

# Azure SQL Database Managed Instance – Discovery Hub<sup>®</sup>

Modernize Your Data Estate to Modernize Your Business

By Tobias Eld | September 2018

The release of Azure SQL Database Managed Instance marks an important step for companies implementing an Information Data Estate on the Microsoft Azure stack. Managed Instance represents the latest innovation in the relational database space in Azure. It is a single tenant service with full PaaS capabilities and brings important improvements to redundancy, security and compliance while allowing more control with dedicated compute and storage resources.

## Environment Control

In a typical analytical environment founded on a relational database, there are some very specific strains put on the compute and storage components that are not normally seen in an online transaction processing (OLTP) configuration. This ranges from the loading of extremely large datasets with multiple read, write and update statements passed against a table to extended queries combining multiple tables. Managed Instance provides significantly more granular environment configuration options which, in turn, allows for more precise configuration providing the best possible performance of your Information Data Estate in these scenarios.

Leveraging these granular environment control capabilities to build the best platform for Discovery Hub<sup>®</sup>, allows for even greater capacity while building and populating your Information Data Estate with some of our customers achieving performance improvements of up to 65%, while reducing the overall cost by 49%.



## Security and Compliance

Managed Instance provides near full-feature parity with SQL on-premises. This is especially meaningful for security and compliance purposes – VNet deployment and all private IP addresses ensures full control of access to the data. Single tenancy has a significant impact, and for many companies, this addresses one of the main compliance hurdles for moving to a full PaaS Data Infrastructure.

Our focus from a compliance perspective, as we worked with the support of Azure SQL Database Managed Instance, has been to automate the documentation of the solution. Our documentation gives you the ability to visualize the full data lineage of any data item, and importantly which data resides where, and how it has been categorized.

This allows companies to create a complete overview of what data is used for, the types of data stored, where it resides, and whether it is “Personally Identifiable Information”, private, public or categorized otherwise.

## Feature Parity

Azure SQL Database Managed Instance provides near 100% likeness to SQL Server on-premises, giving you practically everything that has made SQL Server the preferred data platform for years, while getting the

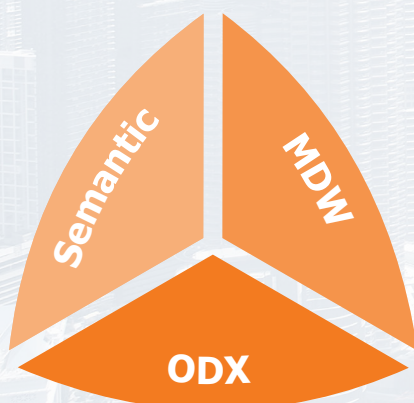
benefits of a full PaaS solution and the scaling that comes with it.

Features like Columnstore Indexing, that has long been a critical component of most analytics environments – and a host of other features that make your Information Data Estate more robust – can be deployed directly through Discovery Hub® to your Managed Instance environment. This gives you more flexibility and configurability in designing and building your Information Data Estate.

## Lift and Shift

Managed Instance provides a host of additional benefits and the service must be seriously considered by any organization that has decided to deploy a cloud-based Information Data Estate but moreover, should also be one of the first choices for any organization evaluating the modernization of their overall data estate.

The TimeXtender R&D team has worked closely with Microsoft to completely automate the process of lifting and shifting a Discovery Hub® built on an on-premises data estate to Azure SQL Database Managed Instance. This helps TimeXtender customers, who have deployed an on-premise solution, to modernize their data infrastructure, making sure that they get the full benefit of Azure SQL MI.



## Conclusion

The latest version of Discovery Hub® fully supports Azure SQL DB Managed Instance allowing us to leverage some of the great new features, seamlessly. Building an Information Data Estate using Discovery Hub® and Azure SQL Database Managed Instance gives you a solid foundation for any use case and data scenario from core analytics to deep learning and beyond.