

# Presidio Cloud Solutions

Azure Backup & Recovery Services

Azure Backup Solution Planning

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## Why Presidio for Cloud?

- We understand digital infrastructure – 25 years designing comprehensive solutions
- Cloud practice group with 80 dedicated people in North America and growing. National & Local in-region. (Q3 119M Rev/57%)
- Comprehensive Partnerships with major leading Cloud providers. Microsoft, AWS & Google (Date TBD).
- Finance optimization -> Leverage the power of Presidio Clients and balance sheet.
- Deep engineering skills on planning, designing, optimizing and managing & cloud migrations.



# Presidio and Microsoft Relationship

- Nationally Managed Partner- Gold status
  - Dedicated National Partner Management
    - Certified Sales and Engineering resources locally
    - Advanced technical solutions previews
  - Locally Dedicated Partner Engagement Manager
    - Helping to make sure of client satisfaction
    - Dedicated escalation path
    - TAP programs
- Practices
  - Azure Cloud Services
    - Azure Network Assessment Services
    - Cloud Governance
    - Applications assessment Service
    - ExpressRoute Expertise
    - Azure Stack Design and Implementation Services



# Presidio and Microsoft Relationship

- Practices continued
  - Office 365
    - Assessment Services
    - Migration and Deployment Services
    - Skype for Business Assessment, Design and Rollout services
  - Windows Architecture and Deployment services
    - Active Directory Design Services/Azure Active Directory
    - Windows 10 Design and Rollout Services
    - Citrix on Azure Design and Deployment
    - Application Rationalization Services



# Presidio and Microsoft Relationship

- CSP-Presidio is a licensed reseller of MSFT Cloud Services

## Benefits of using Presidio as your CSP

Single stop for both billing and technical service  
Advanced technical support( Certified Engineers)  
Admin portal control  
Monthly billing  
24X7 Support  
Potential licensing discounts with services  
bundled



# Azure Backup-Recovery Professional Services

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# Backup and Recovery

## Use Cases

1

**SQL Servers:** configure SQL Server to automatically backup to Azure

2

**Windows Server:** configure automatic backup to Azure via Backup Schedule Wizard or PowerShell cmdlet

3

**Virtual Machines:** store VM configurations, VMM data, and VHDs to Azure via Microsoft System Center Data Protection Manager (DPM)

4

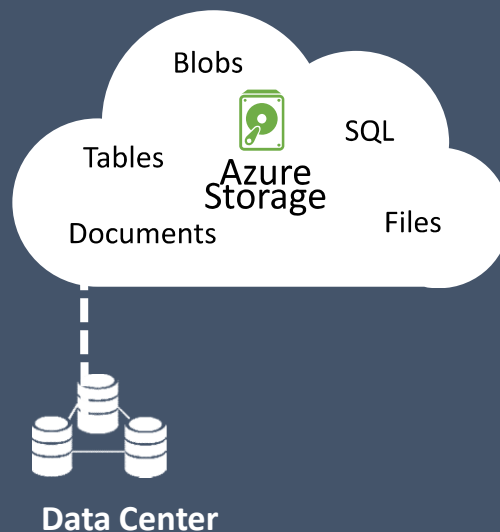
**Backup Datacenter:** Azure Site Recovery replicates critical services in the cloud to get you up and running in minutes (VMWare in preview!)



# Pain Points for Storage

## Hybrid Data Storage

Microsoft Azure



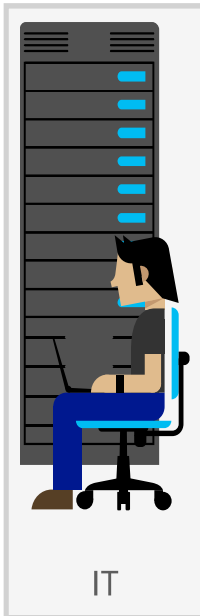
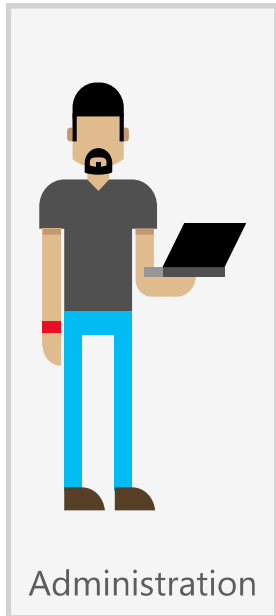
- Customers spend too much on their storage, backup or disaster recovery.
- Customers use cumbersome tape backups and/or do not back up to a remote location.
- Infrastructure is expensive and requires dedicated space in their facility.
- Much of their data is not being actively used.
- Customers need to continually invest in new hardware as stored data grows exponentially.
- Testing existing disaster recovery systems is difficult, time consuming, and expensive.



# Azure Backup and Recovery



## Safe, Fast, Inexpensive Solution



### Opportunities

**Lower TCO:** roughly 50% cost reduction over most on-prem DR

**Peace of Mind:** Reliable, offsite, & potentially geo-replicated backup store

**Increased Uptime:** 99.9% Availability guaranteed

**Fast:** automatic, testable backups

**Minimal Bandwidth Use:** Efficient incremental backups

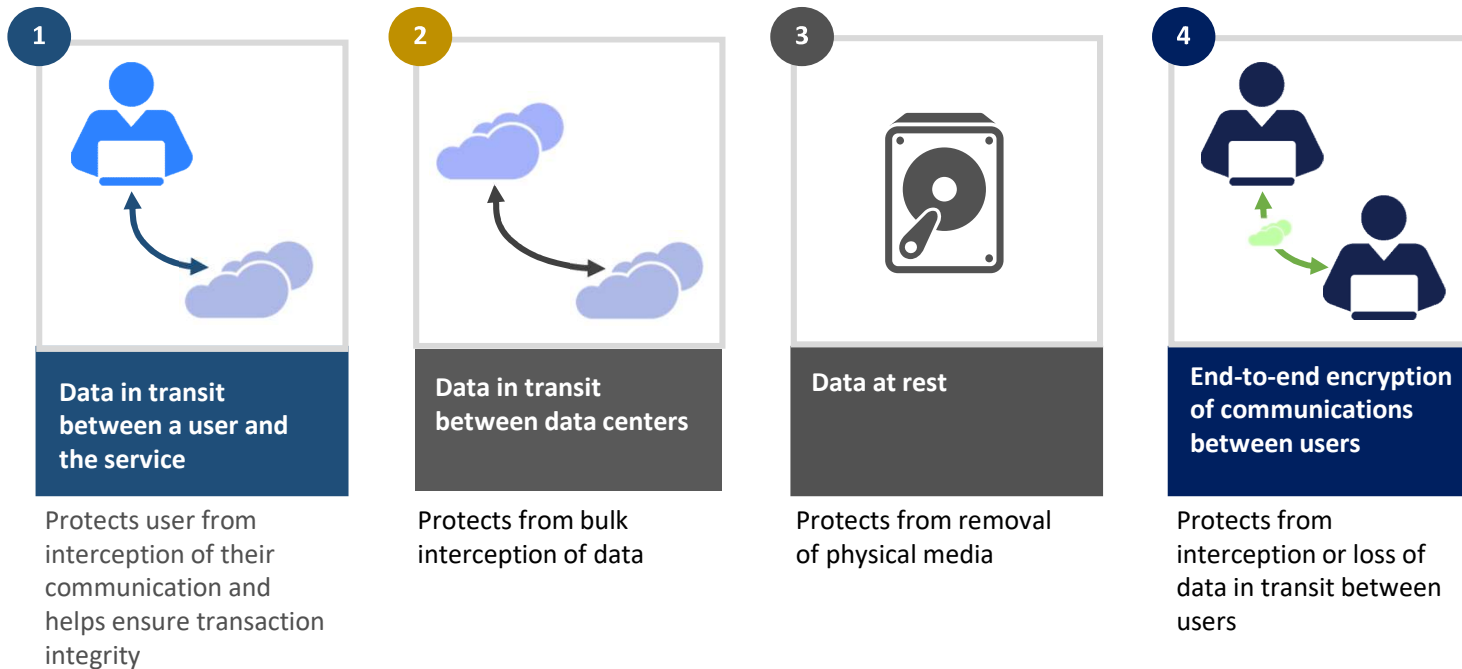
**Safety:** Secure, encrypted in-transit and at-rest

**Privacy:** certified against worldwide standards

# Data Security



We protect your data at stages with 2048-bit encryption



# Data Privacy



Compliant and certified with worldwide privacy standards

## Microsoft Azure

ISO/IEC 27018



SAS 70/ SSAE / SOC 1 / SOC 2



(Type II)

FedRAMP



HIPAA BAA



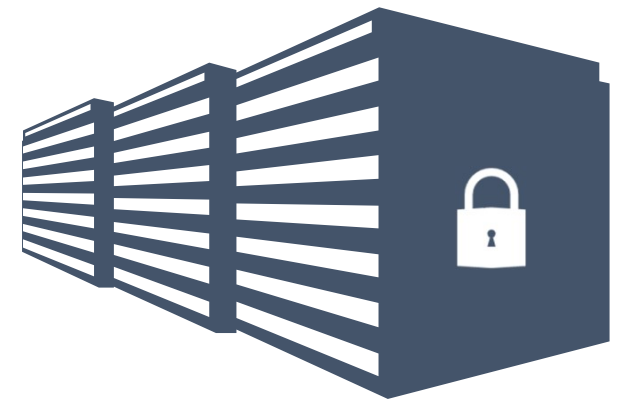
EU-Model Clauses / Safe Harbor



UK G-Cloud/IL2



PCI DSS



More certification information is available at the [Azure Trust Center](#).

Microsoft is recognized as a leader in Public Cloud

94

New Product features/ functionality released over the last 12 months



[Magic Quadrant for Cloud Infrastructure as a Service \(IaaS\)](#)



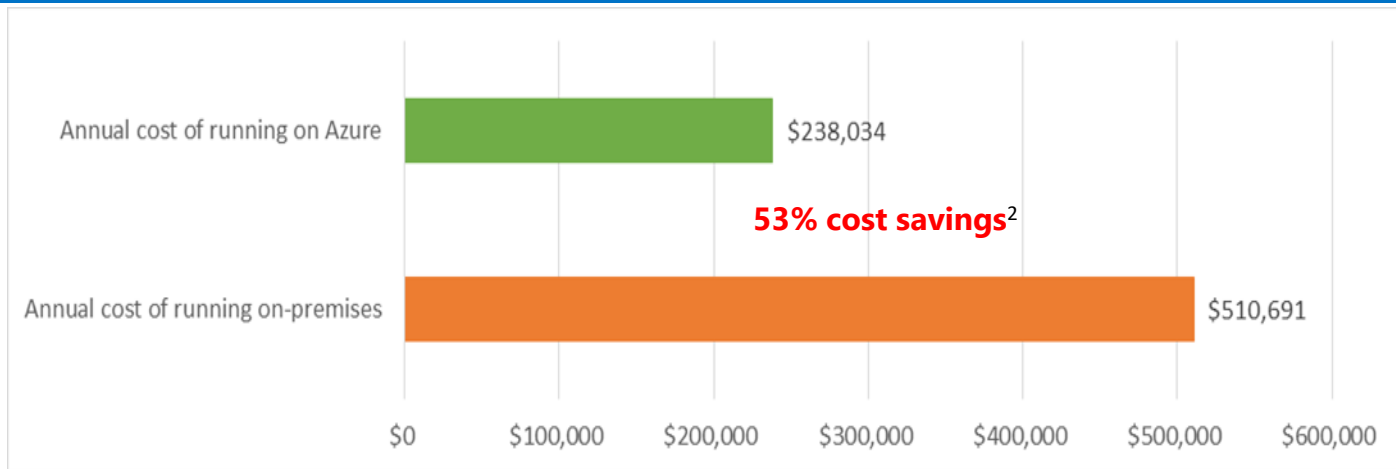
[Magic Quadrant for Enterprise Application Platform as a Service \(PaaS\)](#)



Source: Gartner (July 2014)

[Magic Quadrant for Public Cloud Storage Services](#)

# Relative Cost Analysis - Example



## Azure Services

- 55 VMs: 20 medium, 22 extra large, 13 A7
- 35 TB LR storage
- 35 TB zone 1 egress, 5 VPN connections

## On-premises DC cost breakdown

|                             |           |
|-----------------------------|-----------|
| Annual hardware expense     | \$371,774 |
| Annual software expense     | \$89,200  |
| Annual power expense        | \$10,913  |
| Annual administration costs | \$11,638  |
| Annual DC facility expenses | \$27,166  |
| Total                       | \$510,691 |

## Azure cost breakdown

|                          |           |
|--------------------------|-----------|
| Annual Azure VMs expense | \$172,071 |
| Annual storage expense   | \$21,462  |
| Annual egress expense    | \$36,792  |
| Annual admin expense     | \$6,110   |
| Annual other expenses    | \$1,599   |
| Total                    | \$238,034 |



## USE-CASE: COST EFFECTIVE **BACKUP & DISASTER RECOVERY**



Marquette didn't have an effective disaster recovery process because of the high cost and IT time required. But after upgrading to Windows Server 2012 R2, which includes enhanced replication management and works with Azure Site Recovery, Marquette created a cost-effective solution that can recover critical workloads in minutes rather than hours.

### University Gains Cost-Effective Disaster Recovery Solution with Software Upgrade

- Situation** Marquette University needed a reliable, fast, and cheap disaster recovery solution
- Solution** The university leveraged Windows Server 2012 and Azure to set up automatic, remote data backup
- Benefits**
- Reduced costs
  - Highly automated solution
  - Assurance that data and systems can be quickly and reliably recovered



"We needed a stronger disaster recovery process. We've had some near-disasters in the past that were a real pain to recover from. We needed a real disaster recovery solution that was compatible with our budget—and our staffing bandwidth."

**Anthony Ciske**  
*Windows Administrator*

## USE CASE: STORAGE AND DISASTER RECOVERY

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By adopting a hybrid cloud storage solution from Microsoft, the Catholic District School Board of Eastern Ontario saved US\$30,000, gained unlimited storage scalability, achieved better disaster recovery, and improved storage performance.

### School District Saves \$30,000, Improves Disaster Recovery with Hybrid Cloud Storage

|                  |  |
|------------------|--|
| <b>Situation</b> | Cost-effectively expand storage and improve storage performance  |
| <b>Solution</b>  | Replace storage-area network with StorSimple from Microsoft, a cloud-integrated solution that interoperates with Windows Azure   |
| <b>Benefits</b>  | <ul style="list-style-type: none"><li>○ Cost-effective scalability, cost avoidance of US\$30,000</li><li>○ Faster, more complete disaster recovery</li><li>○ Storage performance doubled</li></ul> |



Transform the  
data center

"With the Microsoft hybrid cloud storage solution, we have unlimited storage capacity through Windows Azure. StorSimple is the most impactful piece of hardware I've purchased in my 25 years in IT."

**James Proulx**

*Manager, Information and Communications Technology,  
Catholic District School Board of Eastern Ontario*

## USE CASE: CLOUD STORAGE **COST REDUCTION**



Curtin University

By moving to a Windows Azure cloud-based platform, Curtin has reduced data storage costs, simplified IT resource planning, streamlined development, and enabled exciting enhancements to its existing application.

### University Controls Costs, Streamlines IT, and Improves Education with Cloud Platform


















- |                  |   |
|------------------|---|
| <b>Situation</b> | Curtin University needed to replace its data repository with a less-expensive system that is easier to scale and manage.  |
| <b>Solution</b>  | The university has moved its locally hosted storage and computing resources to the cloud-based Windows Azure platform.  |
| <b>Benefits</b>  | <ul style="list-style-type: none"><li>○ Reduced data storage costs and simplified IT planning.</li><li>○ Enhanced learning resources.</li><li>○ More agile development.</li></ul> |



"Because we can use and pay for Windows Azure storage on demand, as we need it, it's easy to meet our ever-increasing capacity needs and predict what our ongoing costs will be."

**Heath Wilkinson**  
*Director of Business Systems*

# Cloud Practice

|                                       | Solution Offerings  | National Cloud Team or Area                      |  |
|---------------------------------------|---|--|--|
| <b>Consulting / Advisory Services</b> | <ul style="list-style-type: none"> <li>Multi-Cloud Assessment</li> <li>Multi-Cloud Design, Migration and Implementation Services</li> <li>Application Migration</li> </ul>                      | National Cloud Team and/or Area Cloud Team       |  <br>    |
| <b>Cloud Services Brokerage</b>       | <ul style="list-style-type: none"> <li>Cloud Management &amp; Orchestration</li> <li>Subscription Management &amp; Billing</li> <li>Custom Software Development</li> <li>DevOps/PaaS</li> </ul> | National Cloud Team and/or Area Cloud Team       |   <br>            |
| <b>Cloud Security / Governance</b>    | <ul style="list-style-type: none"> <li>Cloud Security Assessment</li> <li>Cloud Governance/Compliance</li> <li>Cloud Security Services</li> </ul>   | National Security Team and/or Area Security Team |  <br>  |
| <b>Cloud Managed Services</b>         | <ul style="list-style-type: none"> <li>Multi-Cloud Managed Services</li> </ul>  | Presidio Managed Services                        |  <br>   |

# CLOUD CAPABILITIES



## Migration Assistance & Managed Services

- Application Assessments
- Application Migration Consulting
- Migration project plan and execution
- Post migration testing / QA
- AWS Managed Services
- 24x7x365 monitoring
- Rapid scaling & deployment



## Automation & Integration

- Applications and Scripts
  - automating and simplifying repetitive tasks
- API Integration
  - Traditional software architecture to a micro service approach
- Automate All with code!
  - Networking, Infrastructure, Databases, etc.



## DevOps

### QUALITY CODE FASTER & MORE CONSISTENTLY

- Software Dev Life Cycle
- Source Control
- Automated Builds
- Continuous Integration
- Continuous Deployment
- Release Management
- Infrastructure as Code
- Configuration Mgmt
- Agile Software Dev



## Contact Center

- Amazon Connect Launch Partner
- 130+ Engineers/SA's trained on Amazon Connect
- 1 of only 3 authorized Amazon Connect resellers
- \$100M+ annually in Contact Center revenue



## Cloud Concierge

- Cloud Consumption Analytics
- Cloud Optimization Services for AWS
- Billing & Financial Management
- Hybrid Cloud Analytics
- Presidio Managed Cloud
  - Hybrid Cloud Brokerage
- Hybrid Cloud Marketplace



# TOOLBOX

## PRESIDIO CLOUD TEAM TOOLBOX

- Assessments: RISC Networks CloudScape, CloudHealth, Sr. Architects
- Migrations: Veeam, Zerto, AWS Simple Migration Service, AWS Database Migration Service, etc.
- Automation: Cloudformation, Terraform, Puppet, Chef, Ansible, ServiceNow, etc..
- Development: App Refactoring, CI / CD, Software Development Life Cycle, etc.
- Monitor & Optimize: CloudHealth, DataDog & Turbonomic
- Security: AWS IAM & Config, Alertlogic, Cloud Passage, CloudLock, etc.



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# MIGRATIONS



## MIGRATION ASSISTANCE

- Detailed application assessment
- Detailed cloud environment diagram
- Identify opportunities to leverage PaaS/SaaS offerings
- Migration project plan and execution
- Post migration testing / QA
- Knowledge transfer, Documentation, and training



# APPLICATION MODERINZATION / PAASIFICATION



- Cloud native application design and cloud modernization utilizing heavy PaaS services
- Designing and building distributed systems running in the cloud
- Migrating and transforming legacy systems into modern micro service architectures
- Refactoring of code or services to take advantage of PaaS or SaaS cloud offerings where possible
- Automated stress testing and tuning



# DEVOPS



## RELEASING HIGH QUALITY CODE FASTER AND MORE CONSISTENTLY

- Software Development Life Cycle
- Source Control
- Automated Builds
- Unit, Integration, and UI Testing
- Continuous Integration
- Continuous Deployment
- Release Management
- Infrastructure as Code
- Configuration Management
- Agile Software Development
- Application / Infrastructure Monitoring & Health Checks
- Microservices
- Replatforming / PaaS



# THANK YOU

FIND OUT MORE



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