

Reading Query Plans



Erin Stellato

PRINCIPAL CONSULTANT

@erinstellato www.sqlskills.com/blogs/erin



Module Overview



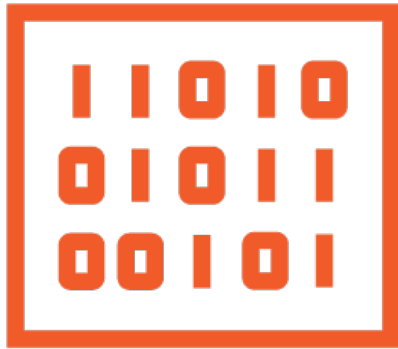
Understand what a plan represents

Methods for reading query plans

Initial information to review in plan



What is a plan?



SQL Server Optimizer



Logical operations
transformed to
physical operations

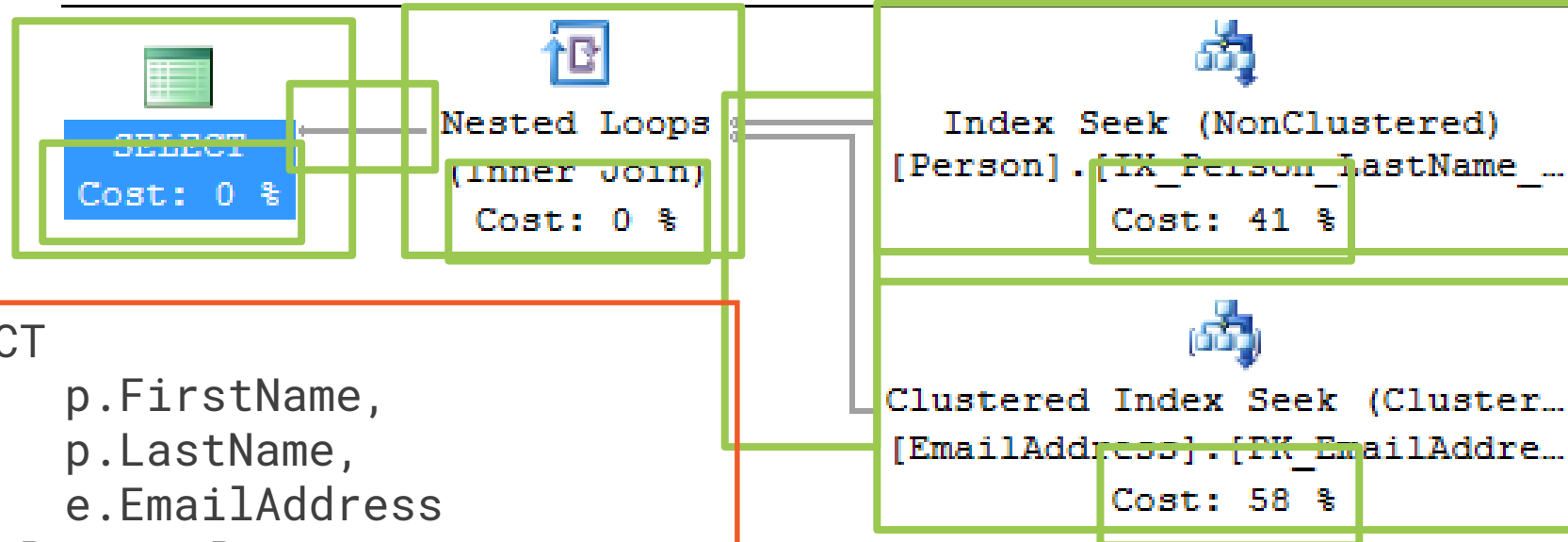


Query plan

What's in a Plan?

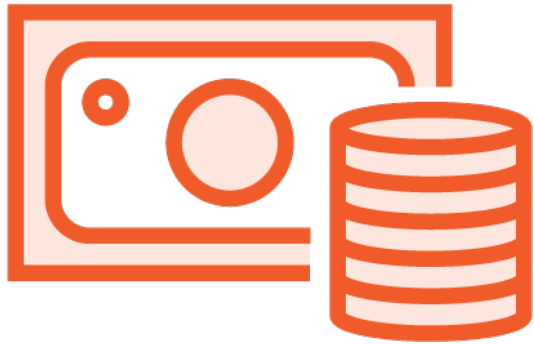
Query 1: Query cost (relative to the batch): 100%

SELECT p.FirstName, p.LastName, e.EmailAddress FROM Person.Per



```
SELECT
    p.FirstName,
    p.LastName,
    e.EmailAddress
FROM Person.Person p
JOIN Person.EmailAddress e
    ON p.BusinessEntityID =
       e.BusinessEntityID
WHERE p.LastName LIKE 'Whit%';
```





Cost *used* to equate to elapsed time in seconds required to run on a specific Microsoft employee's machine

“Cost” today in the context of query plans is a unit-less measure

Cost is *always* an estimate

What is *not*
in a plan?

Query duration

I/O information*

Locks

Wait statistics

Actual cost



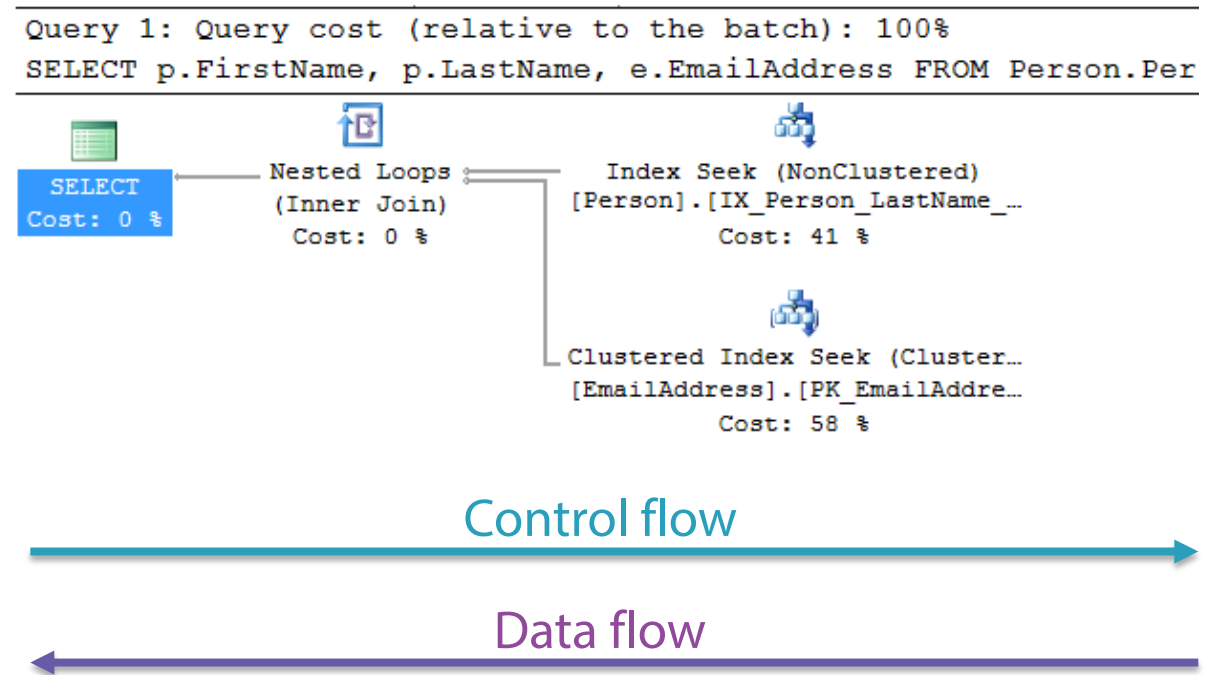
Unless you capture the actual execution plan, the numbers you see in a plan are estimates



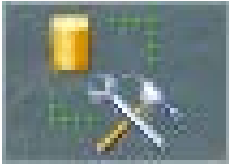
Reading Plans

Control flow starts at
the root operator

Data flow starts at
the leaf level



How Do You Find Information in a Plan?



**Graphical
Plan**



**Plan
Explorer**

Demo



How to Start Looking at a Query Plan



What We Covered



Understand what a plan represents

Methods for reading query plans

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