RAPORT INDEKSY

Zapytanie z otwartymi zleceniami serwisowymi

```
o.Id,
o.OrderNumber,
o.OpenedAt,
o.CustomerNameSnapshot,
o.RegistrationNumberSnapshot,
s.Name AS StatusName
FROM dbo.ServiceOrders AS o
INNER JOIN dbo.OrderStatuses AS s
ON s.Id = o.StatusId
WHERE s.Name <> N'Completed'
ORDER BY o.OpenedAt DESC;
```

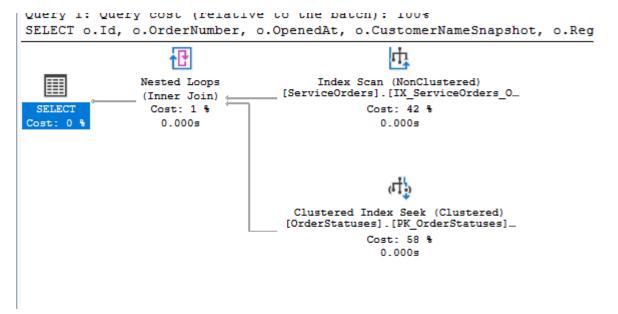
Bez indeksu

```
Query 1: Query cost (relative to the batch): 100%
SELECT o.Id, o.OrderNumber, o.OpenedAt, o.CustomerNameSnapshot, o.RegistrationNumberSnapshot, s.Name AS Sta
                                                                                              ďψ
                                                            A↓
                                                                             Clustered Index Scan (Clustered)
[ServiceOrders]..[PK_ServiceOrders]...
                   Nested Loops
                                                           Sort
                   (Inner Join)
                                                        Cost: 59 %
                    Cost: 0 %
                                                                                          Cost: 17 %
                                                          0.000s
                      0.000s
                                                                                            0.000
                                                            (H)
                                           Clustered Index Seek (Clustered) [OrderStatuses].[PK_OrderStatuses]
                                                        Cost: 24 %
                                                          0.000s
```

| Physical Operation | Sort |
|--|----------|
| Logical Operation | Sort |
| Actual Execution Mode | Row |
| Estimated Execution Mode | Row |
| Actual Number of Rows for All Executions | 9 |
| Actual Number of Batches | 0 |
| Estimated I/O Cost 0, | 0112613 |
| Estimated Operator Cost 0,0114 | 06 (59%) |
| Estimated Subtree Cost 0, | 0146979 |
| Estimated CPU Cost 0, | 0001448 |
| Estimated Number of Executions | 1 |
| Number of Executions | 1 |
| Estimated Number of Rows for All Executions | 9 |
| Estimated Number of Rows Per Execution | 9 |
| Estimated Row Size | 261 B |
| Actual Rebinds | 1 |
| Actual Rewinds | 0 |
| Node ID | 1 |
| Output List | |
| [WorkshopDb].[dbo].[ServiceOrders].ld: [WorkshopDb].[dbo]. | |
| [ServiceOrders].OrderNumber: [WorkshopDb].[dbo]. | |
| [ServiceOrders].StatusId; [WorkshopDb].[dbo]. | |
| [ServiceOrders].OpenedAt; [WorkshopDb].[dbo]. | |
| [ServiceOrders].CustomerNameSnapshot; [WorkshopDb].[dbo | 1. |
| [ServiceOrders].RegistrationNumberSnapshot | |
| Order By | |
| [WorkshopDb],[dbo],[ServiceOrders],OpenedAt Descending | |

| Clustered Index Scan (Clustered) | | | |
|--|---|--|--|
| Scanning a clustered index, entirely or only a range. | | | |
| | | | |
| Physical Operation | Clustered Index Scan | | |
| Logical Operation (| Clustered Index Scan | | |
| Actual Execution Mode | Row | | |
| Estimated Execution Mode | Row | | |
| Storage | RowStore | | |
| Actual Number of Rows for All Executions | 9 | | |
| Actual Number of Rows Read | 9 | | |
| Actual Number of Batches | 0 | | |
| Estimated Operator Cost | 0,0032919 (17%) | | |
| Estimated I/O Cost | 0,003125 | | |
| Estimated CPU Cost | 0,0001669 | | |
| Estimated Subtree Cost | 0,0032919 | | |
| Number of Executions | 1 | | |
| Estimated Number of Executions | 1 | | |
| Estimated Number of Rows to be Read | 9 | | |
| Estimated Number of Rows for All Executions | 9 | | |
| Estimated Number of Rows Per Execution | 9 | | |
| Estimated Row Size | 261 B | | |
| Actual Rebinds | 0 | | |
| Actual Rewinds | 0 | | |
| Ordered | False | | |
| Node ID | 2 | | |
| | | | |
| Object | | | |
| [WorkshopDb].[dbo].[ServiceOrders].[PK_ServiceOrders] | [o] | | |
| Output List | | | |
| [WorkshopDb].[dbo].[ServiceOrders].ld; [WorkshopDb].[dbo]. | | | |
| [ServiceOrders].OrderNumber; [WorkshopDb].[dbo]. | | | |
| [ServiceOrders].StatusId; [WorkshopDb].[dbo].[ServiceOrders].OpenedAt; | | | |
| [WorkshopDb].[dbo].[ServiceOrders].CustomerNameSnapshot; | | | |
| [WorkshopDb].[dbo].[ServiceOrders].RegistrationNumber | [WorkshopDb].[dbo].[ServiceOrders].RegistrationNumberSnapshot | | |

Z indeksem na (OpenedAt, StatusId)



| Index Scan (NonClustered) | |
|--|-----------------|
| Scan a nonclustered index, entirely or only a range. | |
| | |
| Physical Operation | Index Scan |
| Logical Operation | Index Scan |
| Actual Execution Mode | Row |
| Estimated Execution Mode | Row |
| Storage | RowStore |
| Actual Number of Rows for All Executions | 9 |
| Actual Number of Rows Read | 9 |
| Actual Number of Batches | 0 |
| Estimated Operator Cost | 0,0032919 (42%) |
| Estimated I/O Cost | 0,003125 |
| Estimated CPU Cost | 0,0001669 |
| Estimated Subtree Cost | 0,0032919 |
| Number of Executions | 1 |
| Estimated Number of Executions | 1 |
| Estimated Number of Rows to be Read | 9 |
| Estimated Number of Rows for All Executions | 9 |
| Estimated Number of Rows Per Execution | 9 |
| Estimated Row Size | 261 B |
| Actual Rebinds | 0 |
| Actual Rewinds | 0 |
| Ordered | True |
| Node ID | 1 |
| | |
| Object | |
| [WorkshopDb].[dbo].[ServiceOrders]. | |
| [IX_ServiceOrders_OpenedAt_StatusId] [o] | |
| Output List | |
| [WorkshopDb].[dbo].[ServiceOrders].ld; [WorkshopDl | o].[dbo]. |
| [ServiceOrders].OrderNumber; [WorkshopDb].[dbo]. | |
| [ServiceOrders].StatusId; [WorkshopDb].[dbo]. | |
| [ServiceOrders].OpenedAt; [WorkshopDb].[dbo]. | |
| [ServiceOrders].CustomerNameSnapshot; [Workshopl | Db].[dbo]. |
| [CanciesOrdare] PasistrationNumberChanchet | |
| | |

Po dodaniu nieklastrowego indeksu IX_ServiceOrders_OpenedAt_StatusId zapytanie przestało robić pełny skan klastra i "kosztowny sort" – plan zredukował się do nieklastrowego Index Sorta. Natomiast przy naszej ilości danych to i tak praktycznie nic nie dało, gdyż mamy za mało danych.