

Designing and Implementing SQL Server Indexes

GENERAL INDEXING GUIDELINES



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Why do we Create Indexes?

**Enforce uniqueness across
columns**

**Improve the performance of
queries**



Indexes created for
performance are
determined by the
workload



When Indexing a New System

**Create indexes to support
unique requirements**

**Create indexes on foreign key
columns**

**Create indexes to support
expected common queries**

**Be prepared to change
indexes later**



When Indexing an Existing System

Identify the most resource-intensive queries

Identify the most important queries

Index to support them

Re-investigate regularly



Course Agenda



Index Architecture and Execution Plans

Clustered Indexes

Nonclustered Indexes

Indexed Views

Columnstore Indexes

