Summary and Further Reading



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Summary

Clustered Indexes

Nonclustered Indexes

Indexed Views

Columnstore Indexes



Clustered

Define the table's storage

Rowstore or Columnstore

Rowstore for OLTP systems, Columnstore for analytics

Choose key to organise table or for frequent access path



Nonclustered Indexes

Separate structure from the table

Rowstore or Columnstore

For rowstore indexes, order of columns determined by queries

Columnstore useful for analytics queries against operational tables



Indexed Views

Force a view to be materialised

Lots of restrictions on what is allowed

Useful for queries that often aggregate data



Recommended Courses

SQL Server: Indexing for Performance Kimberly Tripp

https://app.pluralsight.com/library/courses/sqls erver-indexing-for-performance/

SQL Server: Analyzing Query Performance for Developers Erin Stellato

https://app.pluralsight.com/library/courses/s glserver-query-performance-developers/





Documentation on indexes:

https://tinyurl.com/MS-IndexDocs



SQL Server Index Architecture and Design Guide

https://tinyurl.com/MS-IndexArch



XML Indexes

https://tinyurl.com/MS-XMLIndexes



Spatial Indexes

https://tinyurl.com/MS-SpatialIndexes





Indexed view limitations:

https://tinyurl.com/MS-IndexedView



Columnstore index dictionaries:

https://tinyurl.com/Nico-CSDict



Causes of Small Rowgroups:

https://tinyurl.com/Nico-SmallRGs



Columnstore index maintenance:

https://tinyurl.com/MS-CSIndexMaint





My blog:

https://sqlinthewild.co.za/index.php/category/sql-server/indexes/

Kimberly Tripp: https://www.sqlskills.com/blogs/kimberl y/category/indexes/

