper-V VM's

Microsoft Azure

Search resources, services, and docs

[Home](#) > [New](#) > [Azure Migrate](#) > [Azure Migrate - Servers](#) > [Discover machines](#)

Discover machines

Discover using appliance

Import using CSV (Preview)

Help me choose

Are your machines virtualized?

Yes, with VMware vSphere Hypervisor

Yes, with VMware vSphere Hypervisor

Yes, with Hyper-V

Not virtualized / Other (Preview)

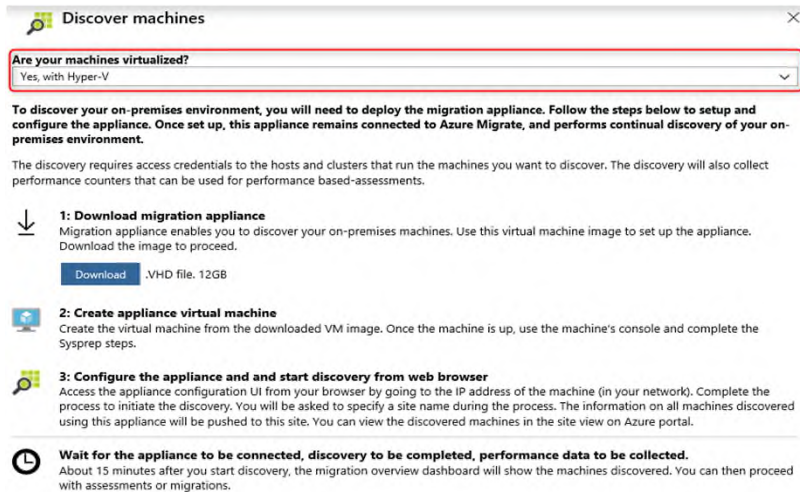
the steps below to setup and c

can scope the machines to be dis

34

17

2a Deploy the Azure Migration appliance



Discover machines

Are your machines virtualized?
Yes, with Hyper-V

To discover your on-premises environment, you will need to deploy the migration appliance. Follow the steps below to setup and configure the appliance. Once set up, this appliance remains connected to Azure Migrate, and performs continual discovery of your on-premises environment.

The discovery requires access credentials to the hosts and clusters that run the machines you want to discover. The discovery will also collect performance counters that can be used for performance based-assessments.

↓ **1: Download migration appliance**
Migration appliance enables you to discover your on-premises machines. Use this virtual machine image to set up the appliance. Download the image to proceed.
[Download](#) .VHD file, 12GB

🖥️ **2: Create appliance virtual machine**
Create the virtual machine from the downloaded VM image. Once the machine is up, use the machine's console and complete the Sysprep steps.

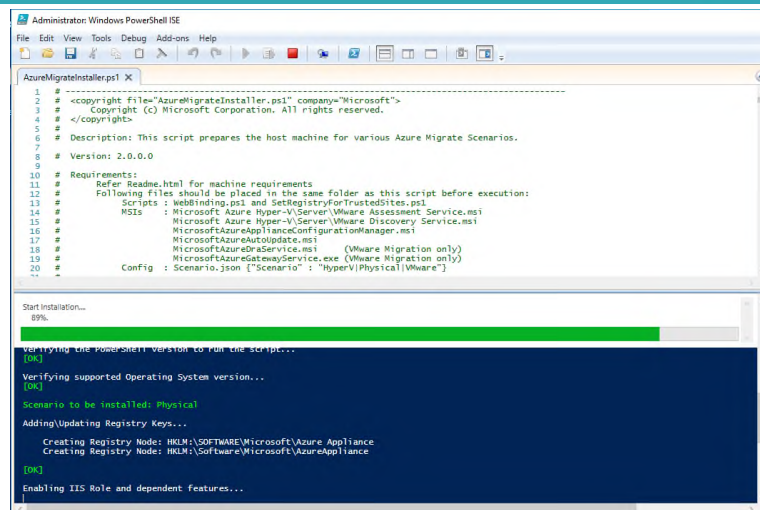
🔍 **3: Configure the appliance and start discovery from web browser**
Access the appliance configuration UI from your browser by going to the IP address of the machine (in your network). Complete the process to initiate the discovery. You will be asked to specify a site name during the process. The information on all machines discovered using this appliance will be pushed to this site. You can view the discovered machines in the site view on Azure portal.

🕒 **Wait for the appliance to be connected, discovery to be completed, performance data to be collected.**
About 15 minutes after you start discovery, the migration overview dashboard will show the machines discovered. You can then proceed with assessments or migrations.



35

2b. Deploy Azure Migrate Software (Physical)



```

1 # -----
2 # <copyright file="AzureMigrateInstaller.ps1" company="Microsoft">
3 # Copyright (c) Microsoft Corporation. All rights reserved.
4 # </copyright>
5 #
6 # Description: This script prepares the host machine for various Azure Migrate Scenarios.
7 #
8 # Version: 2.0.0.0
9 #
10 # Requirements:
11 # Refer Readme.html for machine requirements
12 # Following files should be placed in the same folder as this script before execution:
13 #   Scripts : webBinding.ps1 and SetRegistryForTrustedSites.ps1
14 #   MSIs : Microsoft Azure Hyper-V|Server|VMware Assessment Service.msi
15 #         Microsoft Azure Hyper-V|Server|VMware Discovery Service.msi
16 #         Microsoft Azure Appliance Configuration Manager.msi
17 #         Microsoft Azure AutoUpdate.msi
18 #         Microsoft Azure Data Service.msi (VMware Migration only)
19 #         Microsoft Azure Gateway Service.exe (VMware Migration only)
20 #
21 # Config : Scenario.json ["Scenario" : "HyperV|Physical|VMware"]
22 #
23 #
24 #
25 #
26 #
27 #
28 #
29 #
30 #
31 #
32 #
33 #
34 #
35 #
36 #
37 #
38 #
39 #
40 #
41 #
42 #
43 #
44 #
45 #
46 #
47 #
48 #
49 #
50 #
51 #
52 #
53 #
54 #
55 #
56 #
57 #
58 #
59 #
60 #
61 #
62 #
63 #
64 #
65 #
66 #
67 #
68 #
69 #
70 #
71 #
72 #
73 #
74 #
75 #
76 #
77 #
78 #
79 #
80 #
81 #
82 #
83 #
84 #
85 #
86 #
87 #
88 #
89 #
90 #
91 #
92 #
93 #
94 #
95 #
96 #
97 #
98 #
99 #
100 #
101 #
102 #
103 #
104 #
105 #
106 #
107 #
108 #
109 #
110 #
111 #
112 #
113 #
114 #
115 #
116 #
117 #
118 #
119 #
120 #
121 #
122 #
123 #
124 #
125 #
126 #
127 #
128 #
129 #
130 #
131 #
132 #
133 #
134 #
135 #
136 #
137 #
138 #
139 #
140 #
141 #
142 #
143 #
144 #
145 #
146 #
147 #
148 #
149 #
150 #
151 #
152 #
153 #
154 #
155 #
156 #
157 #
158 #
159 #
160 #
161 #
162 #
163 #
164 #
165 #
166 #
167 #
168 #
169 #
170 #
171 #
172 #
173 #
174 #
175 #
176 #
177 #
178 #
179 #
180 #
181 #
182 #
183 #
184 #
185 #
186 #
187 #
188 #
189 #
190 #
191 #
192 #
193 #
194 #
195 #
196 #
197 #
198 #
199 #
200 #
201 #
202 #
203 #
204 #
205 #
206 #
207 #
208 #
209 #
210 #
211 #
212 #
213 #
214 #
215 #
216 #
217 #
218 #
219 #
220 #
221 #
222 #
223 #
224 #
225 #
226 #
227 #
228 #
229 #
230 #
231 #
232 #
233 #
234 #
235 #
236 #
237 #
238 #
239 #
240 #
241 #
242 #
243 #
244 #
245 #
246 #
247 #
248 #
249 #
250 #
251 #
252 #
253 #
254 #
255 #
256 #
257 #
258 #
259 #
260 #
261 #
262 #
263 #
264 #
265 #
266 #
267 #
268 #
269 #
270 #
271 #
272 #
273 #
274 #
275 #
276 #
277 #
278 #
279 #
280 #
281 #
282 #
283 #
284 #
285 #
286 #
287 #
288 #
289 #
290 #
291 #
292 #
293 #
294 #
295 #
296 #
297 #
298 #
299 #
300 #
301 #
302 #
303 #
304 #
305 #
306 #
307 #
308 #
309 #
310 #
311 #
312 #
313 #
314 #
315 #
316 #
317 #
318 #
319 #
320 #
321 #
322 #
323 #
324 #
325 #
326 #
327 #
328 #
329 #
330 #
331 #
332 #
333 #
334 #
335 #
336 #
337 #
338 #
339 #
340 #
341 #
342 #
343 #
344 #
345 #
346 #
347 #
348 #
349 #
350 #
351 #
352 #
353 #
354 #
355 #
356 #
357 #
358 #
359 #
360 #
361 #
362 #
363 #
364 #
365 #
366 #
367 #
368 #
369 #
370 #
371 #
372 #
373 #
374 #
375 #
376 #
377 #
378 #
379 #
380 #
381 #
382 #
383 #
384 #
385 #
386 #
387 #
388 #
389 #
390 #
391 #
392 #
393 #
394 #
395 #
396 #
397 #
398 #
399 #
400 #
401 #
402 #
403 #
404 #
405 #
406 #
407 #
408 #
409 #
410 #
411 #
412 #
413 #
414 #
415 #
416 #
417 #
418 #
419 #
420 #
421 #
422 #
423 #
424 #
425 #
426 #
427 #
428 #
429 #
430 #
431 #
432 #
433 #
434 #
435 #
436 #
437 #
438 #
439 #
440 #
441 #
442 #
443 #
444 #
445 #
446 #
447 #
448 #
449 #
450 #
451 #
452 #
453 #
454 #
455 #
456 #
457 #
458 #
459 #
460 #
461 #
462 #
463 #
464 #
465 #
466 #
467 #
468 #
469 #
470 #
471 #
472 #
473 #
474 #
475 #
476 #
477 #
478 #
479 #
480 #
481 #
482 #
483 #
484 #
485 #
486 #
487 #
488 #
489 #
490 #
491 #
492 #
493 #
494 #
495 #
496 #
497 #
498 #
499 #
500 #
501 #
502 #
503 #
504 #
505 #
506 #
507 #
508 #
509 #
510 #
511 #
512 #
513 #
514 #
515 #
516 #
517 #
518 #
519 #
520 #
521 #
522 #
523 #
524 #
525 #
526 #
527 #
528 #
529 #
530 #
531 #
532 #
533 #
534 #
535 #
536 #
537 #
538 #
539 #
540 #
541 #
542 #
543 #
544 #
545 #
546 #
547 #
548 #
549 #
550 #
551 #
552 #
553 #
554 #
555 #
556 #
557 #
558 #
559 #
560 #
561 #
562 #
563 #
564 #
565 #
566 #
567 #
568 #
569 #
570 #
571 #
572 #
573 #
574 #
575 #
576 #
577 #
578 #
579 #
580 #
581 #
582 #
583 #
584 #
585 #
586 #
587 #
588 #
589 #
590 #
591 #
592 #
593 #
594 #
595 #
596 #
597 #
598 #
599 #
600 #
601 #
602 #
603 #
604 #
605 #
606 #
607 #
608 #
609 #
610 #
611 #
612 #
613 #
614 #
615 #
616 #
617 #
618 #
619 #
620 #
621 #
622 #
623 #
624 #
625 #
626 #
627 #
628 #
629 #
630 #
631 #
632 #
633 #
634 #
635 #
636 #
637 #
638 #
639 #
640 #
641 #
642 #
643 #
644 #
645 #
646 #
647 #
648 #
649 #
650 #
651 #
652 #
653 #
654 #
655 #
656 #
657 #
658 #
659 #
660 #
661 #
662 #
663 #
664 #
665 #
666 #
667 #
668 #
669 #
670 #
671 #
672 #
673 #
674 #
675 #
676 #
677 #
678 #
679 #
680 #
681 #
682 #
683 #
684 #
685 #
686 #
687 #
688 #
689 #
690 #
691 #
692 #
693 #
694 #
695 #
696 #
697 #
698 #
699 #
700 #
701 #
702 #
703 #
704 #
705 #
706 #
707 #
708 #
709 #
710 #
711 #
712 #
713 #
714 #
715 #
716 #
717 #
718 #
719 #
720 #
721 #
722 #
723 #
724 #
725 #
726 #
727 #
728 #
729 #
730 #
731 #
732 #
733 #
734 #
735 #
736 #
737 #
738 #
739 #
740 #
741 #
742 #
743 #
744 #
745 #
746 #
747 #
748 #
749 #
750 #
751 #
752 #
753 #
754 #
755 #
756 #
757 #
758 #
759 #
760 #
761 #
762 #
763 #
764 #
765 #
766 #
767 #
768 #
769 #
770 #
771 #
772 #
773 #
774 #
775 #
776 #
777 #
778 #
779 #
780 #
781 #
782 #
783 #
784 #
785 #
786 #
787 #
788 #
789 #
790 #
791 #
792 #
793 #
794 #
795 #
796 #
797 #
798 #
799 #
800 #
801 #
802 #
803 #
804 #
805 #
806 #
807 #
808 #
809 #
810 #
811 #
812 #
813 #
814 #
815 #
816 #
817 #
818 #
819 #
820 #
821 #
822 #
823 #
824 #
825 #
826 #
827 #
828 #
829 #
830 #
831 #
832 #
833 #
834 #
835 #
836 #
837 #
838 #
839 #
840 #
841 #
842 #
843 #
844 #
845 #
846 #
847 #
848 #
849 #
850 #
851 #
852 #
853 #
854 #
855 #
856 #
857 #
858 #
859 #
860 #
861 #
862 #
863 #
864 #
865 #
866 #
867 #
868 #
869 #
870 #
871 #
872 #
873 #
874 #
875 #
876 #
877 #
878 #
879 #
880 #
881 #
882 #
883 #
884 #
885 #
886 #
887 #
888 #
889 #
890 #
891 #
892 #
893 #
894 #
895 #
896 #
897 #
898 #
899 #
900 #
901 #
902 #
903 #
904 #
905 #
906 #
907 #
908 #
909 #
910 #
911 #
912 #
913 #
914 #
915 #
916 #
917 #
918 #
919 #
920 #
921 #
922 #
923 #
924 #
925 #
926 #
927 #
928 #
929 #
930 #
931 #
932 #
933 #
934 #
935 #
936 #
937 #
938 #
939 #
940 #
941 #
942 #
943 #
944 #
945 #
946 #
947 #
948 #
949 #
950 #
951 #
952 #
953 #
954 #
955 #
956 #
957 #
958 #
959 #
960 #
961 #
962 #
963 #
964 #
965 #
966 #
967 #
968 #
969 #
970 #
971 #
972 #
973 #
974 #
975 #
976 #
977 #
978 #
979 #
980 #
981 #
982 #
983 #
984 #
985 #
986 #
987 #
988 #
989 #
990 #
991 #
992 #
993 #
994 #
995 #
996 #
997 #
998 #
999 #
1000 #

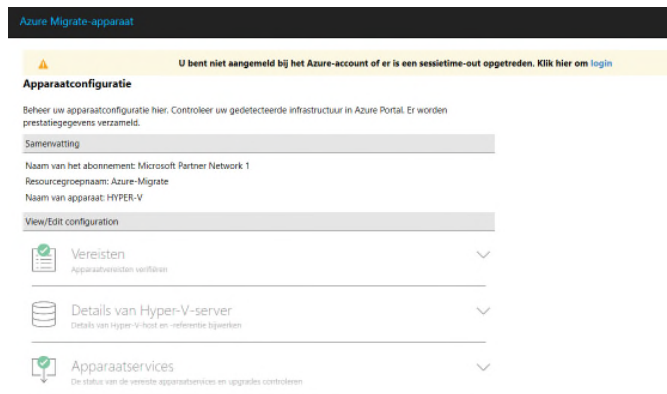
```



36

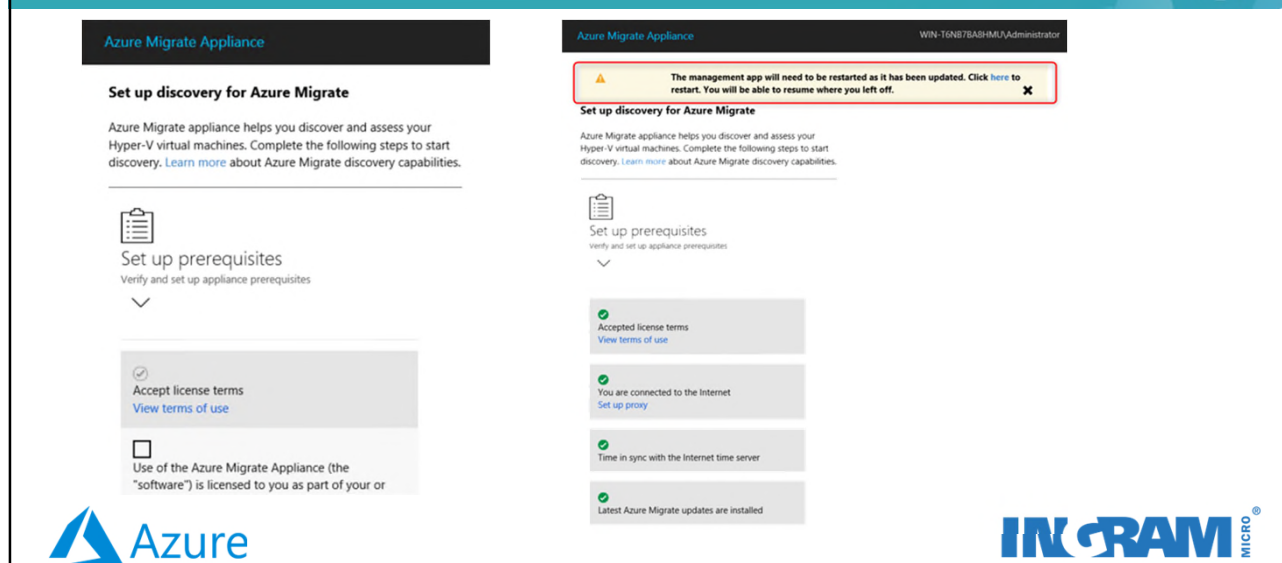
3. Connect to the Appliance Portal Page

- https://Appliance_IP_Address:44368



37

3a. Configure the Azure Migrate Appliance



38

3b. Register with Azure Migrate

Register with Azure Migrate
Specify your Microsoft Azure account details

Choose the subscription and resource group that you used to set up Azure Migrate. The discovery and assessment metadata will be stored in the geography you selected while setting up Azure Migrate on the Azure portal. [Learn more](#)

Logged in as [username]
[Logout](#)

Subscription
Visual Studio Enterprise – MPN 1

Migrate project
SmartHotelMigration(AzureMigrateRC) 2

Enter Appliance Name
SmartHotelAppl 3

[Register](#) 4 Successfully registered

[Continue](#) 5

Azure INCRAM MICRO

39

3c. Provide Hyper-V host details

Provide Hyper-V hosts details
Provide Hyper-V host and credential details to discover machines

Specify credentials to connect to Hyper-V hosts and clusters
These credentials are used to connect to the Hyper-V hosts and clusters being discovered. [Learn more](#) about permissions.

User name
demouser 1

Password
***** 2

Friendly name for credentials
Host login 3

[Save details](#) 4

Azure INCRAM MICRO

40

3d. Verify the Discovered Servers in Azure portal

Azure Migrate - Servers

Search (Ctrl+/)

Overview

Migration goals

- Servers**
- Databases
- Data Box

Manage

- Discovered items
- Support + troubleshooting
- New support request

Refresh

Last refreshed at: 25/07/2019 08:57:14 (Click on "Refresh" to update the page)

Assessment tools

Azure Migrate: Server Assessment

Discover Assess Overview

Discovered servers	5
Groups	0
Assessments	0
Notifications	0

Next step: Start assessing your servers by clicking on 'Assess'

Azure

INCRAM MICRO

41

4.1 Create a migration Assessment

Azure Migrate: Server Assessment

Discover Assess Overview

Discovered servers	5
Groups	0
Assessments	0
Notifications	0

Next step: Start assessing your servers by clicking on 'Assess'

Azure

INCRAM MICRO

42

4.2 Verify Azure Readiness

SmartHotelAssessment - Azure readiness

Search (Ctrl+F) Edit properties Export assessment Recalculate Columns Delete assessment

The confidence rating of the assessment is low, ensure that you wait for at least a day after starting discovery, before creating performance-based assessments.

Essentials

Azure readiness

Details How do I modify list of assessed machines?

Search to filter machines

NAME	AZURE VM READINESS	AZURE VM SIZE	SUGGESTED TOOL	OPERATING SYSTEM	BOOT TYPE
smarthotelweb1	Unsupported boot type	Standard_D1_v2	Azure Migrate: Ser...	Windows Server 2012...	EFI
UbuntuWAF	Unknown OS	Standard_D1_v2	Azure Migrate: Ser...		BIOS
smarthotelweb2	Unsupported boot type	Standard_D1_v2	Azure Migrate: Ser...	Windows Server 2012...	EFI

Azure INGRAM MICRO

43

New Azure VM Size Naming

E64i_v3 NC24r_v3

<Family> [Sub-family] <#> [m][r][s]...[_v#]

Family series indicates target workload.

Optional sub-family further differentiates workloads (e.g. NC for GPU Compute; NV for GPU Visualization)

Number of vCPUs in the VM

One or more additive features:

- d = Disk, local are present
- h = Hibernation capable
- i = Isolated
- l = Low memory
- m = Memory intensive
- n = NVMe
- t = Tiny memory
- r = RDMA
- s = Premium Storage capable

Version # of family, incremented with 10%+ performance improvements

Azure

44

Two options to consider

Reserved VM Instances (RIs)

- Discounts up to 72% for 1 year or 3 year commitment for specific VM size in a region
- Can be exchanged or returned if needed (12% fee for returns, up to \$50K per customer)
- Highly recommended for workloads, running 24/7

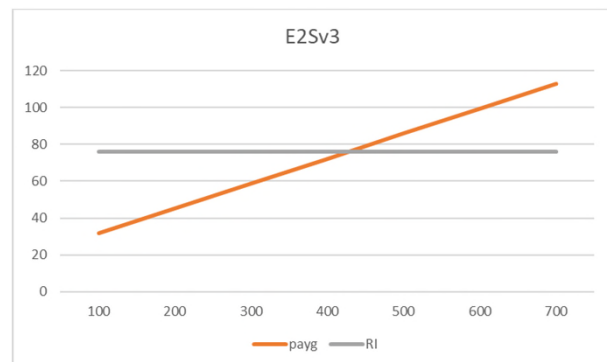
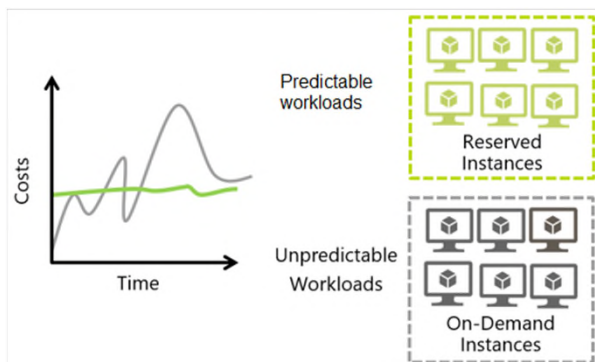
Azure Hybrid Benefit (AHB)

- AHB for Windows Server – Allows to leverage Windows Server licenses with active SA of the customer for Windows Server VMs
- AHB for SQL Server – Allows to leverage SQL Server licenses with active SA of the customer for Azure SQL Database



45

Reserved Instances (RI's)



46

4.3 Cost Estimation / Assessment Issues


Home > Azure Migrate - Servers > Azure Migrate: Server Assessment - Assessments > SmarHotelAssessment - Azure readiness > smarthotelweb1

smarthotelweb1
Machine

Essentials



Azure readiness
Ready with conditions

Azure VM size
Standard_D1_v2

Monthly cost estimate (USD)

 Compute 27.5
 Storage 3.01
 Total 30.5

Readiness issues
 ⚠️ **Unsupported boot type**
Suggestion: Use Azure Site Recovery that converts boot type during migration.

Migration tool
[Azure Migrate: Server Migration](#)
Reason: This machine is suitable for lift and shift migration to Azure

47

5. Dependency Visualization

SmarHotel VMs
Group

+ Add machines - Remove machines Refresh Assess servers View assessments



Assessments : 1

Machines **3** Assessments **1**

MACHINES
Search to filter machines

NAME	MEMBER OF	DEPENDENCIES	CORES
smarthotelweb1	smarthotel vms	Requires installation	1
UbuntuWAF	smarthotel vms	Requires installation	1
smarthotelweb2	smarthotel vms	Requires installation	1

For deeper discovery

48

Demo

Azure Migrate : Server Assessment

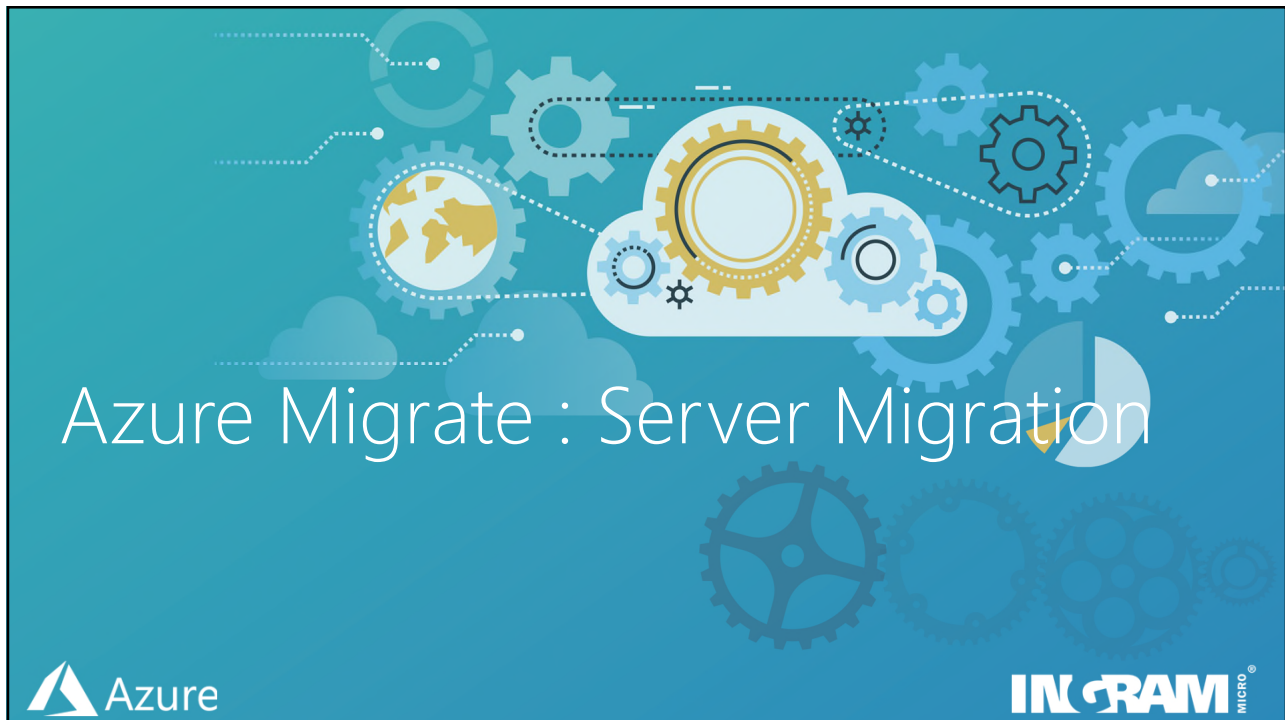
49

Learning

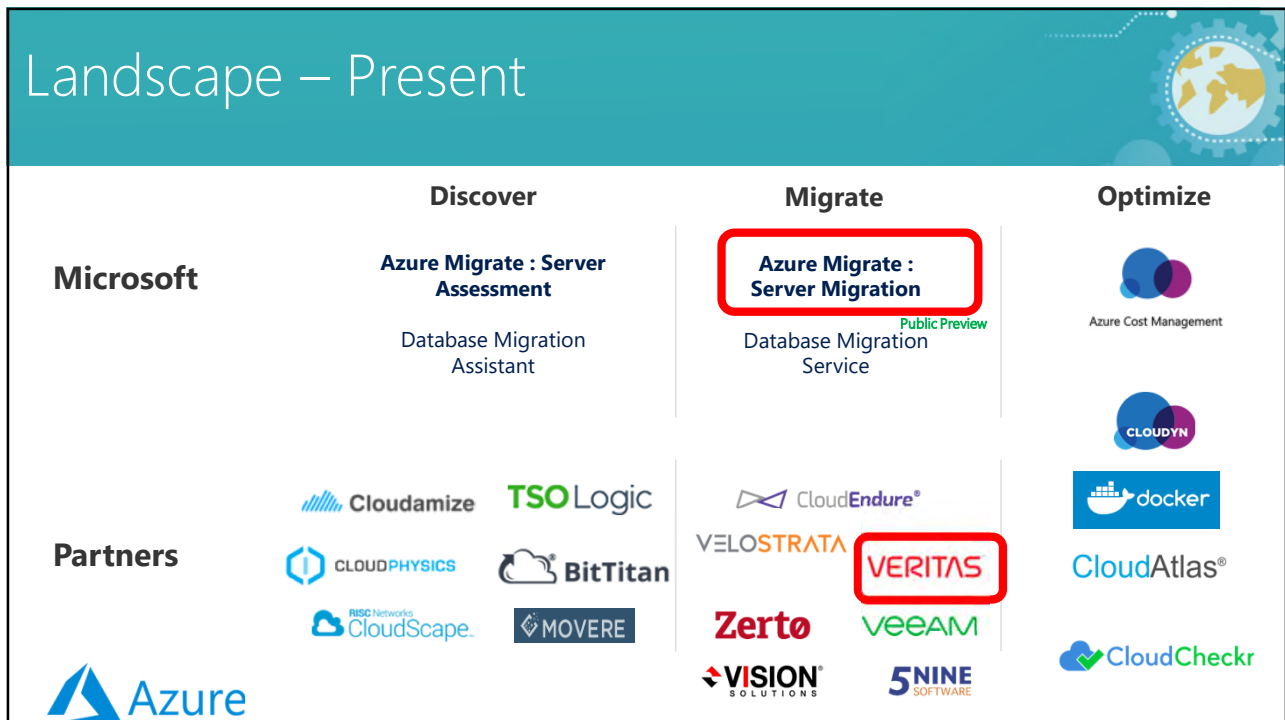
Design your migration to Azure

<https://docs.microsoft.com/en-us/learn/modules/design-your-migration-to-azure/>

50

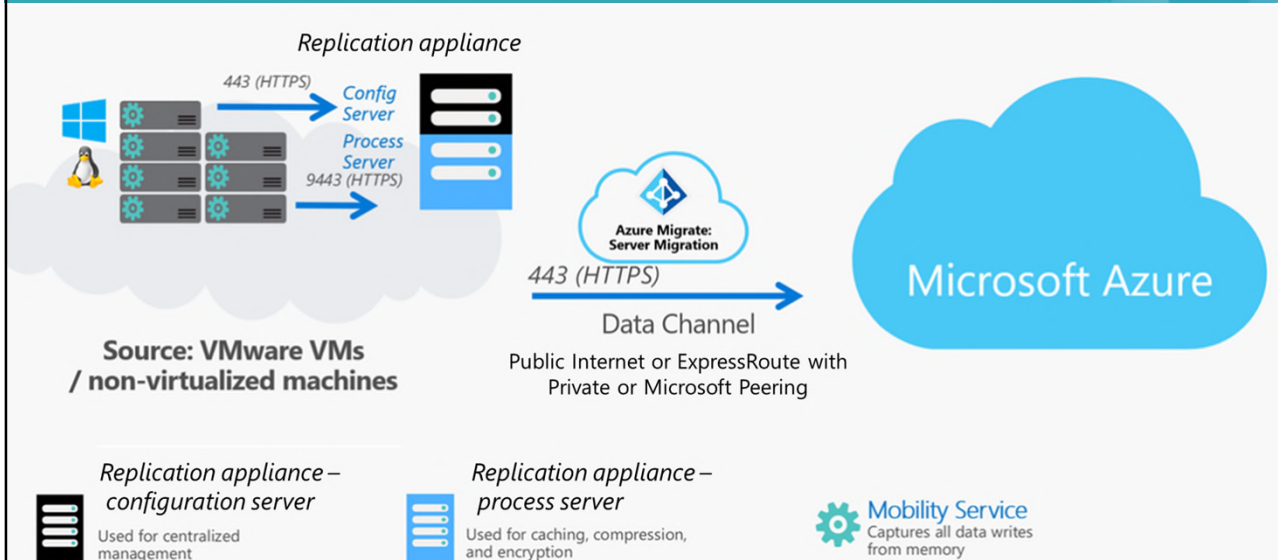


51



52

How does it work ?



53

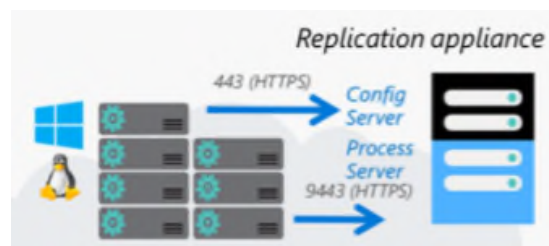
Replication Appliance

- Acts as Bridge between On-Premises Server(s) & Server Migration
- The Appliance has two components
 - Configuration Server
 - Process Server

54

Configuration Server

- Coordinates the Replication
- Connects to Azure Migrate
- By Default, the Configuration Server is installed together with the Process Server on the Replication Appliance



55

Process Server

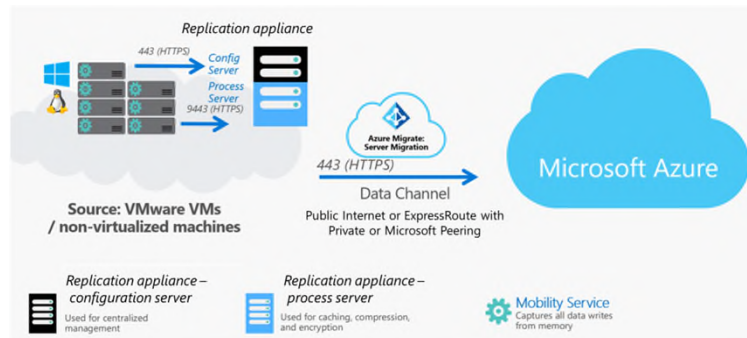
- Normally installed together with the Configuration Server
- An additional Process Server might be needed when :
 - Daily change rate is more than 2 TB
 - You are replicating more than 200 Servers
- If you are deploying a separate Process Server, we are speaking about a **Scale-out Process Server**



56

Mobility Service

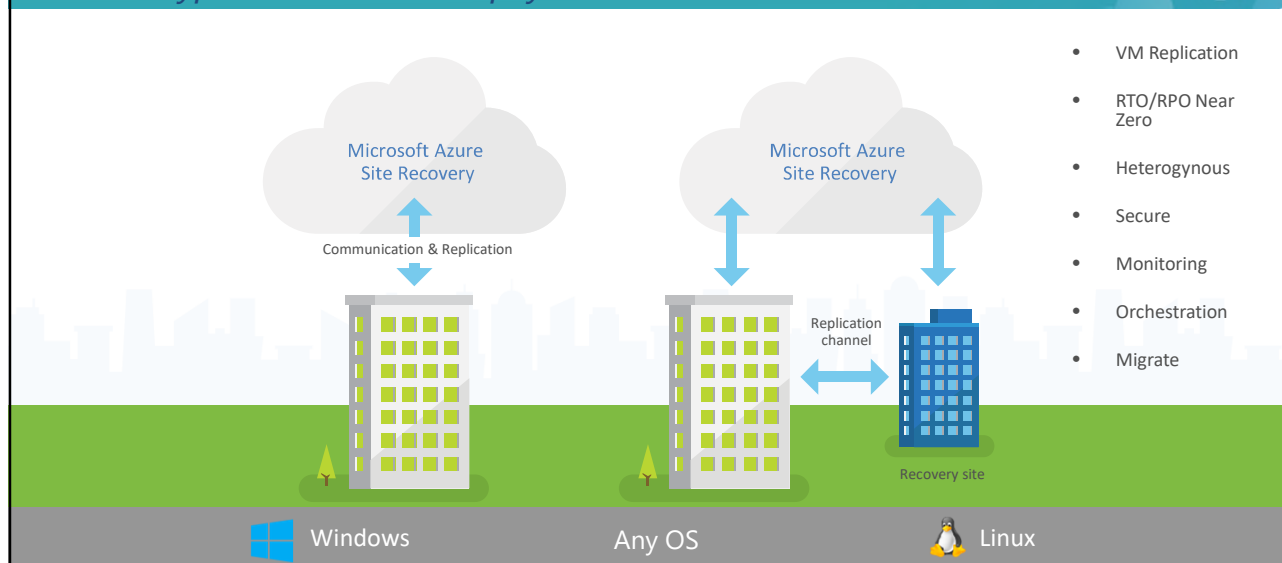
- Service an every protected VM
- Can be pushed from the Process Server to the VM



57

Replicate: on-prem or Azure

Secure Hyper-V, VMware, and physical servers



58

1. Create a Storage Account

Microsoft Azure

Search resources, services, and docs

Home > New

New

Search the Marketplace

Azure Marketplace [See all](#) Featured [See all](#)

Get started

Recently created

Compute

Networking

Storage 2

Web

Storage account 3
Quickstart tutorial

Azure File Sync
Quickstart tutorial

Data Box Edge / Data Box Gateway
(preview)
[Learn more](#)

General Purpose v1

Azure

INGRAM MICRO

59

2. Create a Virtual Network

Create a resource 1

All services

FAVORITES

Dashboard

All resources

Resource groups

App Services

Function Apps

Policy

SQL databases

Azure Cosmos DB

New

Search the Marketplace

Azure Marketplace [See all](#) Featured [See all](#)

Get started

Recently created

Compute

Networking 2

Storage

Web

Virtual network 3
Quickstart tutorial

Load Balancer
[Learn more](#)

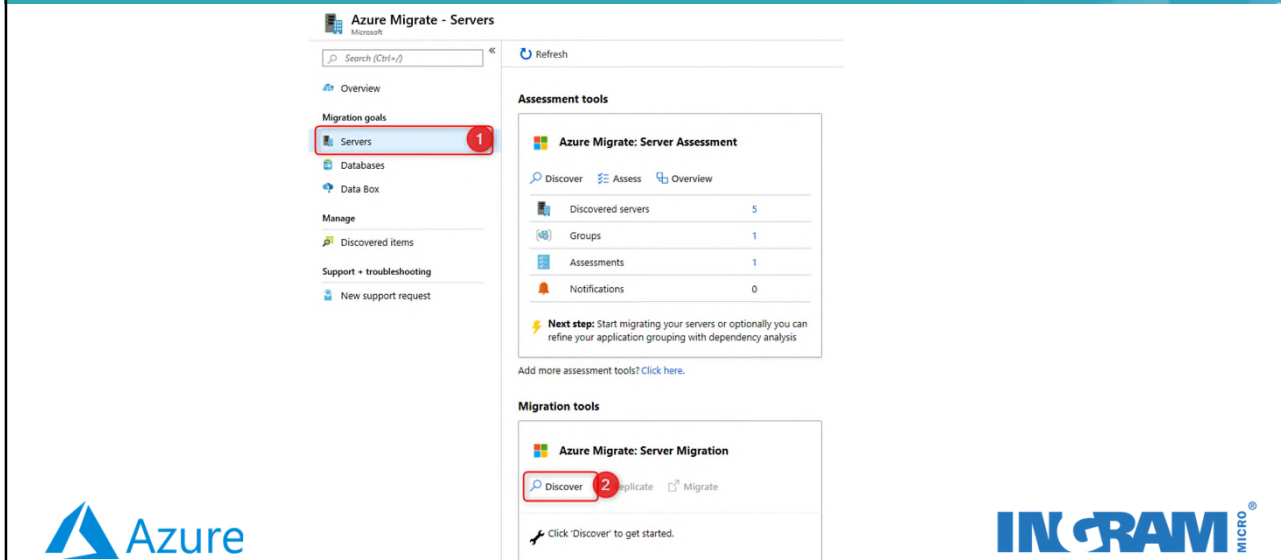
Application Gateway
[Learn more](#)

Azure

INGRAM MICRO

60

3. Register Host with Azure Migrate



Azure Migrate - Servers

Search (Ctrl+F) Refresh

Migration goals

- Overview
- Servers** 1
- Databases
- Data Box

Manage

- Discovered items
- Support + troubleshooting
- New support request

Assessment tools

Azure Migrate: Server Assessment

Discover Assess Overview

Discovered servers	5
Groups	1
Assessments	1
Notifications	0

Next step: Start migrating your servers or optionally you can refine your application grouping with dependency analysis

Add more assessment tools? [Click here.](#)

Migration tools

Azure Migrate: Server Migration

Discover Replicate Migrate Overview

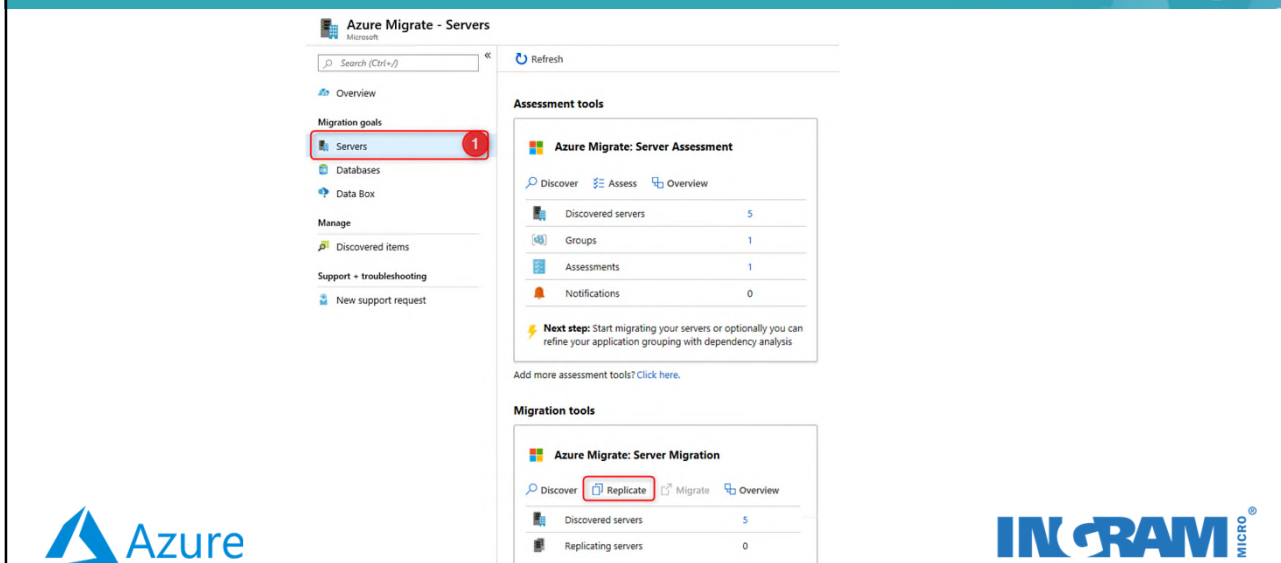
Discovered servers	5
Replicating servers	0

Click 'Discover' to get started.

Azure **INCRAM MICRO**

61

4.1 Enable Replication



Azure Migrate - Servers

Search (Ctrl+F) Refresh

Migration goals

- Overview
- Servers** 1
- Databases
- Data Box

Manage

- Discovered items
- Support + troubleshooting
- New support request

Assessment tools

Azure Migrate: Server Assessment

Discover Assess Overview

Discovered servers	5
Groups	1
Assessments	1
Notifications	0

Next step: Start migrating your servers or optionally you can refine your application grouping with dependency analysis

Add more assessment tools? [Click here.](#)

Migration tools

Azure Migrate: Server Migration

Discover Replicate Migrate Overview

Discovered servers	5
Replicating servers	0

Azure **INCRAM MICRO**

62

4.2 Verify the Replication process

Azure Migrate - Servers

Refresh Replicate Migrate

Last refreshed at: 25/07/2019 16:09:04

Assessment tools

Azure Migrate: Server Assessment

Discover Assess Overview

Category	Count
Discovered servers	5
Groups	1
Assessments	1
Notifications	0

Next step: Start migrating your servers or optionally you can refine your application grouping with dependency analysis.

Add more assessment tools? [Click here.](#)

Migration tools

Azure Migrate: Server Migration

Discover Replicate Migrate Overview

Category	Count
Discovered servers	5
Replicating servers	0
Test migrated servers	0
Migrated servers	0

Next step: Start replicating your servers to Azure

Step 1: Replicate
Start replicating machines

Replicating machines

3

Healthy 3
Warning 0
Critical 0

Replicate more machines

Jobs View all

Job Status	Count
Failed	0
In progress	0

Step 2: Test migration
Perform test migrations

You have not performed any test migrations yet. Perform test migrations on the servers which are replicating to Azure.

[Test migration](#)

Step 3: Migrate
Migrate to Azure

Replicate your machines to Azure first. Performing test migrations on replicated machines is recommended before you start with actual migration.

[Migrate](#)

Attention required

✓ No issues found.

Azure

INCRAM MICRO

63

5. Assign a Static IP Address

smarthotelweb1 - Compute and Network

Replicating machines

Search (Ctrl+F)

[Edit](#) 2

General

Compute and Network 1

Disks

Compute properties

PROPERTIES	ON-PREMISES	MICROSOFT AZURE
Name	smarthotelweb1	smarthotelweb1
Resource group	-	smarthotelrg
Size	1 cores, 4.00 GB memory, 1 NICs	Standard_F2s_v2
Availability set	-	None
Use managed disks	-	Yes

Network interface

InternalNATSwitch

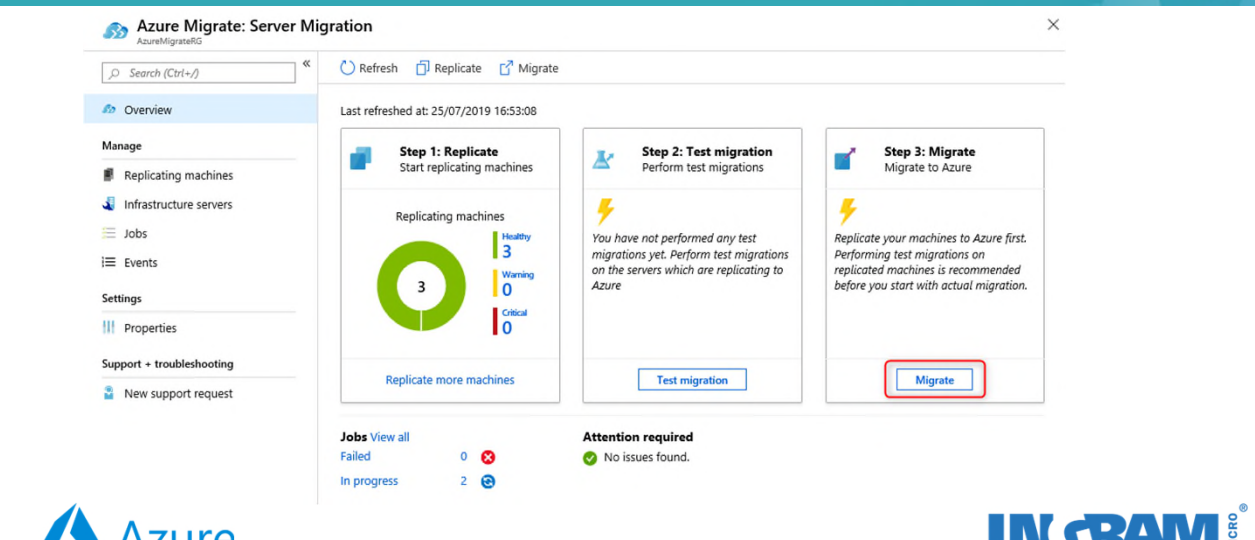
PROPERTIES	SOURCE	TARGET
Subnet	InternalNATSwitch	SmartHotel (192.1...
Private IP address	-	192.168.0.4 ✓

Azure

INCRAM MICRO

64

6. Server Migration



Azure Migrate: Server Migration

Search (Ctrl+/)

Refresh Replicate Migrate

Last refreshed at: 25/07/2019 16:53:08

Step 1: Replicate
Start replicating machines

Replicating machines

3

Healthy 3
Warning 0
Critical 0

Replicate more machines

Step 2: Test migration
Perform test migrations

You have not performed any test migrations yet. Perform test migrations on the servers which are replicating to Azure

Test migration

Step 3: Migrate
Migrate to Azure

Replicate your machines to Azure first. Performing test migrations on replicated machines is recommended before you start with actual migration.

Migrate

Jobs View all

Failed 0
In progress 2

Attention required

No issues found.

Azure INCRAM MICRO

65

Influence Migration Speed

Influence upload efficiency

If you have spare bandwidth for replication, and want to increase uploads, you can increase the number of threads allocated for the upload task, as follows:

1. Open the registry with Regedit.
2. Navigate to key HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows Azure Backup\Replication\UploadThreadsPerVM
3. Increase the value for the number of threads used for data upload for each replicating VM. The default value is 4 and the max value is 32.

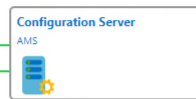
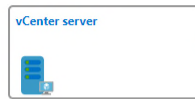


66

Infrastructure Overview

Infrastructure view

On-premises



Azure

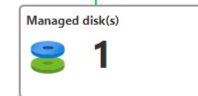
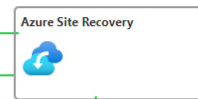
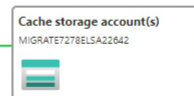


Table view



67

Learning

Migrate virtual machines and apps using Azure Migrate

<https://docs.microsoft.com/en-us/learn/paths/m365-azure-migrate-virtual-machine/>

68

Download Azure Migrate Step-By-Step

- <https://bit.ly/azuremigrate>



69

Module 8: Azure Site Recovery (ASR)

70

Disaster Recovery Plan

- **After a Disaster :**
 - **How much data do you accept that may be lost ?**
 - **How much downtime do you accept ?**

© 2020 Ingram Micro Inc. All Rights Reserved.

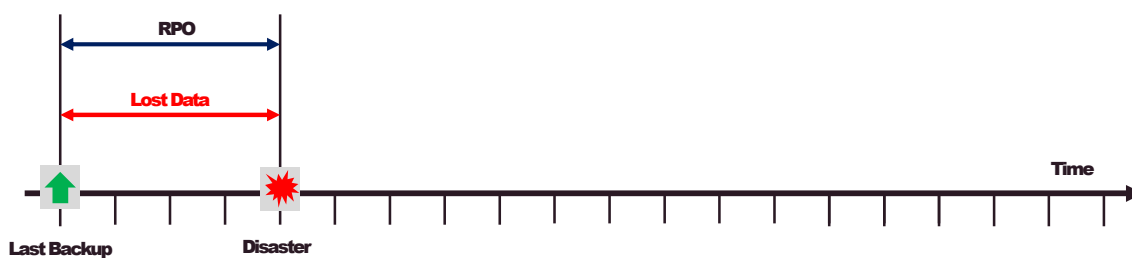
INGRAM
MICRO
CLOUD

71

71

Recovery Point Objective (RPO)

- **RPO :**
 - **Maximum tolerable amount of data loss measured in time**
 - **For Azure Backup usually 1 DAY**
 - **For Azure Site Recovery as low as 30 seconds till 5 minutes**
 - **Azure Site Recovery oldest recovery point : 72 hours**



© 2020 Ingram Micro Inc. All Rights Reserved.

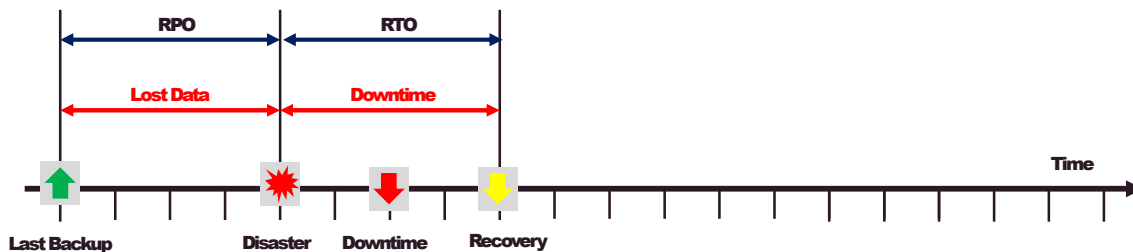
INGRAM
MICRO
CLOUD

72

Recovery Time Objective (RTO)

• RTO :

- **maximum tolerable amount of time needed to bring all critical systems back online**
 - For Azure Backup multiple Hours
 - For Azure Site Recovery multiple Minutes



© 2020 Ingram Micro Inc. All Rights Reserved.

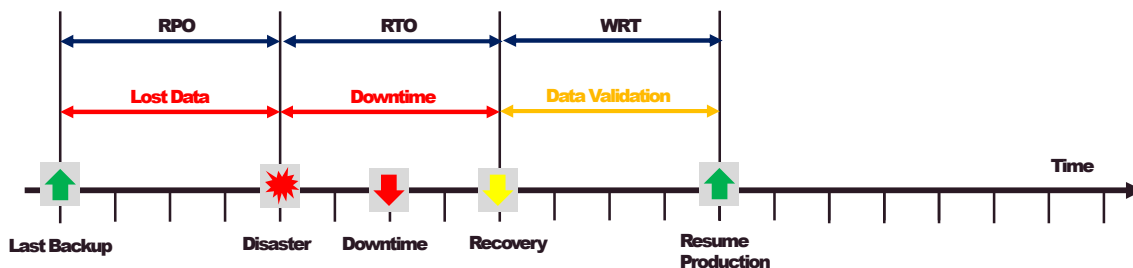
INGRAM MICRO CLOUD

73

Work Recovery Time (WRT)

• WRT :

- **Maximum tolerable amount of time to verify the recovered systems and/or data integrity**



© 2020 Ingram Micro Inc. All Rights Reserved.

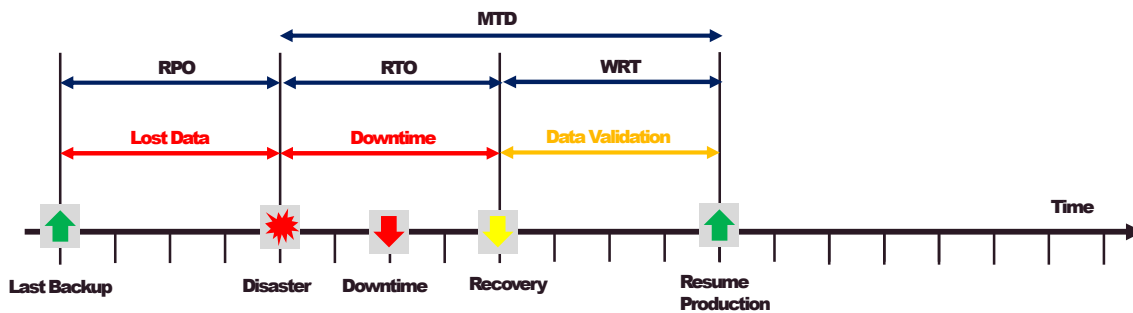
INGRAM MICRO CLOUD

74

Maximum Tolerable Downtime (MTD)

• MTD :

- total amount of time that a business process can be disrupted without causing any unacceptable consequences



© 2020 Ingram Micro Inc. All Rights Reserved.

INGRAM
CLOUD

75

Migrate SQL Database



76

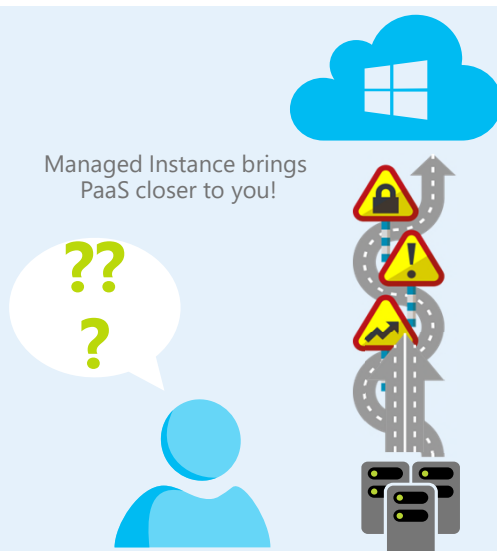
Azure SQL Databases

- SQL Database Managed Instance
- Single Database (Singleton)
- Elastic Pool
- SQL Database IaaS



77

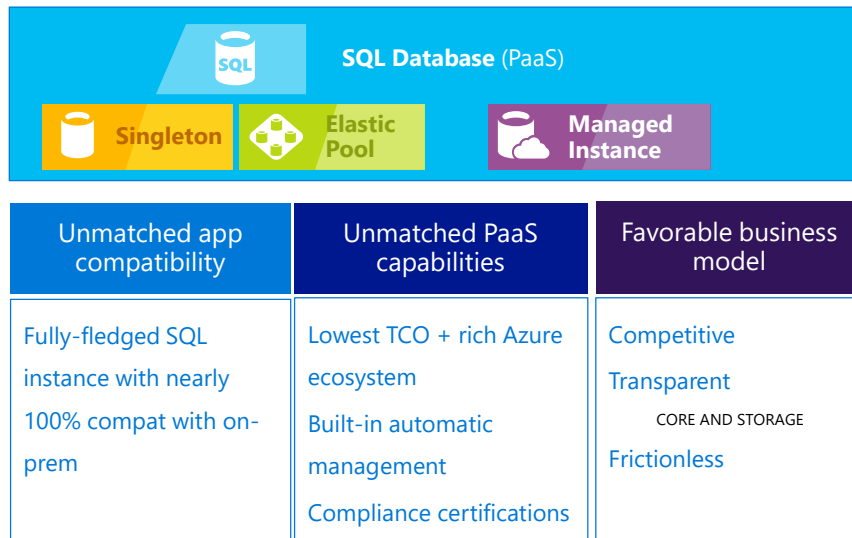
WHY AZURE SQL MANAGED INSTANCE?



- **Are your customers interested in moving to cloud?**
 - Want to close your data center
 - Current hosting solution is high maintenance
 - You're asked to do more with less
 - Want to expand your reach globally
- **Do your customer want to avoid app rewrites but still benefit from PaaS?**

78

WHAT IS SQL DATABASE MANAGED INSTANCE? DBaaS designed to for all SQL Server applications



79

Elastic Pool

- Multiple SQL Instances in the same Pool
- All Resources are shared
 - CPU
 - IO
 - Memory
- Share Compute Power between Database resources



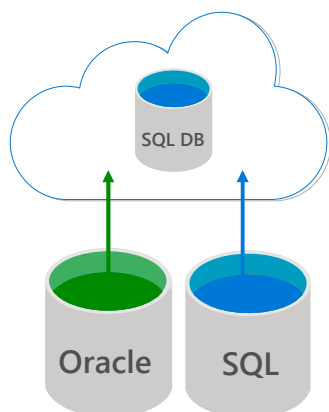
80

HOW DOES PAAS HELP YOU?

On-prem database management tasks	How PaaS helps?
Data protection <ul style="list-style-type: none"> Backups (with health checks and retention) 	Built-in
High availability / disaster recovery implementation <ul style="list-style-type: none"> Always On Database Mirroring Log shipping 	Built-in
Compliance with standards	Built-in
Security <ul style="list-style-type: none"> Data access Defense in depth Breach detection 	Easy to use tools
Monitoring	Easy to use tools
Performance tuning and maintenance <ul style="list-style-type: none"> Query plan regressions – detection and prevention Index optimization and maintenance 	Built-in

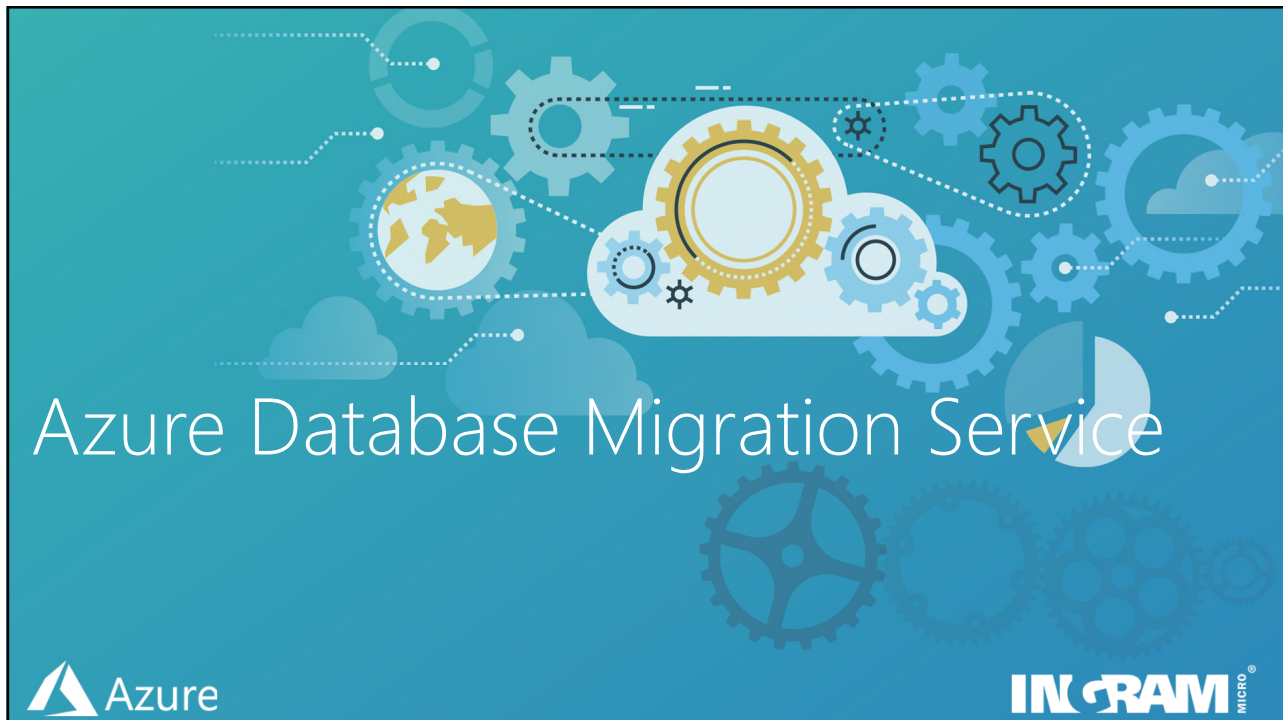
81

RELIABLE AND SEAMLESS MIGRATIONS Azure Database Migration Service (DMS)

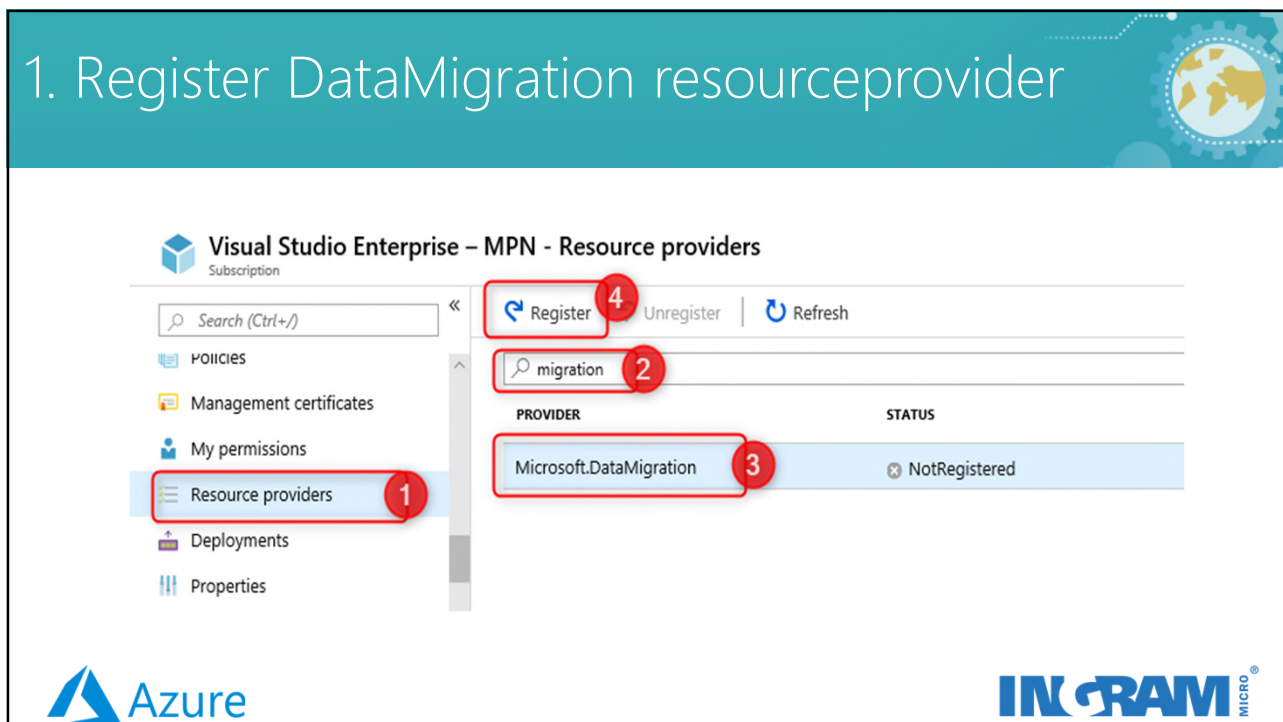


- Fully managed database migration service for both operational databases and data warehouses
- Supports minimal down time migrations
- Supports both homogeneous and heterogeneous source-target pairs
- Initial focus on reliability and performance
- Iterative addition of source-target pairs
- Continued investment in friction-free competitive conversions

82

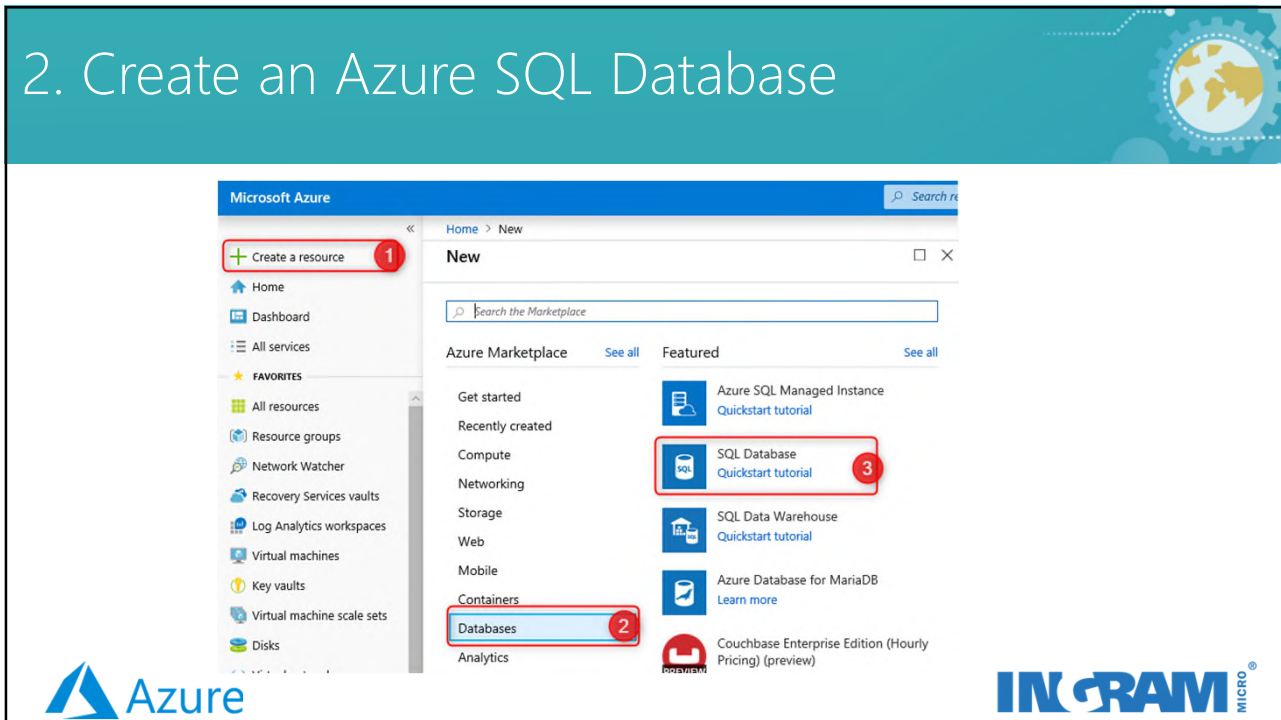


83



84

2. Create an Azure SQL Database



85

3. Create a Database Migration Service

- + Create a resource
 - Search for **migration** and select **Azure Database Migration Service**

Azure Database Migration Service

Microsoft



Azure Database Migration Service


Microsoft

Create

[Save for later](#)


86

4. Assess the on-premises database

 Azure Migrate

Microsoft

Search (Ctrl+)

Get started

Overview 1

Migration goals

Servers

Databases

Data Box

Manage


Discovered items

Support + troubleshooting

New support request

Migrate your on-premises datacenter to Azure


Discover, assess and migrate your on-premises applications using Microsoft or third-party tools, or find an expert to help with your migration. [Learn more](#)



Discover, assess and migrate servers

Discover, assess and migrate your on-premises VMware and Hyper-V virtual machines or Physical servers to Azure.

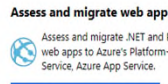
Assess and migrate servers



Assess and migrate databases

Assess and migrate your on-premises databases to Azure SQL Database Managed Instance or Azure SQL Database.

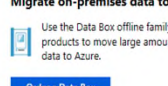
Assess and migrate databases 2



Assess and migrate web apps to Azure

Assess and migrate .NET and PHP web apps to Azure's Platform-as-a-Service, Azure App Service.

Assess and migrate web apps



Migrate on-premises data to Azure

Use the Data Box offline family of products to move large amount of data to Azure.

Order a Data Box

87

5. Create a Database migration project (DMS)

The screenshot displays two sections of the Azure portal interface.

AzureMigrateRG - Deployments

- Left Navigation:** Settings, Quickstart, **Deployments** (highlighted with a red box and a red circle containing the number 1), Policies, Properties.
- Top Bar:** Search (Ctrl+J), Delete, Cancel, Redeploy, View template, Refresh.
- Filter:** Filter by deployment name or resources in the deployment...
- Table:**

DEPLOYMENT NAME	STATUS	LAST MODIFIED	DURATION
Microsoft.AzureDMS	Succeeded (with green checkmark icon)	8/1/2019 11:47:18 AM	14 minutes 14 seconds
Microsoft.Template	Succeeded (with green checkmark icon)	8/1/2019 11:32:35 AM	6 minutes 52 seconds

SmartHotelDBMigration

- Header:** SmartHotelDBMigration, Azure Database Migration Service.
- Left Navigation:** Overview (highlighted with a blue bar), Activity log.
- Top Bar:** Search (Ctrl+J), + New Migration Project (highlighted with a red box), Delete service, Refresh, Start Service, Stop Service.
- Status Message:** Great job! Your database migration service was successfully created. You can create your first migration project now.
- Resource Group:** : AzureMigrateRG

88

6. Migrate the database schema

The screenshot shows the Azure DBMigrate (SmartHotelDBMigration/DBMigrate) interface. The left sidebar contains navigation links: Overview, Activity log, Access control (IAM), and Tags. The main area displays the 'Migration Wizard' with four steps: 1. Select source, 2. Select target, 3. Select database and schema, and 4. Summary. The 'Select target' step is currently active, showing a list of migration options: 'Offline data migration' and 'Schema only migration'. The 'Schema only migration' option is highlighted with a red box and a red circle with the number 2. Above this, the '+ New Activity' button is highlighted with a red box and a red circle with the number 1. The 'Migration target details' panel on the right shows the following information: Target server name (smarthoteldb6.database.windows.net), Authentication type (SQL Authentication), User Name (demouser), Password (masked with dots and a checkmark), and Connection properties (Encrypt connection checked). The source version is listed as SQL Server 2017 14.0.1000.169. The Azure logo is in the bottom left, and the IN-CRAM MICRO logo is in the bottom right.

89

7. Migrate the data

The screenshot shows the Azure DBMigrate (SmartHotelDBMigration/DBMigrate) interface. The left sidebar contains navigation links: Overview, Activity log, Access control (IAM), and Tags. The main area displays the 'Migration Wizard' with four steps: 1. Select source, 2. Select target, 3. Select database and schema, and 4. Summary. The 'Select target' step is currently active, showing a list of migration options: 'Offline data migration' and 'Schema only migration'. The 'Offline data migration' option is highlighted with a red box and a red circle with the number 2. Above this, the '+ New Activity' button is highlighted with a red box and a red circle with the number 1. The 'Migration target details' panel on the right shows the following information: Target server (smarthoteldb6.database.windows.net) and Target version. The source version is listed as SQL Server 2017 14.0.1000.169. The Azure logo is in the bottom left, and the IN-CRAM MICRO logo is in the bottom right.

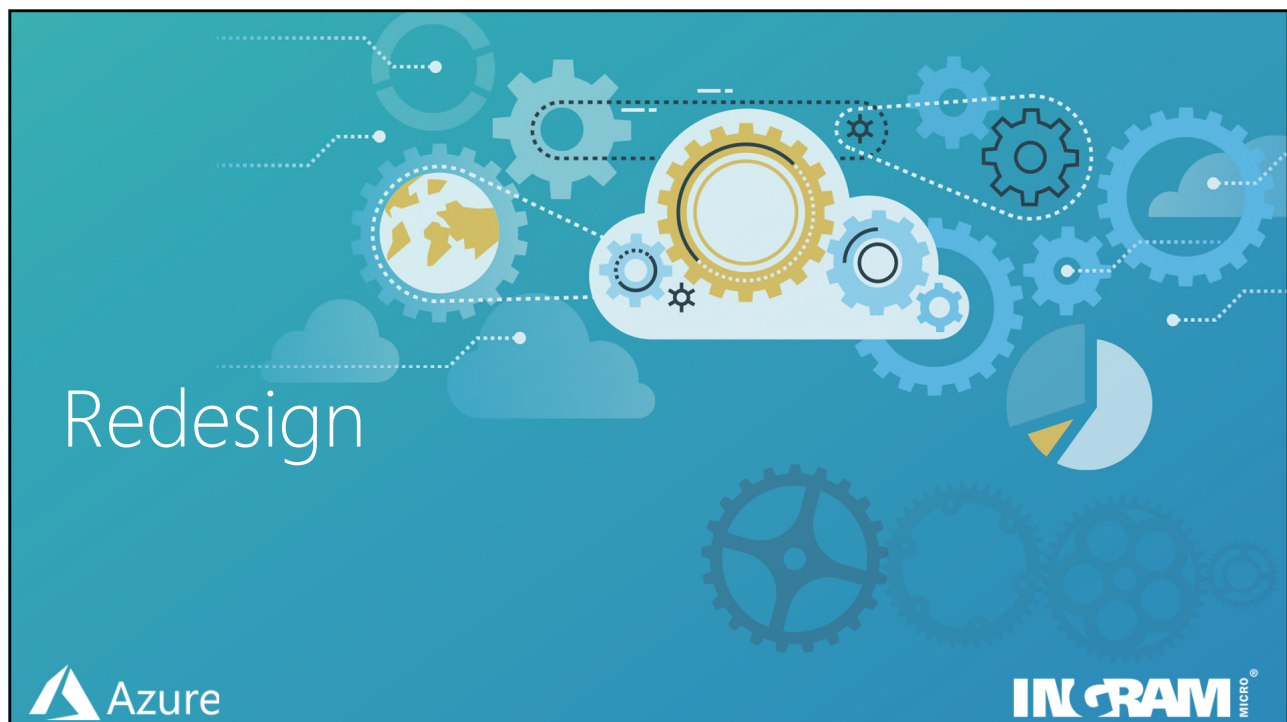
90

Hands-On LAB

Migrate your relational data stored in SQL Server to Azure SQL Database

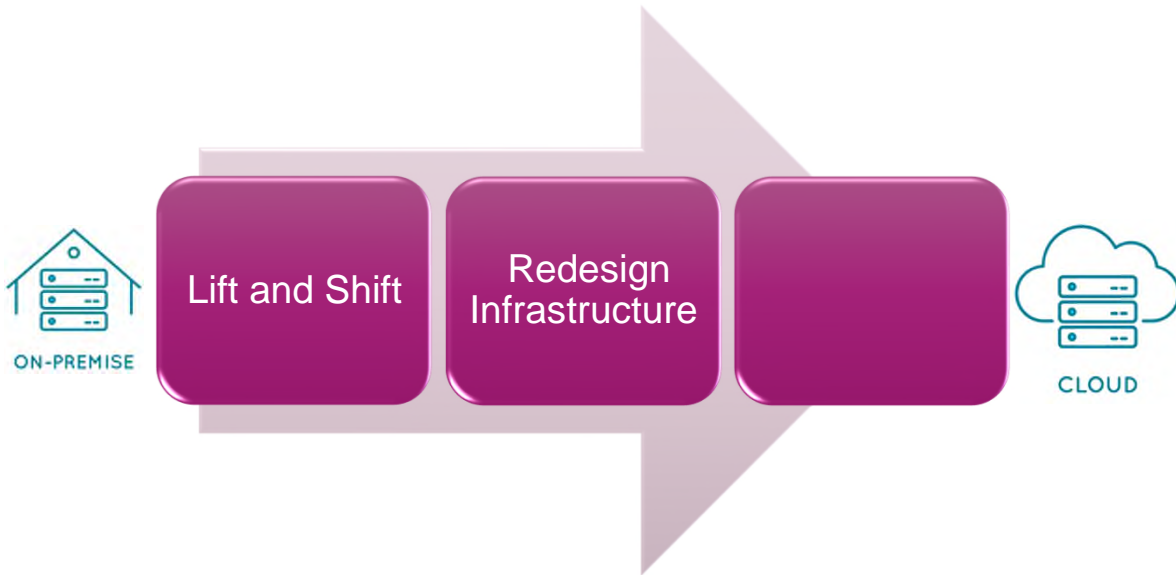
<https://docs.microsoft.com/en-us/learn/modules/migrate-sql-server-relational-data/>

91



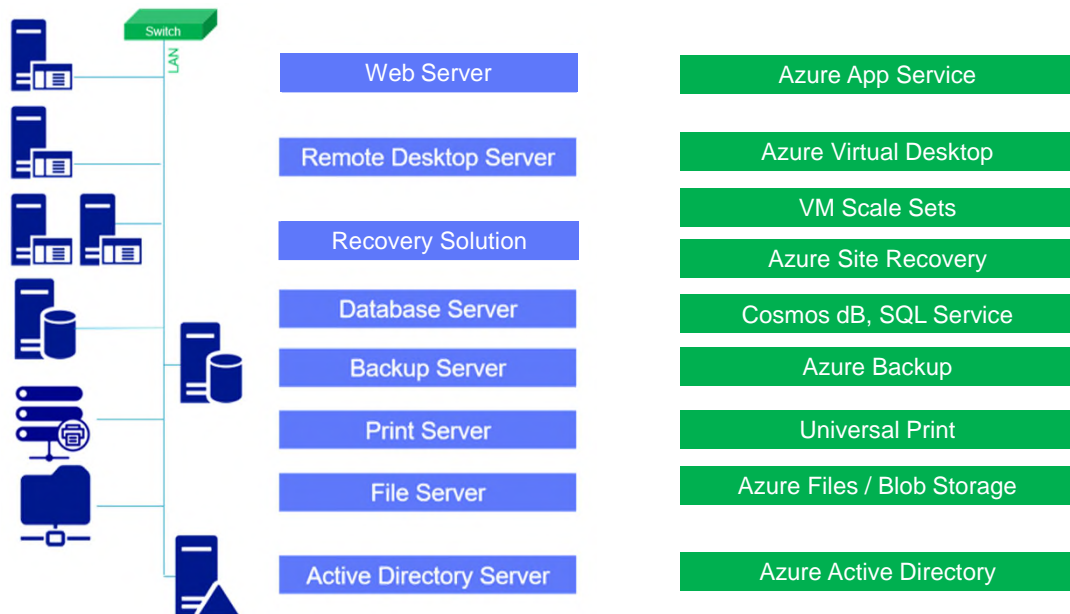
92

Moving your IT Solutions to the Cloud



93

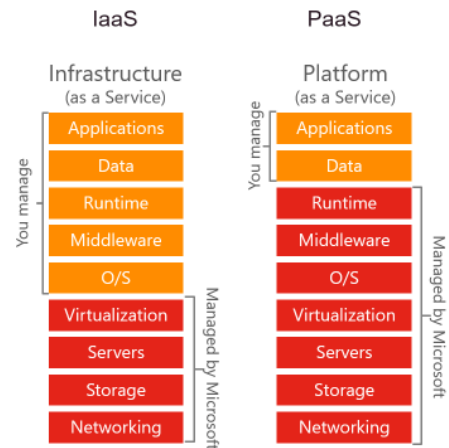
PaaSifying your Infrastructure



94

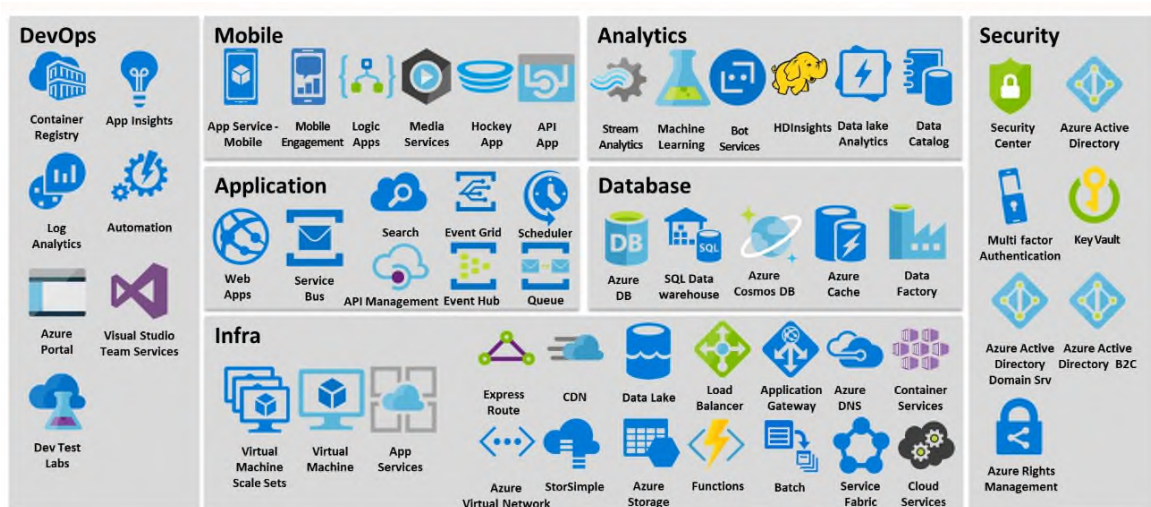
Platform as a Service (PaaS)

- No Operating System to maintain
- No Middleware maintenance
- No Runtime Maintenance
- Service is Ready to Configure



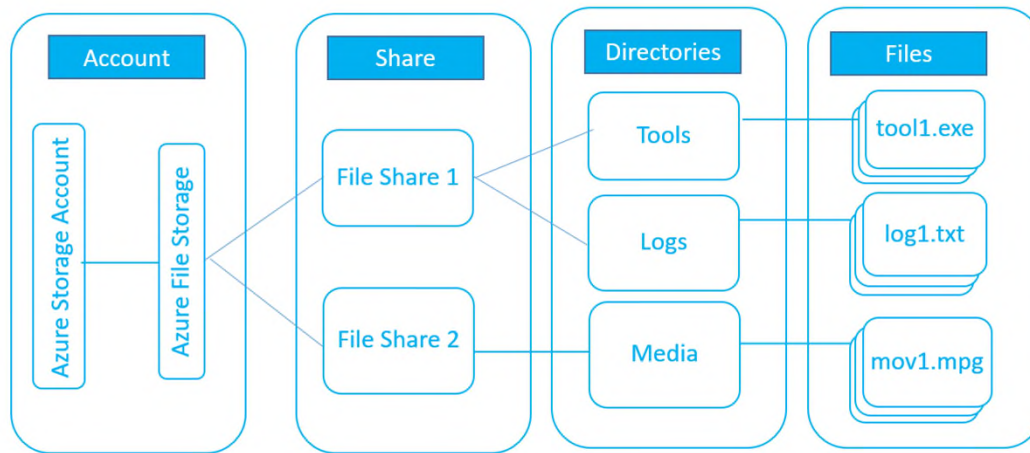
95

PaaS Services in Azure



96

1. Azure Files (File Server)



97

File Server PaaS replacement

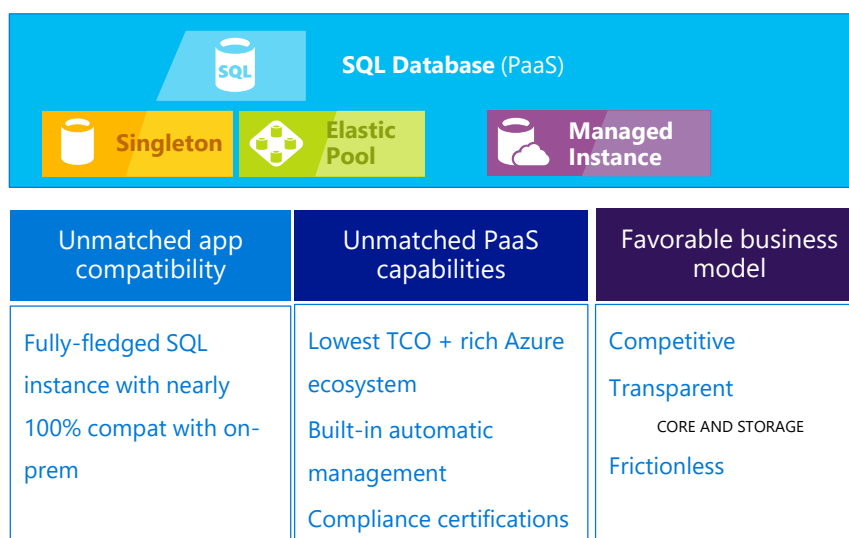
Azure Files
1000 GB
10.000.000 Transactions
32€ /month

98

Additional Features possible

- Identity Based Authentication (AD DS)
- Snapshots (for example every hour)
- Synchronization to On-Premise
- Daily Backup

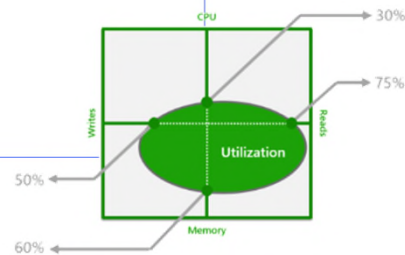
2. Azure SQL Service (SQL Server)



SQL Database Replacement

Single SQL Database
250 GB database storage
20 DTU's (data transaction Units)

29€ /month



IN-GRAM CLOUD More as a Service

101

101

Additional Features possible

- Daily Backup
- Long Term Retention Backup
- Logging / Monitoring
- Zone Redundancy

IN-GRAM CLOUD More as a Service

102

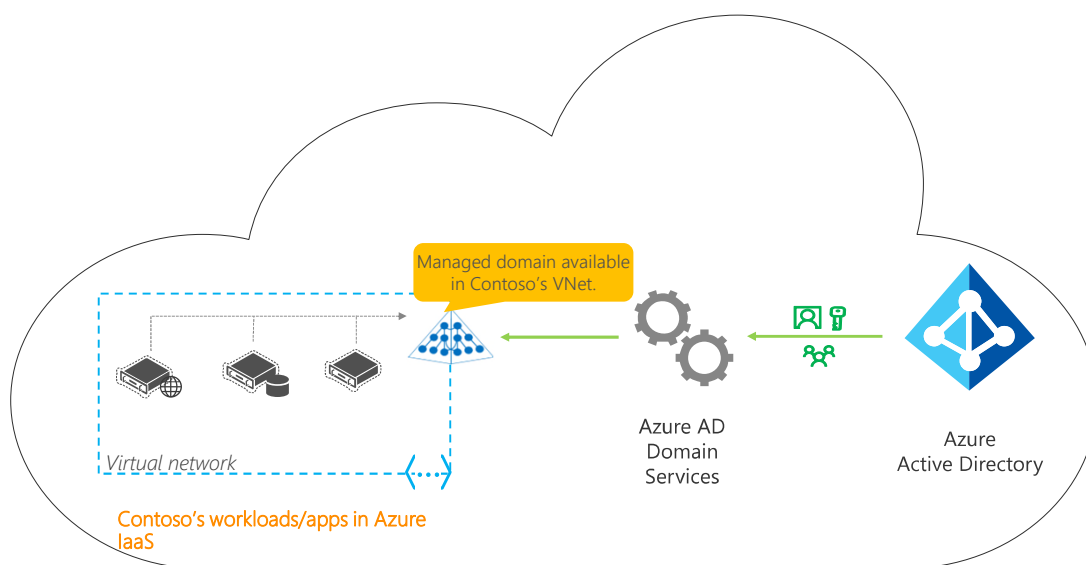
102

3. Azure Active Directory

- User Identity Directory
- Single sign on to any app
- User self-service portal
- Multifactor (MFA) + Passwordless Authentication
- Conditional Access + Identity Protection
- Hybrid Identity Management
- Frontline Worker Identities & External Identities (B2B)

103

Azure AD Domain Services



104

AD DS Replacement

Azure AD Domain Services

Dual Managed Domain Controller

Standard Tier

(less than 25.000 Objects)

108€ /month

105

4. Azure Backup

- Backup VMs running in Azure
- Backup Servers running On Prem
- Backup Azure Files
- Backup Azure Blob Storage
- Backup SQL Servers/Services
- Backup PostgreSQL database



Microsoft Azure Backup

106

Azure Backup

**Single Virtual Machine
700 GB Storage
20 Daily / 8 Weekly / 6 Monthly

€26 /month**

INCRAM CLOUD More as a Service

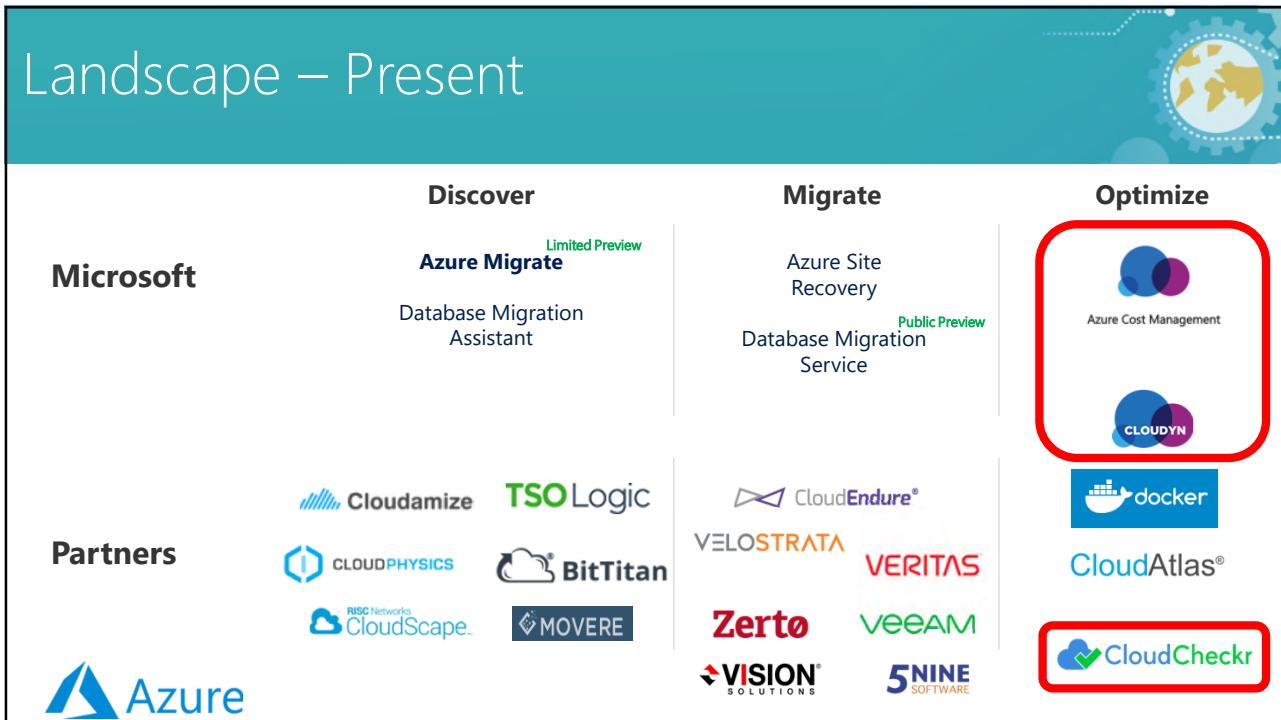
107

107



108

Landscape – Present



109

Insights in Azure Consumption & Cost

What are our spending trends?

Are there any spending anomalies?

Will we stay within budget?

How do our spending habits change month-over-month?

What are we spending, on what?

How much do the services cost?

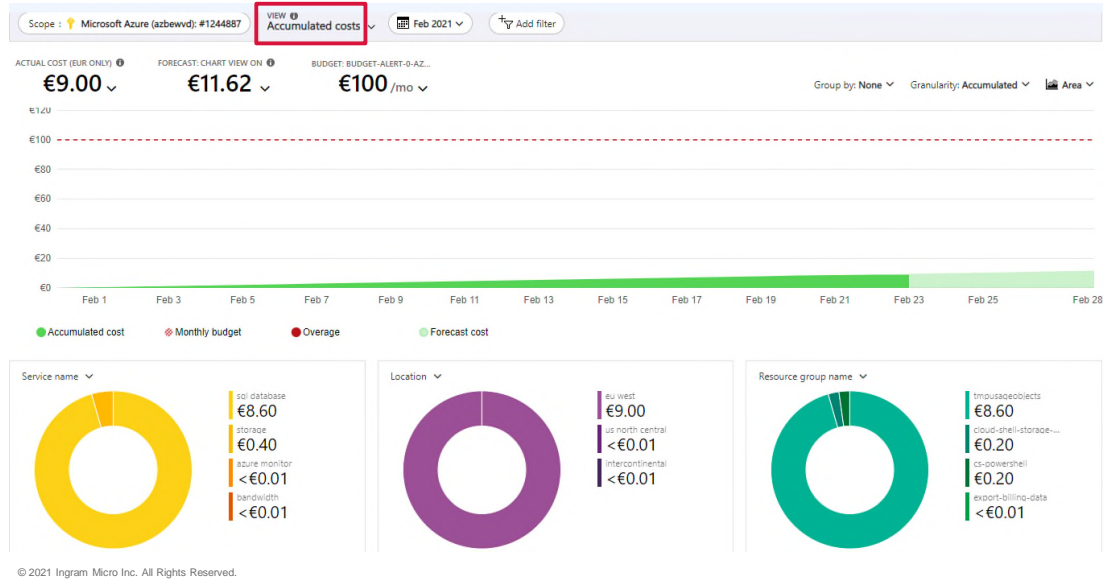
How much have we spent so far this month?

© 2021 Ingram Micro Inc. All Rights Reserved.

110

110

Cost Analysis : Accumulated cost

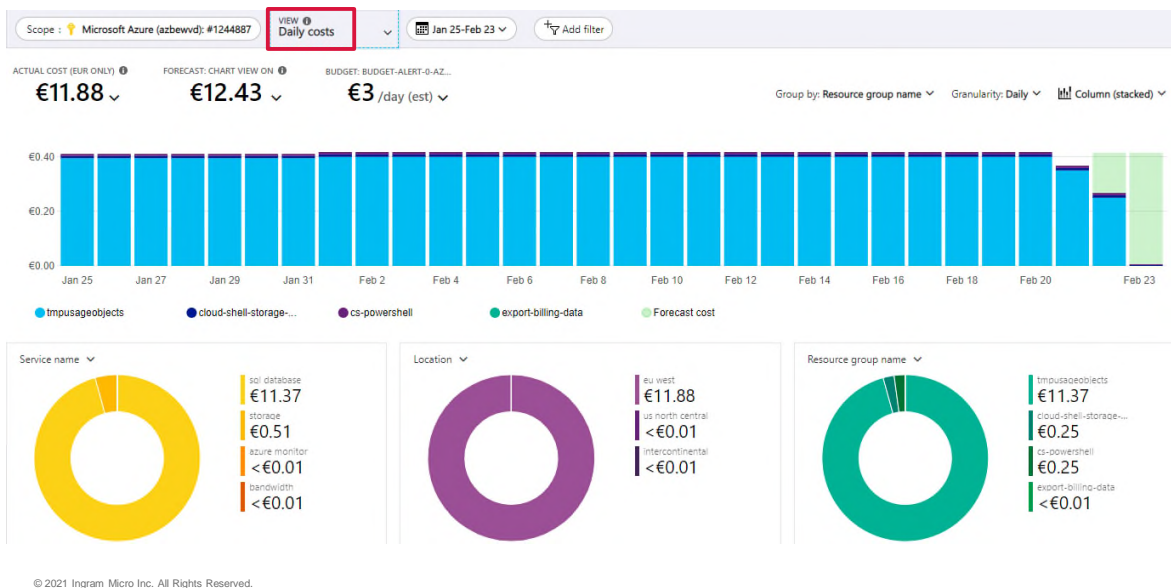


INGRAM MICRO CLOUD

111

111

Cost Analysis : Daily cost



INGRAM MICRO CLOUD

112


112

Budgets

Create a budget and set alerts to help you monitor your costs.

Budget scoping

The budget you create will be assigned to the selected scope. Use additional filters like resource groups to have your budget monitor with more granularity as needed.

Scope  Microsoft Azure (azbewvd): #1244887
[Change scope](#)

Filters 

Budget Details

Give your budget a unique name. Select the time window it analyzes during each evaluation period, its expiration date and the amount.

* Name	<input type="text" value="Budget_Warning"/>		
* Reset period ⓘ	<input type="text" value="Monthly"/>		
* Creation date ⓘ	<input type="text" value="2021"/>	<input type="text" value="February"/>	<input type="text" value="1"/>
* Expiration date ⓘ	<input type="text" value="2023"/>	<input type="text" value="January"/>	<input type="text" value="31"/>

Budget Amount

Give your budget amount threshold

Amount (€) *

© 2021 Ingram Micro Inc. All Rights Reserved.







INGRAM MICRO CLOUD

113

113

Advisor recommendations

Cost Management

-  Cost analysis (preview)
-  Cost analysis
-  Cost alerts
-  Budgets
-  **Advisor recommendations**
-  Cloudyn



You are following all of our cost recommendations for the selected subscriptions and resources.

- Unused Reserved Instances
- Database underutilization
- Idle devices, like VPN Gateway
- Machines that are running the whole month
- Disk Snapshots
- Ephemeral OS Disks

© 2021 Ingram Micro Inc. All Rights Reserved.

INGRAM MICRO CLOUD

114

114

Learning

Azure Cost Management

<https://docs.microsoft.com/en-us/learn/modules/manage-costs-partner-cost-management/>

115

Wrap Up

- DataCenter Migration : Introduction
- Discovery & Assessment
 - Azure Migrate : Server Assessment
 - BitTitan
- Migrate Application Database
 - Azure Database Migration Service
- Migrate Workloads
 - Azure Migrate : Server Migration
 - Migration wit Veritas
- Optimize
 - Azure Cost Optimization – Cloudyn



116



117