



Azure SQL Data Warehouse

2019년 11월

1

Chapter

Azure SQL Data Warehouse

01 | The Fast, Flexible & Secure hub for all your data



Fast
Unlimited Scale

MPP to quickly run
complex queries on any
scale



Flexible
Fit your Needs

Optimize cost by scaling
compute and storage
independently

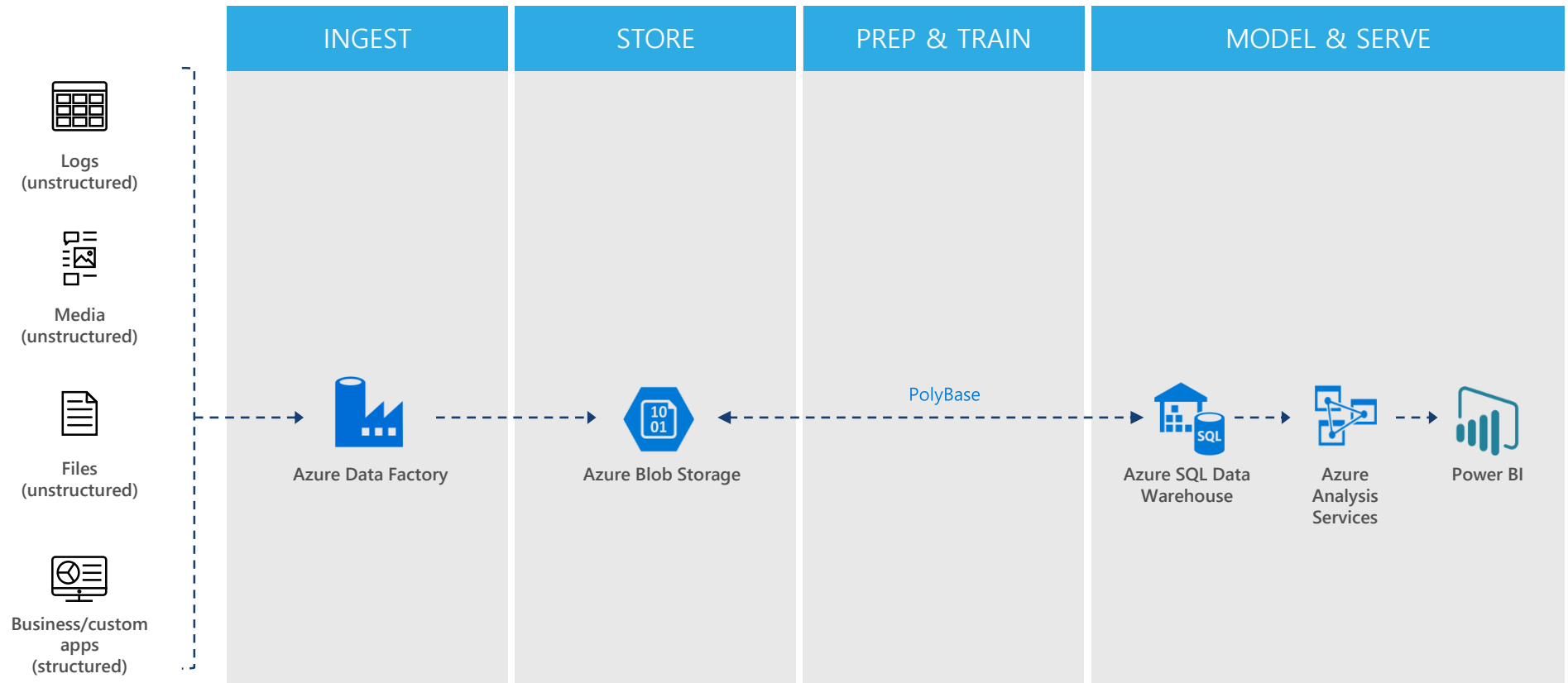


Trusted
Secure. Compliant.
Reliable.

Built-in advanced security
features including Encryption,
Audit, Threat Detection,
AAD and VNet

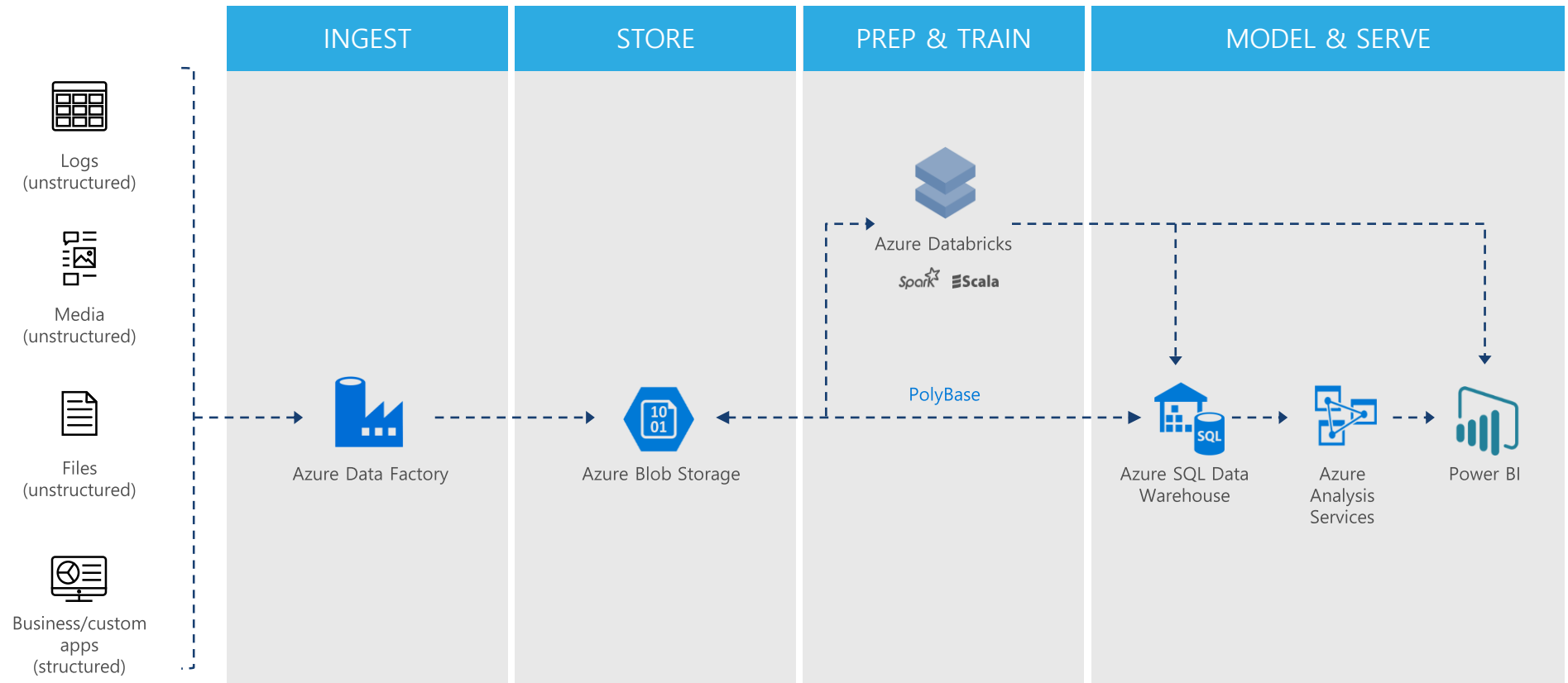
Seamlessly compatible across Microsoft and 3rd party services

02 | Cloud Data Warehouse



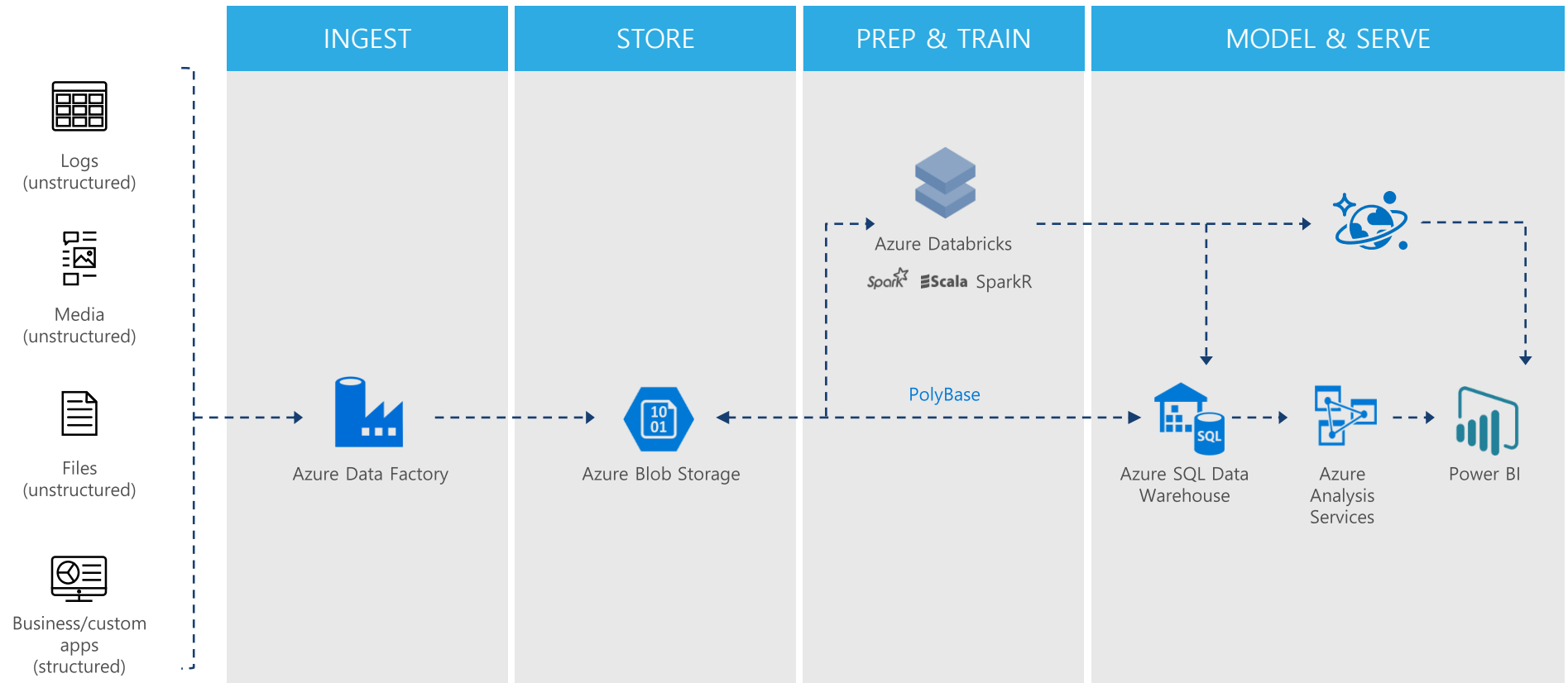
Microsoft Azure also supports other Big Data services like Azure HDInsight and Azure Data Lake to allow customers to tailor the above architecture to meet their unique needs.

03 | Modern Data Warehouse



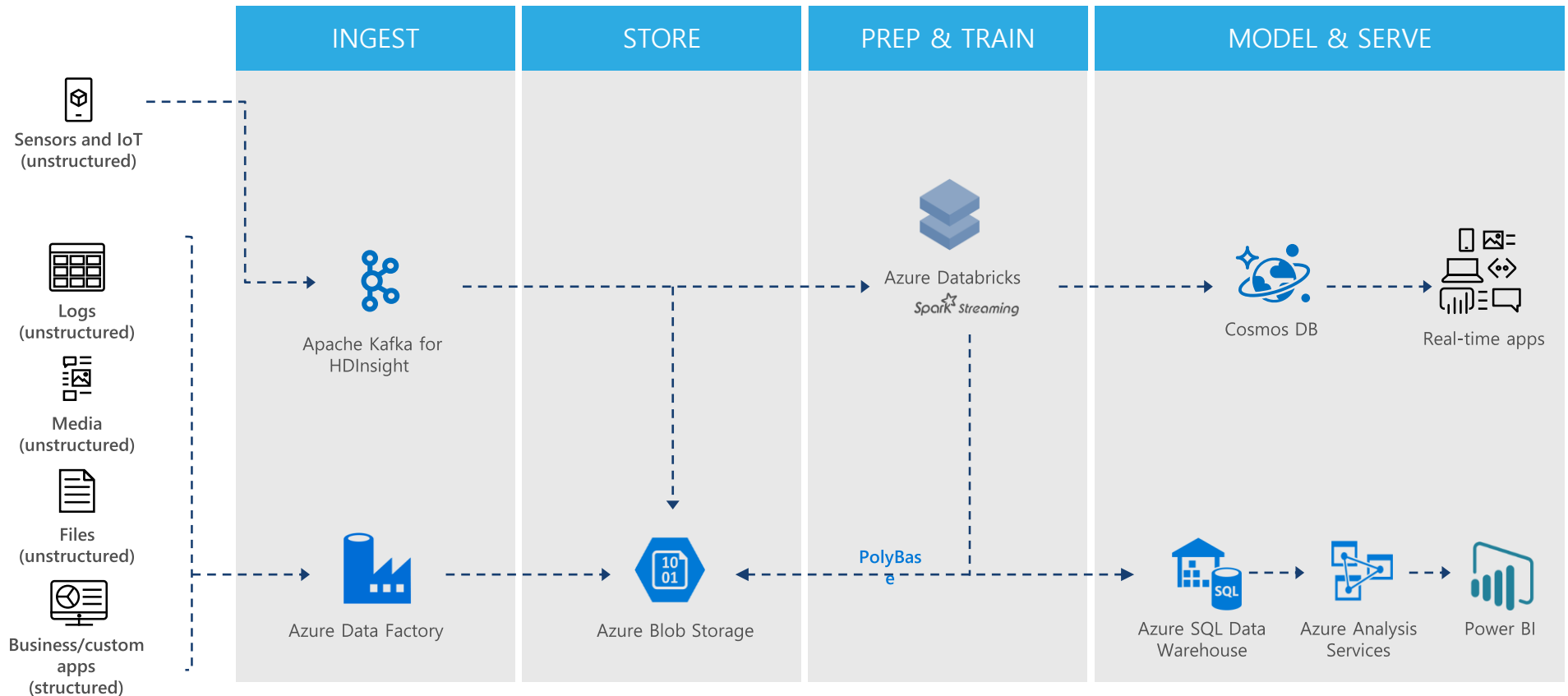
Microsoft Azure also supports other Big Data services like Azure HDInsight and Azure Data Lake to allow customers to tailor the above architecture to meet their unique needs.

04 | Advanced Analytics On Big Data



Microsoft Azure also supports other Big Data services like Azure HDInsight, Azure Machine Learning and Azure Data Lake to allow customers to tailor the above architecture to meet their unique needs.

05 | Real Time Analytics



Microsoft Azure also supports other Big Data services like Azure IoT Hub, Azure Event Hubs, Azure Machine Learning and Azure Data Lake to allow customers to tailor the above architecture to meet their unique needs.

2 Chapter

Azure SQL DW Architecture

01 | Logical Overview



Compute



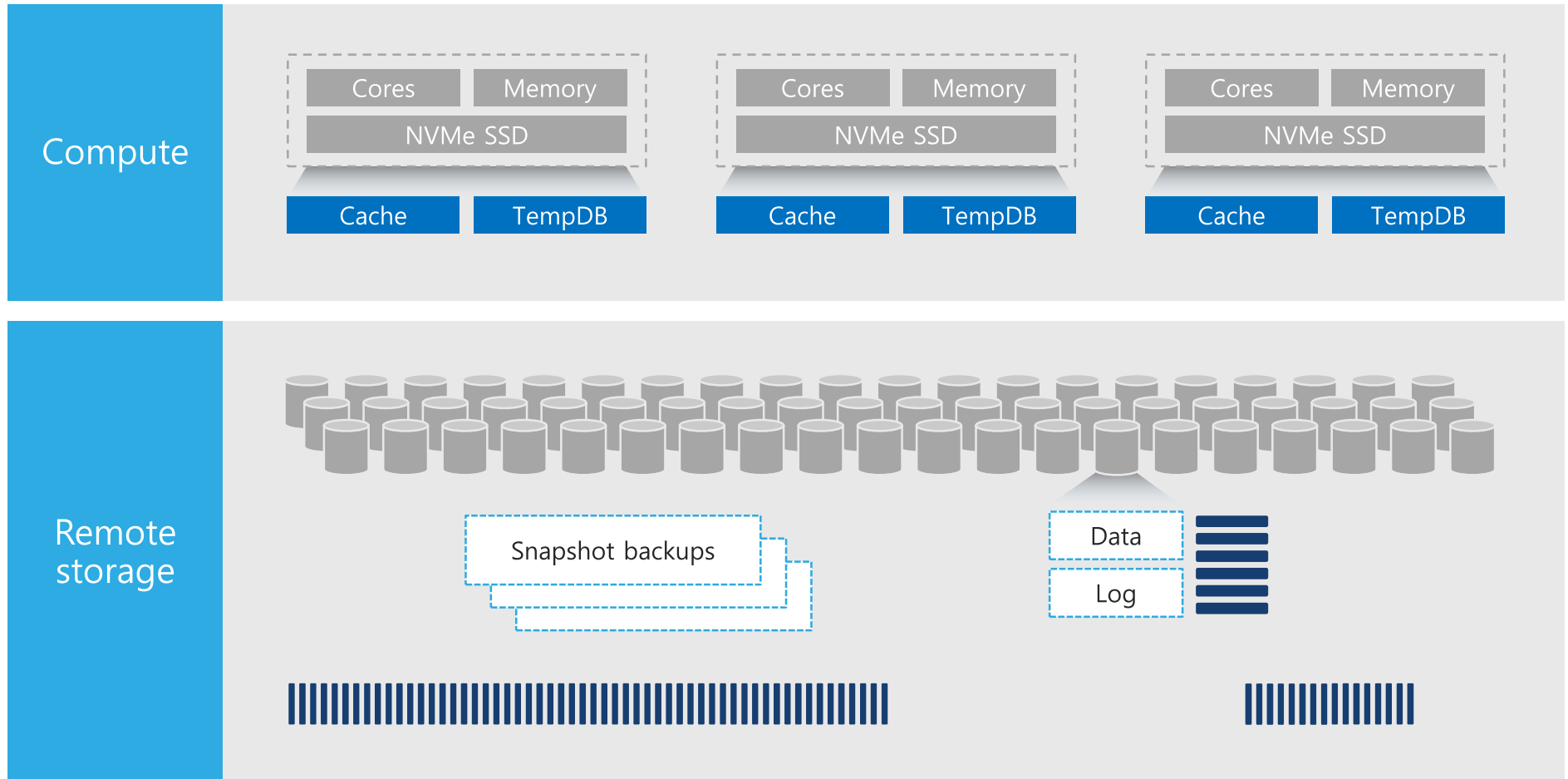
Control



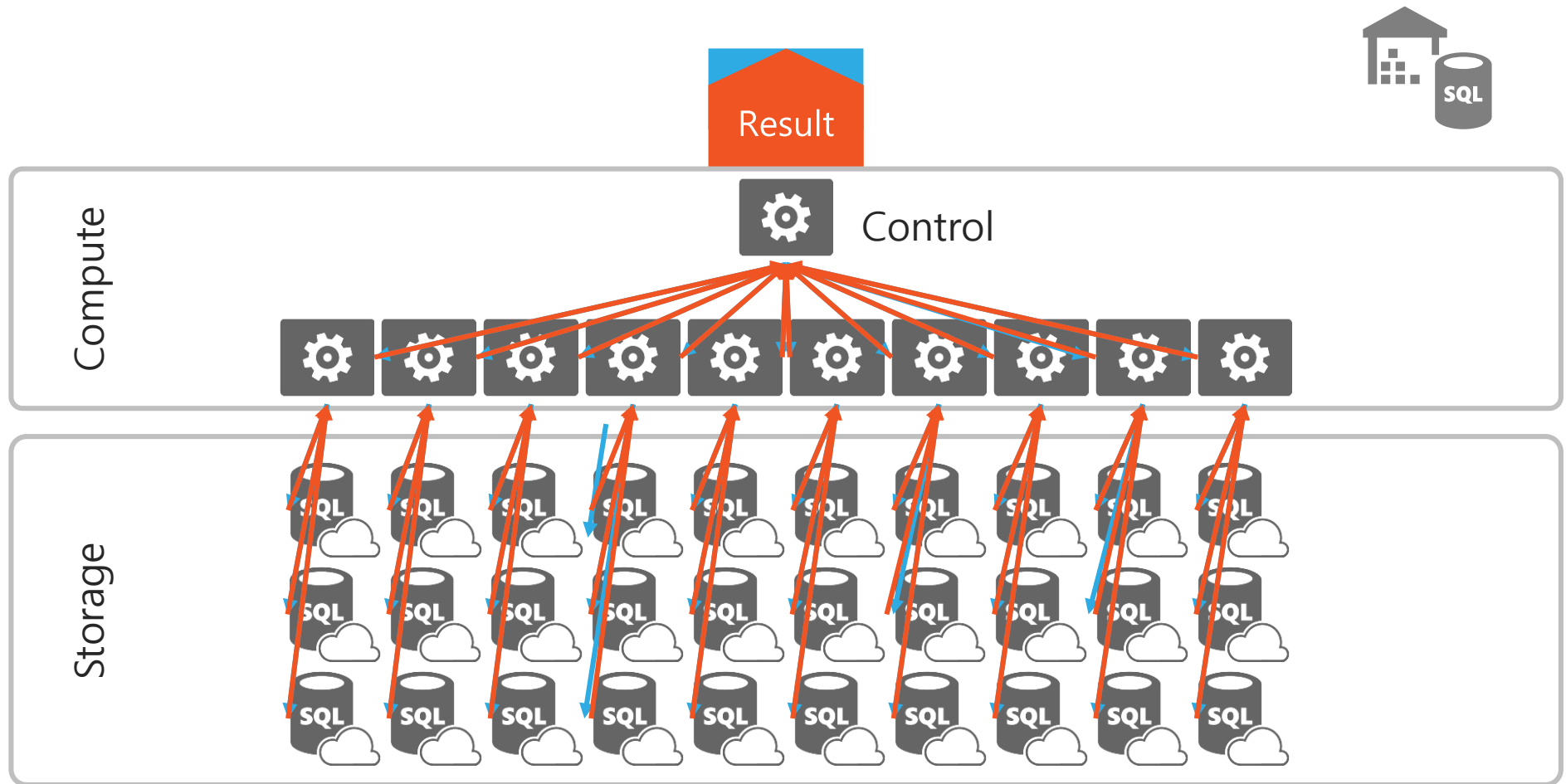
Storage



02 | Compute optimized Gen2 Architecture




03 | Distributed Queries




04 | Creating Tables

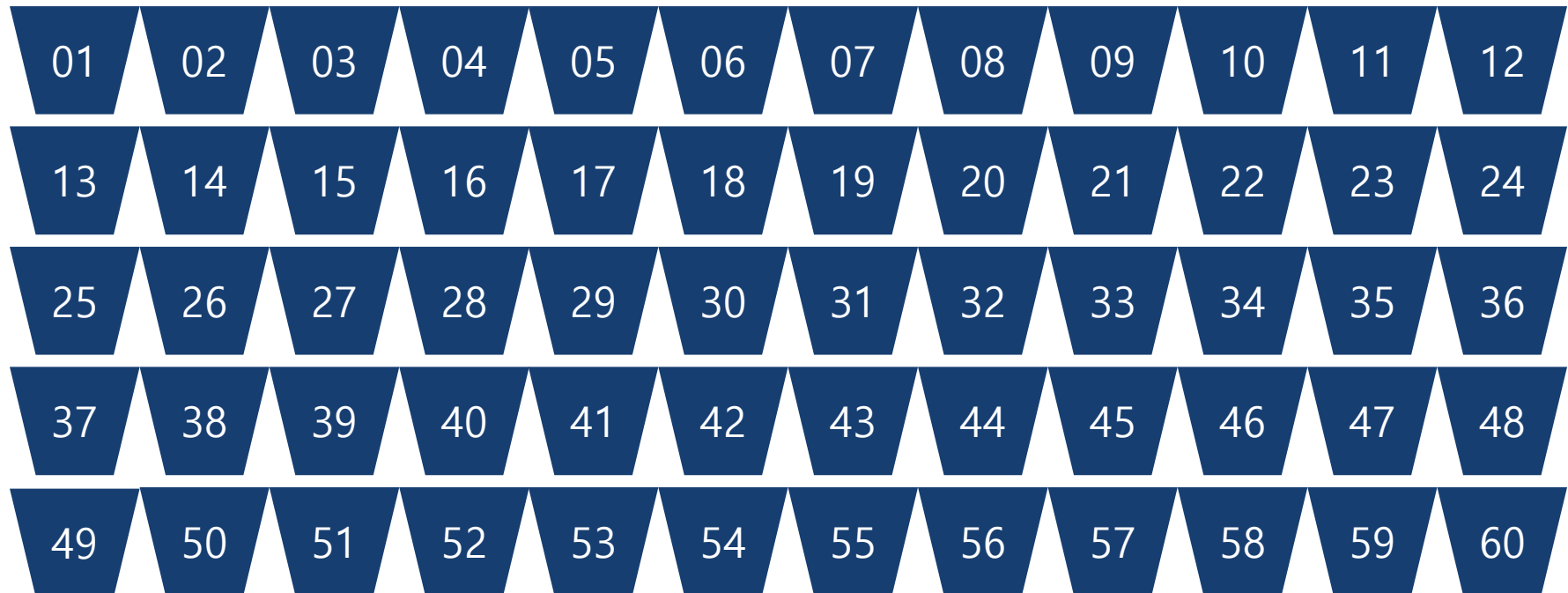
```
CREATE TABLE [build].[FactOnlineSales]
(
    [OnlineSalesKey]      int          NOT NULL
  , [DateKey]            datetime     NOT NULL
  , [StoreKey]           int          NOT NULL
  , [ProductKey]         int          NOT NULL
  , [PromotionKey]       int          NOT NULL
  , [CurrencyKey]        int          NOT NULL
  , [CustomerKey]        int          NOT NULL
  , [SalesOrderNumber]   nvarchar(20) NOT NULL
  , [SalesOrderLineNumber] int        NULL
  , [SalesQuantity]      int          NOT NULL
  , [SalesAmount]        money        NOT NULL
)
WITH
( CLUSTERED COLUMNSTORE INDEX
  , DISTRIBUTION = ROUND_ROBIN
)
;
```



```
CREATE TABLE [build].[FactOnlineSales]
(
    [OnlineSalesKey]      int          NOT NULL
  , [DateKey]            datetime     NOT NULL
  , [StoreKey]           int          NOT NULL
  , [ProductKey]         int          NOT NULL
  , [PromotionKey]       int          NOT NULL
  , [CurrencyKey]        int          NOT NULL
  , [CustomerKey]        int          NOT NULL
  , [SalesOrderNumber]   nvarchar(20) NOT NULL
  , [SalesOrderLineNumber] int        NULL
  , [SalesQuantity]      int          NOT NULL
  , [SalesAmount]        money        NOT NULL
)
WITH
( CLUSTERED COLUMNSTORE INDEX
  , DISTRIBUTION = HASH([ProductKey])
)
;
```

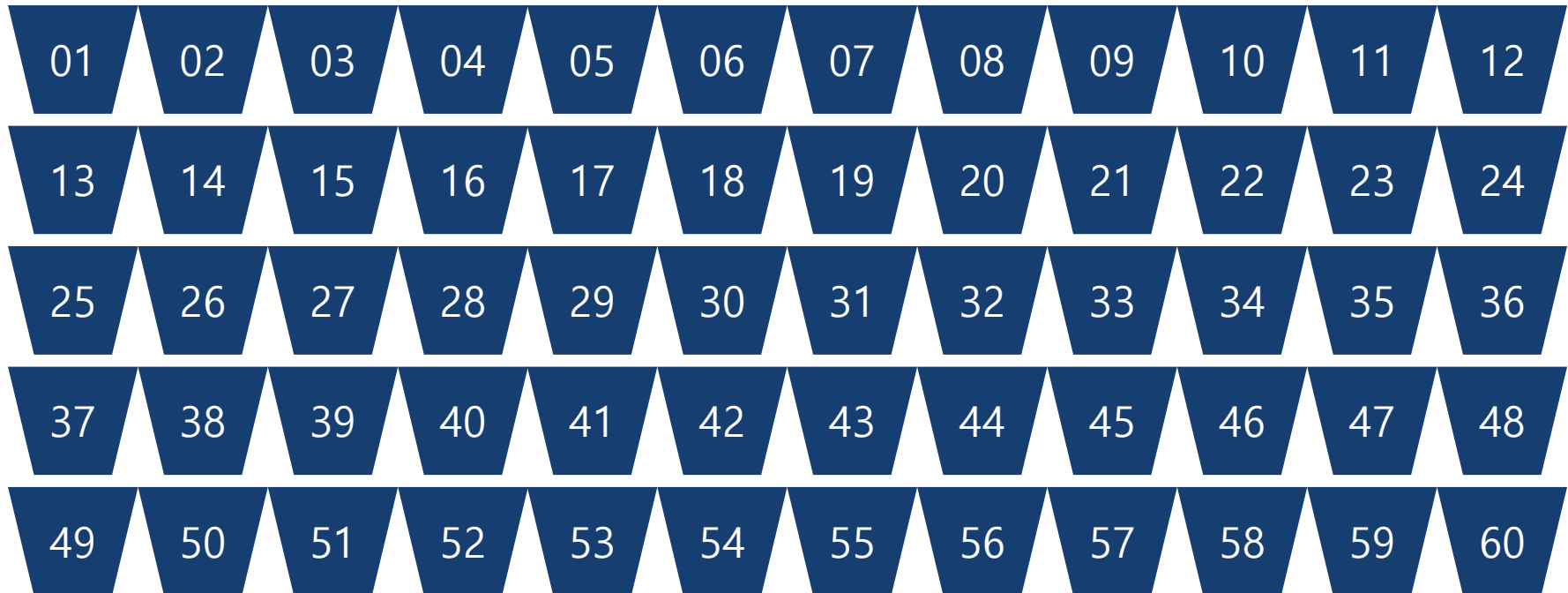


05 | Round Robin Distribution

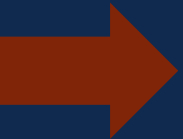


06 | Hash Distribution

HASH (03)

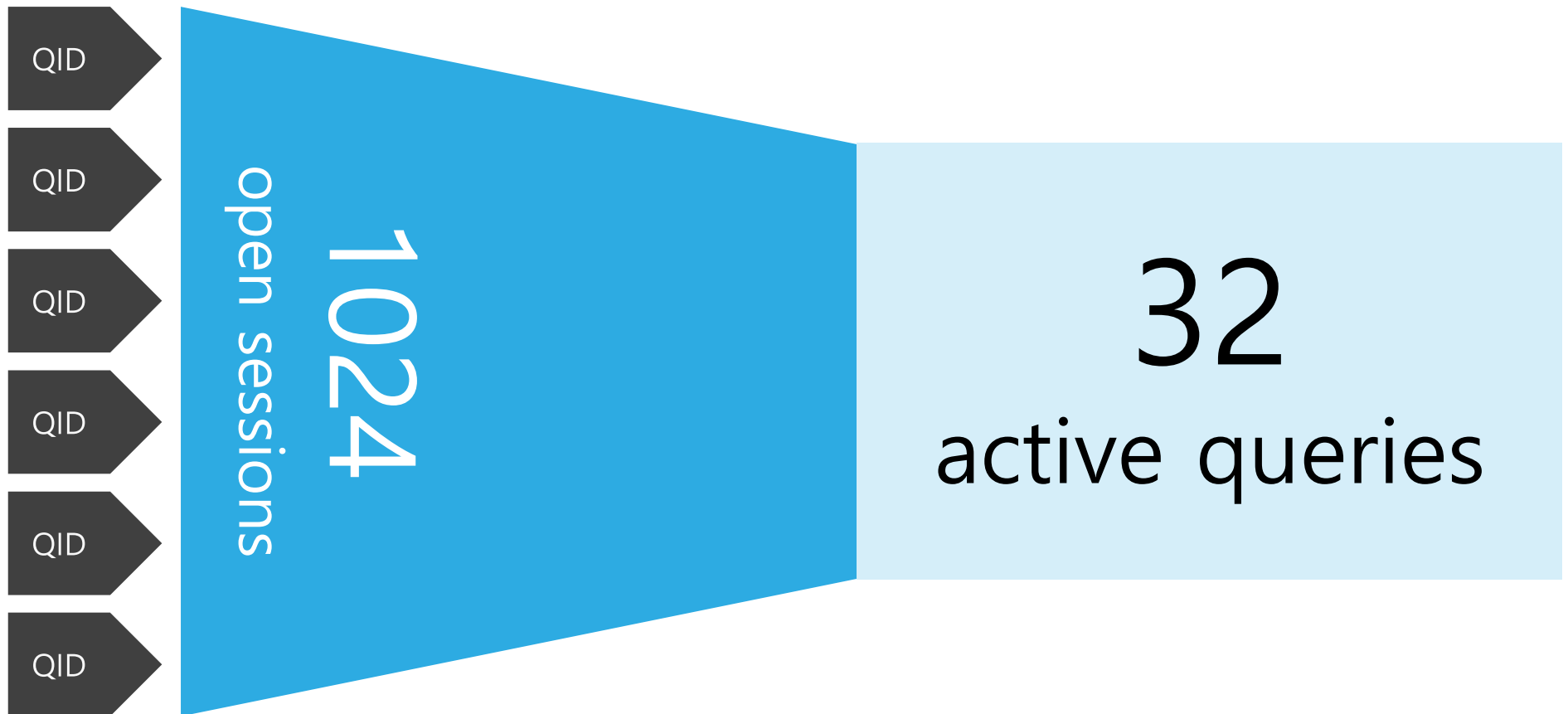


3 Chapter

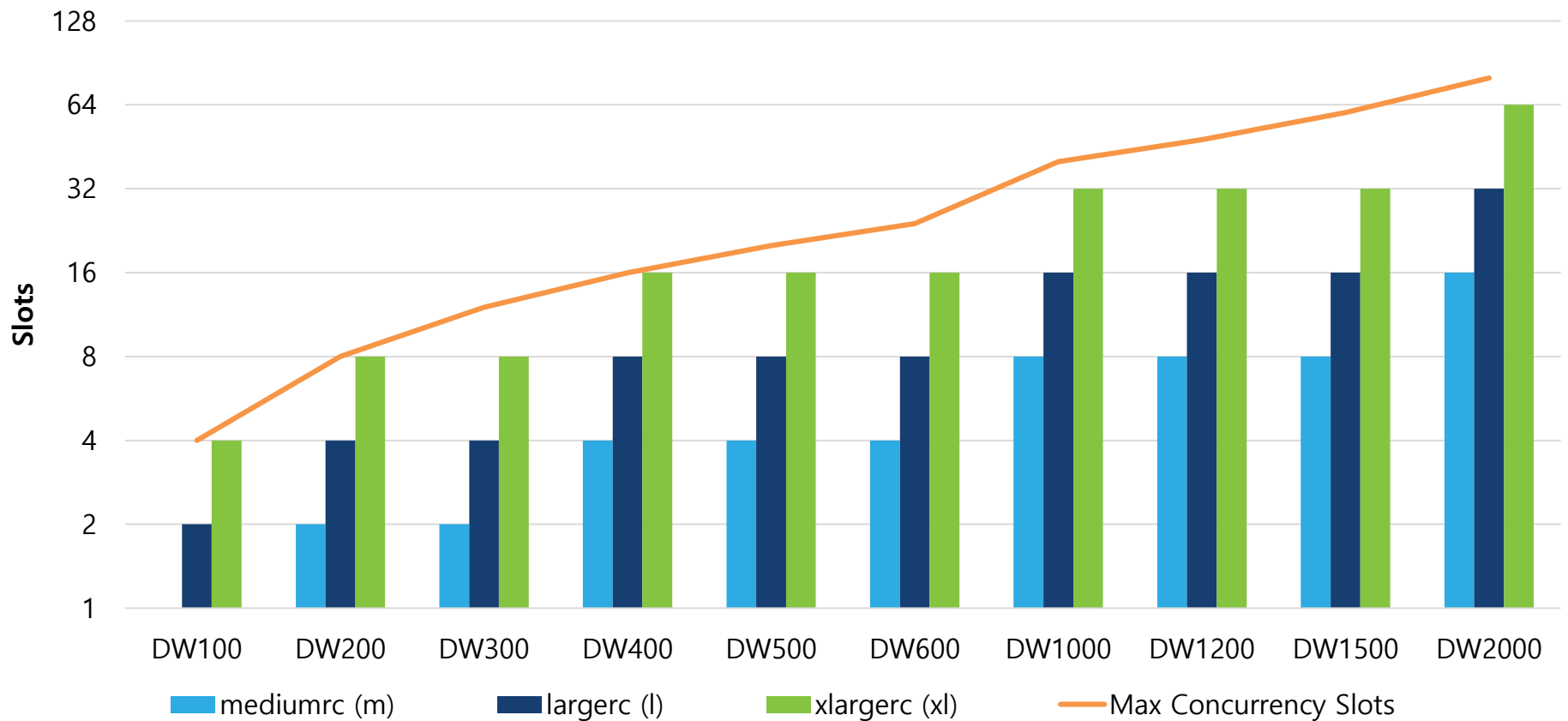


Azure SQL DW Concurrency

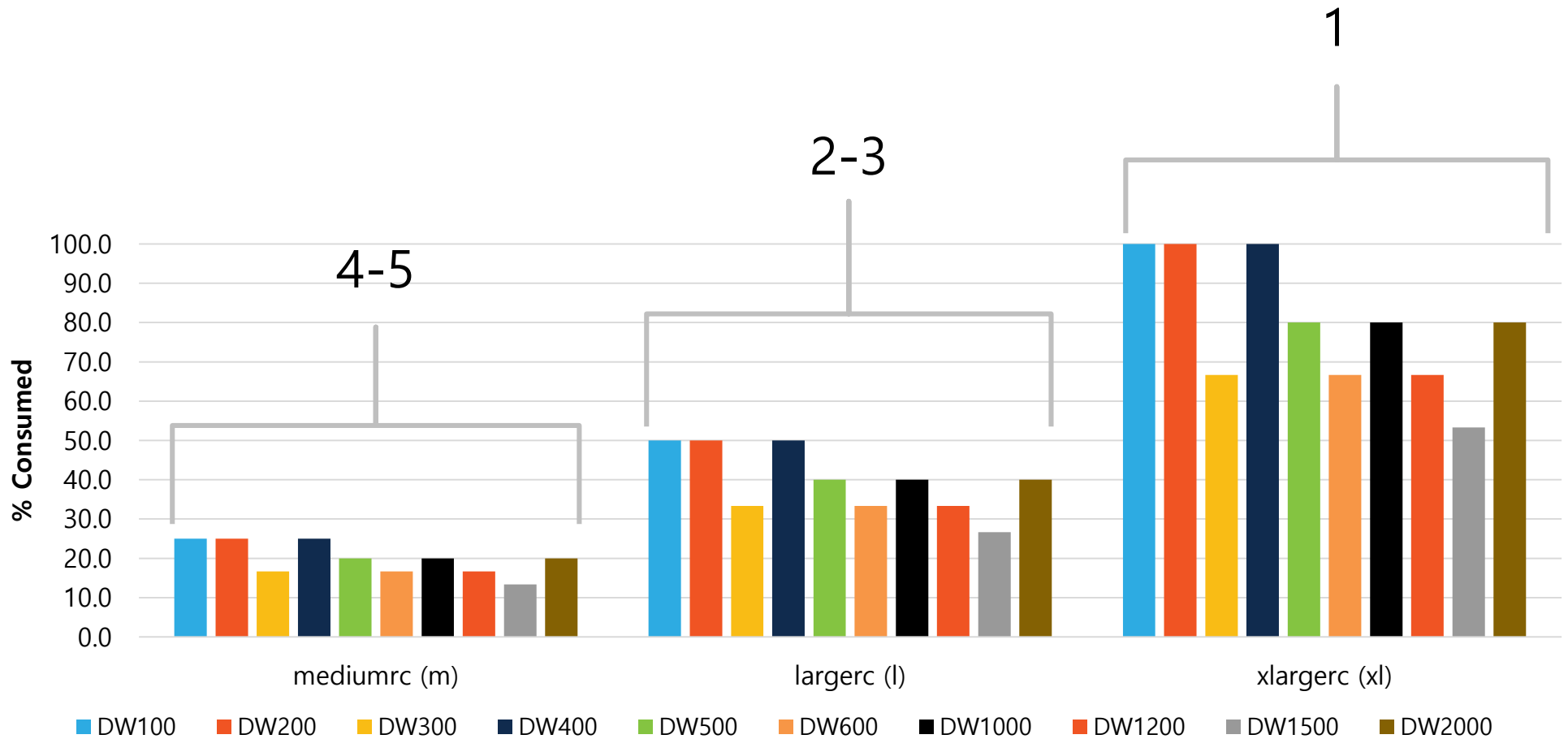
01 | Concurrency : Queries



02 | Concurrency : Slots



03 | Concurrency Slot Consumption



 데이터솔루션

데이터로
새로운 세상을 그린다.

Thank you

