SQL Server Table Partitioning

http://BrentOzar.com/Community

First you take your scissors....

Primary Filegroup

File1.mdf   File2.ndf   File3.ndf   File4.ndf

NCI_YXZ

Y	X	Z

Non-aligned nonclustered indexes may be created on a filegroup instead of a partition scheme.

When these are enabled, they prevent switching!

Table Partitioning can help performance of very large databases by breaking the data up into easier-to-digest chunks.

Partition Function
The algorithm that defines your boundary points based on your Partitioning Key

Partitioning Key

Partition Scheme A

FG1
FG2
FG3

A Partition Scheme maps filegroups to a Partition Function

OrderHistory

Date	X	Y	Z

NCI_DateZY

Date	Z	Y

Aligned partitioned indexes sit on a partition scheme.

They will contain the partitioning key, whether you specify it or not.

The partitioning key is one column-- although it may be a computed column.

Choose a partitioning key you will specify in the WHERE clause for most (or all!) of your queries to support partition elimination.

Partition Scheme B

FG4
FG5
FG6

NCI_DateXY

Date	X	Z

The SWITCH option allows you to move a whole partition IN or OUT of a partitioned table as a metadata-only operation. (SCH-M lock required)

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