

Creating Memory Optimized Tables



Pinal Dave

SQL SERVER PERFORMANCE TUNING EXPERT

<https://blog.sqlauthority.com>



Agenda



In-Memory OLTP

Memory Optimized Tables

Faster Performance

Use Cases and Strategies

Demo



What is In-Memory OLTP?

In-Memory OLTP is the SQL Server technology for optimizing performance of transaction processing, data ingestion, data load, and transient data scenarios.

Available in SQL Server and Azure SQL Database.



In Memory OLTP

Memory

Memory-optimized tables

IO

Non-durable tables

IO

Memory-optimized table
types

CPU

Natively compiled T-SQL
modules





Incorrect Assumptions

- Immature product
- Like DBCC PINTABLE
- Separate installation
- Works without any changes
- Data is not durable
- Poor Security

Use Cases of In-Memory OLTP Technology

**Caching and
Session State
Management**

Data Ingestion

**High Volume and
High Velocity**

**Tempdb Object
Replacement**

**ETL
Workflow**



Demo



Environment Setup

Creating Memory Optimized Table



Summary



In-Memory OLTP Technology is Faster

Latest Eco-System Needs

Supports Hybrid Business Requirements

