

Cloud Migration Project

**Modernizing Infrastructure
Embracing Automation
Controlling Costs**

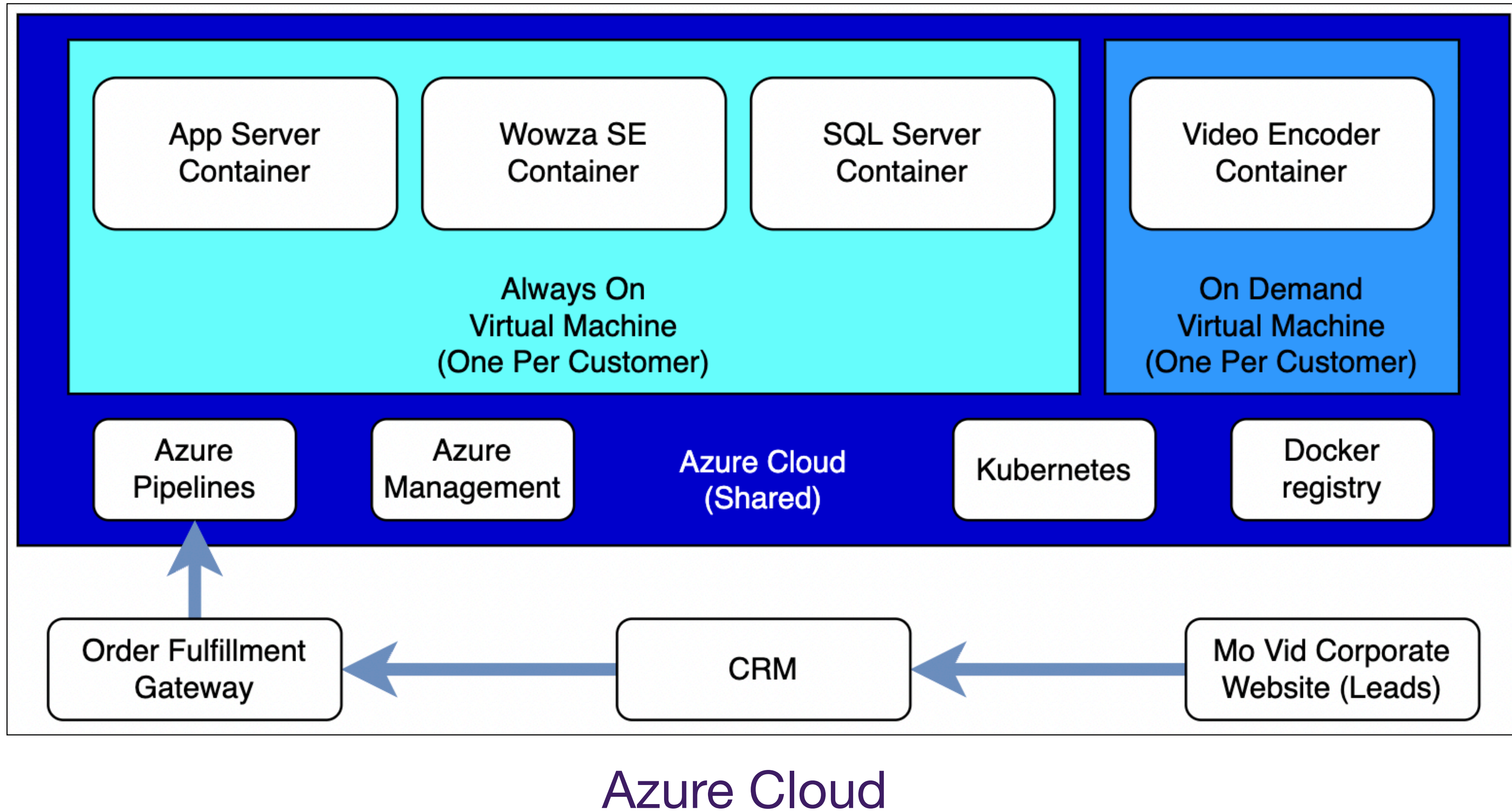
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December 7, 2022



Current Architecture

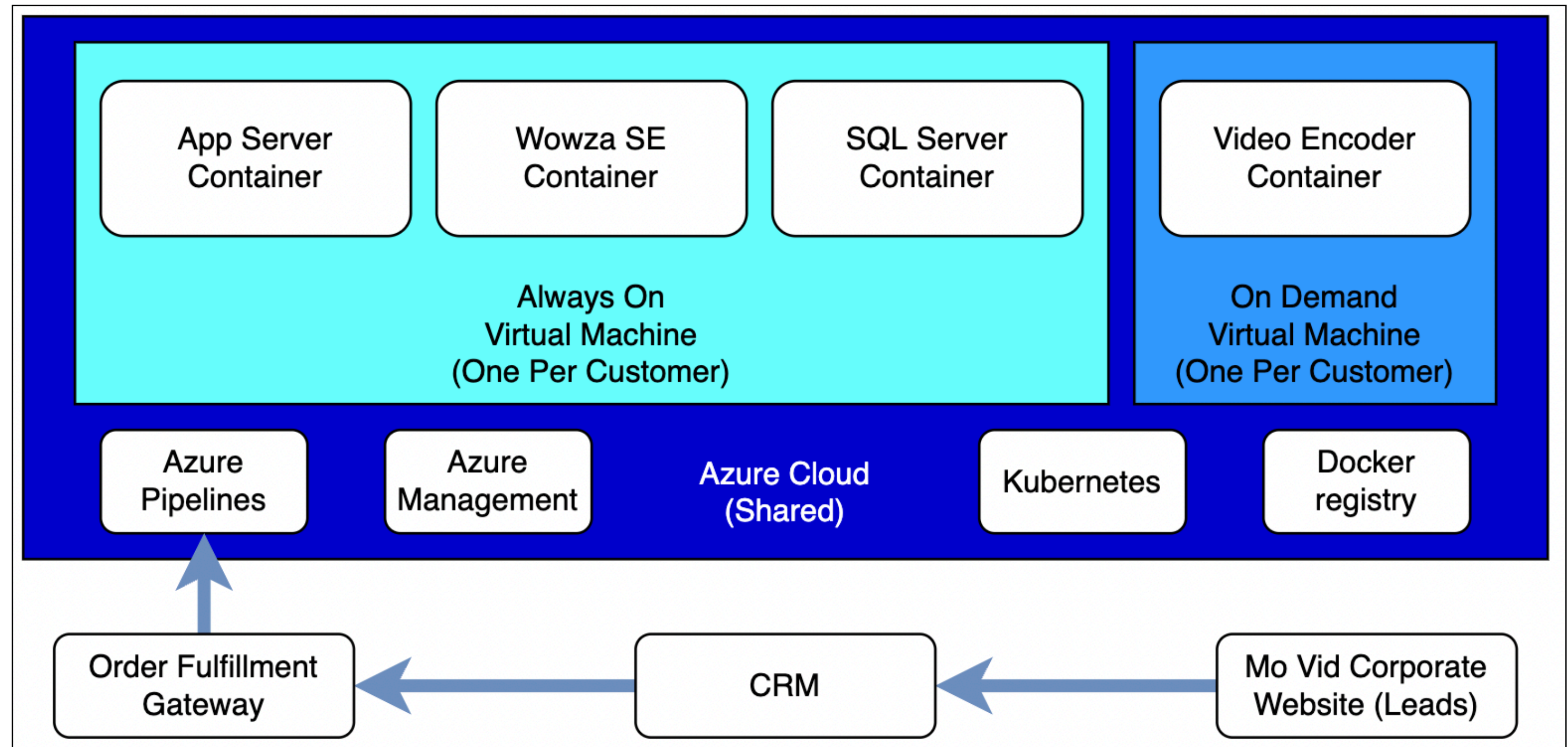
- 38 Customers (25 small, 10 medium, 3 large)
- 152 Virtual Machines
- 1.6 Petabytes of primary storage, equal amount backed up
- 200TB outgoing traffic
- 82TB incoming traffic
- 622Mbps Internet connection (OC-12) is an absolute minimum

Cloud Architecture



Cloud Architecture

- Web app, Wowza and SQL Server converted to containers on one VM
- Small customers require 32 hours of compute time to encode video. Switching to on demand VM reduces cost from \$525/month to just \$24/month
- Video files stored in Azure Blob Storage for a 35% cost saving with large customers.



Backup Solution

- Always On VM has standard 2 month Azure VM backups.
- On Demand VM does not require backups (temporary storage)
- Azure SQL Server Backup, includes 45 day differential & full backups
- Blob storage comes with built in synchronous backup, versioning and undelete. Increased blob storage 20% to accommodate.

Customer Onboarding

- Customer signs invoice
- Sales rep notices invoice was signed
- Sales rep emails Ops team to create VMs
- Ops team are in a 2 hour meeting
- Ops team are hungry and gets lunch
- Ops team finishes eating lunch and creates the VMs
- Opps team emails sales rep
- Sales rep ignores the email for 3 hours while prospecting
- Sales rep emails a welcome letter to customer
- Sales rep creates a reminder to follow up
- In two weeks, sales rep makes followup call

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Sales Process

Demo

Future Considerations

- Content Delivery Network for international delivery
 - No need for a second data center
 - Monthly costs start at \$82/terabyte to Europe
- Cognitive Service for Speech
 - Speech translation - Automated real time language translation (\$2.50/hr)
 - Text to speech - Automated narration (\$16/million characters)
 - Speech to text - Automated transcripts (\$1/hour)

Cost

	Small		Medium		Large	
Always On VM	8/32/64	193	8/32/64	193	16/64/128	386
On Demand VM	32 hr/mo	24	192 hr/mo	139	384 hr/mo	277
Video Storage	10TB Block Blob	215	60TB Block Blob	1,271	150TB Block Blob	2,622
VM Storage	1TB (Std HDD)	41	1TB (Std SDD)	77	1TB (Std SDD)	77
DB Backup	3G	26	8G	26	16G	26
VM Backup	1TB	78	1TB	78	1TB	78
Video Backup	2TB Block Blob (20%)	44	12TB Block Blob (20%)	257	30TB Block Blob (20%)	641
Data Transfer (Outbound)	1TB	72	10TB	792	25TB	1,769
Data Transfer (Inbound)	0.75TB	0	4TB	0	8TB	0
Monthly Per Customer		693		2,833		5,876

Cost

On Prem Costs Eliminated:

- 152 Virtual Machines
- 152 Windows Server licenses
- 1.6 Petabyte storage
- 1.6 Petabyte backup
- OC-12 Internet connection

	Small	Medium	Large
Monthly Per Customer	693	2,833	5,876
Yearly Per Customer	8,316	33,996	70,512
Number of Customers	25	10	3
1 Year Subtotal	207,900	399,960	211,536

Total 1 Year Spend: \$759,396

20% discount available for 3 year commitment

Additional discounts for bulk purchases (blob storage) or software redesign (combined databases, web servers)