04 | Using Set Operators

Graeme Malcolm | Senior Content Developer, Microsoft
Geoff Allix | Principal Technologist, Content Master

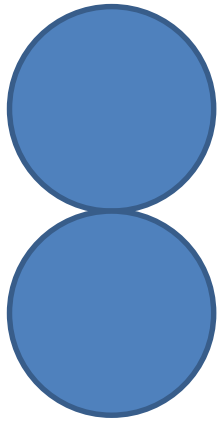
Module Overview

- What are UNION Queries?
- What are INTERSECT Queries?
- What are EXCEPT Queries?

What are UNION Queries?

- UNION returns a result set of distinct rows combined from all statements
- UNION removes duplicates during query processing (affects performance)
- UNION ALL retains duplicates during query processing

```
-- only distinct rows from both queries are returned
SELECT countryregion, city FROM HR.Employees
UNION
SELECT countryregion, city FROM Sales.Customers;
```



UNION Guidelines

- Column aliases
  - Must be expressed in first query
- Number of columns
  - Must be the same
- Data types
  - Must be compatible for implicit conversion (or converted explicitly)

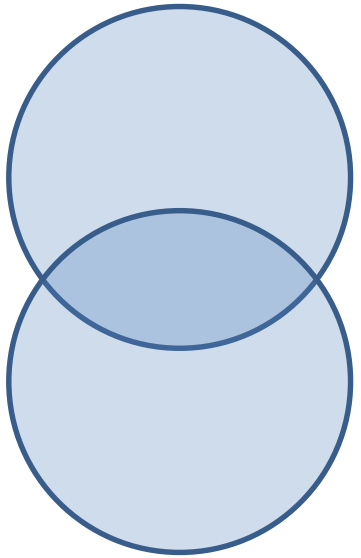
DEMO

Creating UNION Queries

What are INTERSECT Queries?

- INTERSECT returns only distinct rows that appear in both result sets

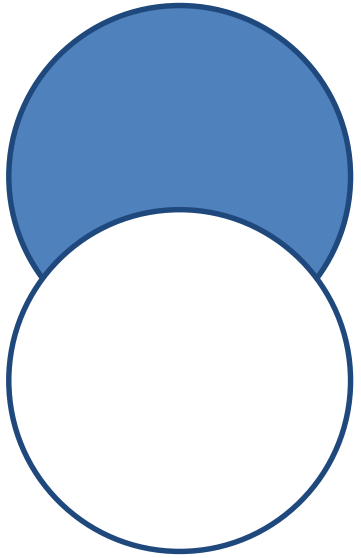
```
-- only rows that exist in both queries will be returned
SELECT countryregion, city FROM HR.Employees
INTERSECT
SELECT countryregion, city FROM Sales.Customers;
```



What are EXCEPT Queries?

- EXCEPT returns only distinct rows that appear in the first set but not the second
  - Order in which sets are specified matters

```
-- only rows from Employees will be returned
SELECT countryregion, city FROM HR.Employees
EXCEPT
SELECT countryregion, city FROM Sales.Customers;
```



DEMO

Demo: Creating INTERSECT and EXCEPT Queries

Using Set Operators

- What are UNION Queries?
- What are INTERSECT Queries?
- What are EXCEPT Queries?

- Lab: Using Set Operators

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