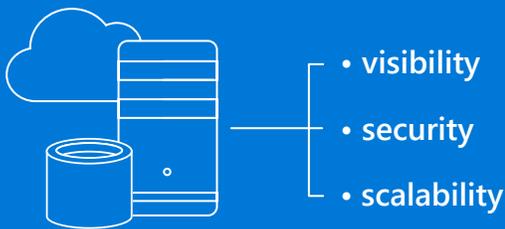


Creating order when data is everywhere

Well-managed data in hybrid cloud has tangible benefits



Companies that integrate their on-premises systems with hybrid cloud services may have to deal with duplicate information, unprotected customer records, and inconsistent data. Without a focused plan, the result is complex integration and disorganized business data. Critical information ends up spread out among different systems, virtual infrastructure, and cloud services. However, there are strategies that can help you avoid this data sprawl.

Reining in disorderly data is a multi-pronged approach

Organizing and controlling data requires significant and focused resources along with a skill set that many organizations just don't have. The tools to wrangle your data can be varied and confusing as well. Each on-premises platform may have its own toolset while cloud service providers often provide a custom vendor-built set of functions. This reduces your visibility into the state of your company's data.

Adopting the right hybrid cloud infrastructure can make all the difference. Almost two-thirds of companies have already adopted the hybrid path, while another 18 percent are pursuing a hybrid cloud strategy without realizing it, according to the Microsoft's State of the Hybrid Cloud 2017 survey.¹ Reclaiming order from your chaotic data starts with these steps:

1. [Create a strategy for the worst-case scenarios](#)
2. [Deliver business intelligence with confidence using a proven analytics engine](#)
3. [Enable analytics, deep learning, and intelligent applications across on-premises and cloud data with common templates and reusable R language support](#)
4. [Focus on data consistency to reap security benefits](#)

Read on to explore applying the above steps to your hybrid environment.



1. Create a strategy for the worst-case scenarios

Replicating data in a planned way results in high availability and the ability to recover from catastrophic IT disasters. Because of the nearly bottomless nature of cloud storage, companies have a greater ability to back up and protect their data in the cloud. The right solution will lower costs, offer bottomless cloud storage, and integrate with your on-premises applications without significant code changes.



2. Deliver business intelligence with confidence using a proven analytics engine

By connecting your on-premises systems to the right hybrid cloud infrastructure, you can create a single source of truth for business intelligence and insights using a proven analytics engine. The right tool should be able to analyze your data—both relational and non-relational—across environments with fully managed data warehouses and big data services in the cloud.



3. Enable analytics, deep learning, and intelligent applications across on-premises and cloud data with common templates and reusable R language support

By using extensible or open-source tools—such as R, Python, or another common data-analysis language—your company can take advantage of analytics, deep learning, and reusable code tailored to its needs. Using a common platform also allows for develop-once, run-anywhere tools and transportable skills. Structured and unstructured data can be analyzed from anywhere with a common set of tools.



4. Focus on data consistency to reap security benefits

A well-planned hybrid cloud infrastructure provides additional consistency and security as well. Data is no longer hidden on employees' systems or in little-used servers that are not regularly backed up. By maintaining a single, consistent data set and encrypting data, your company can satisfy security and compliance requirements.

Find solutions for managing your data in a hybrid cloud environment

[SQL Server on Windows or Linux](#) →

- Standardize your relational database

[Azure Database Services](#), → [including SQL Server Stretch Database](#) →

- Get support for MongoDB apps

[Azure Analysis Services](#) →

- Use on-premises analysis from SQL Server 2016 Analysis Services in the cloud

[Azure SQL Data Warehouse](#) →

[Azure HDInsight](#) →

[Azure Data Lake](#) →

- Maximize data integrity and availability

[Cortana Intelligence Suite](#) →

- Gain cognitive services with the extensible R language integrated into the database