MAMA Framework Scalability Stress Test Results
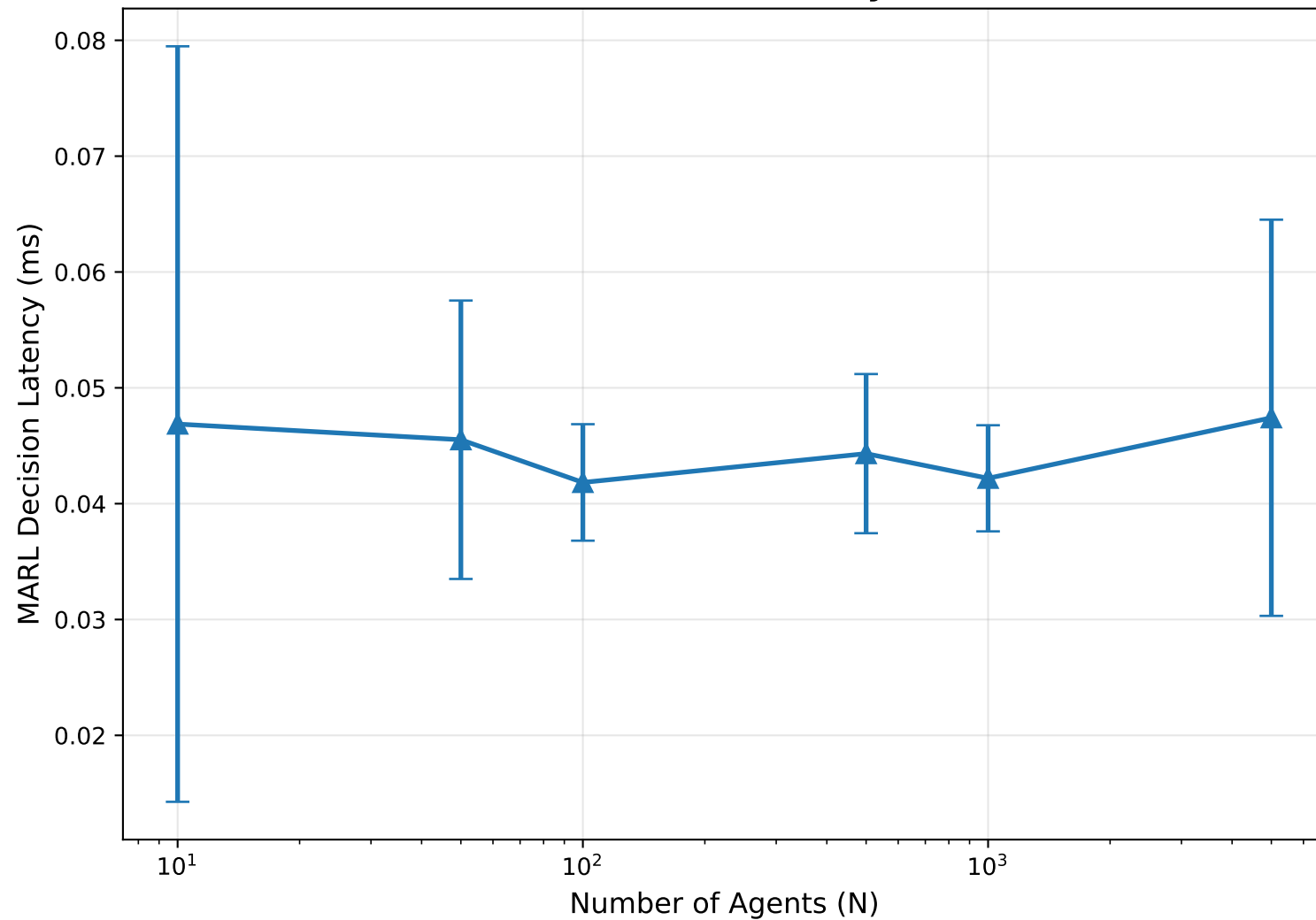
Semantic Matching Latency vs. N

Trend: O(N^0.14)

Semantic Matching Latency (ms)

Number of Agents (N)
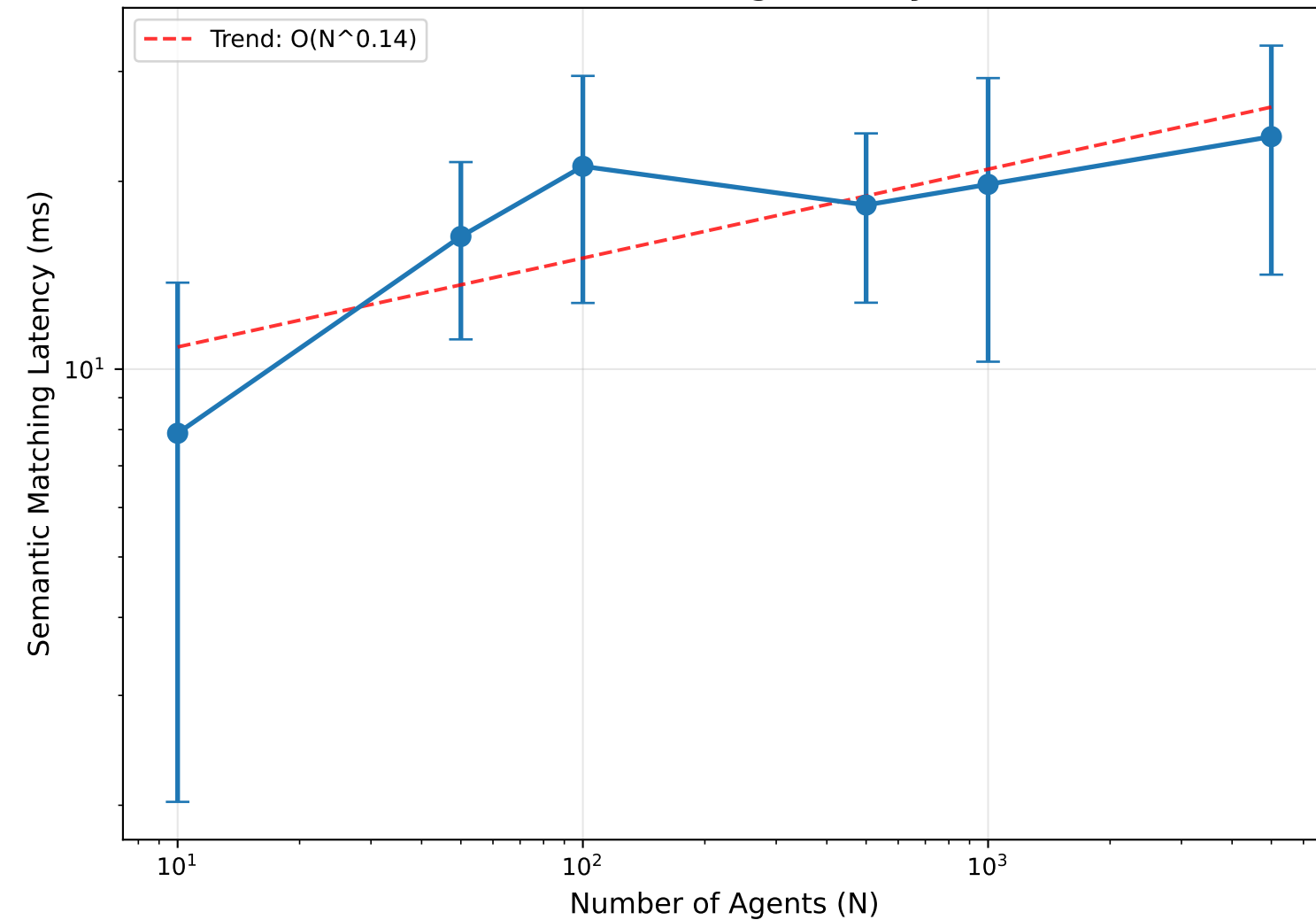
Registrar Service Throughput vs. N

Registrar Throughput (msg/s)

Number of Agents (N)

MARL Decision Latency vs. N
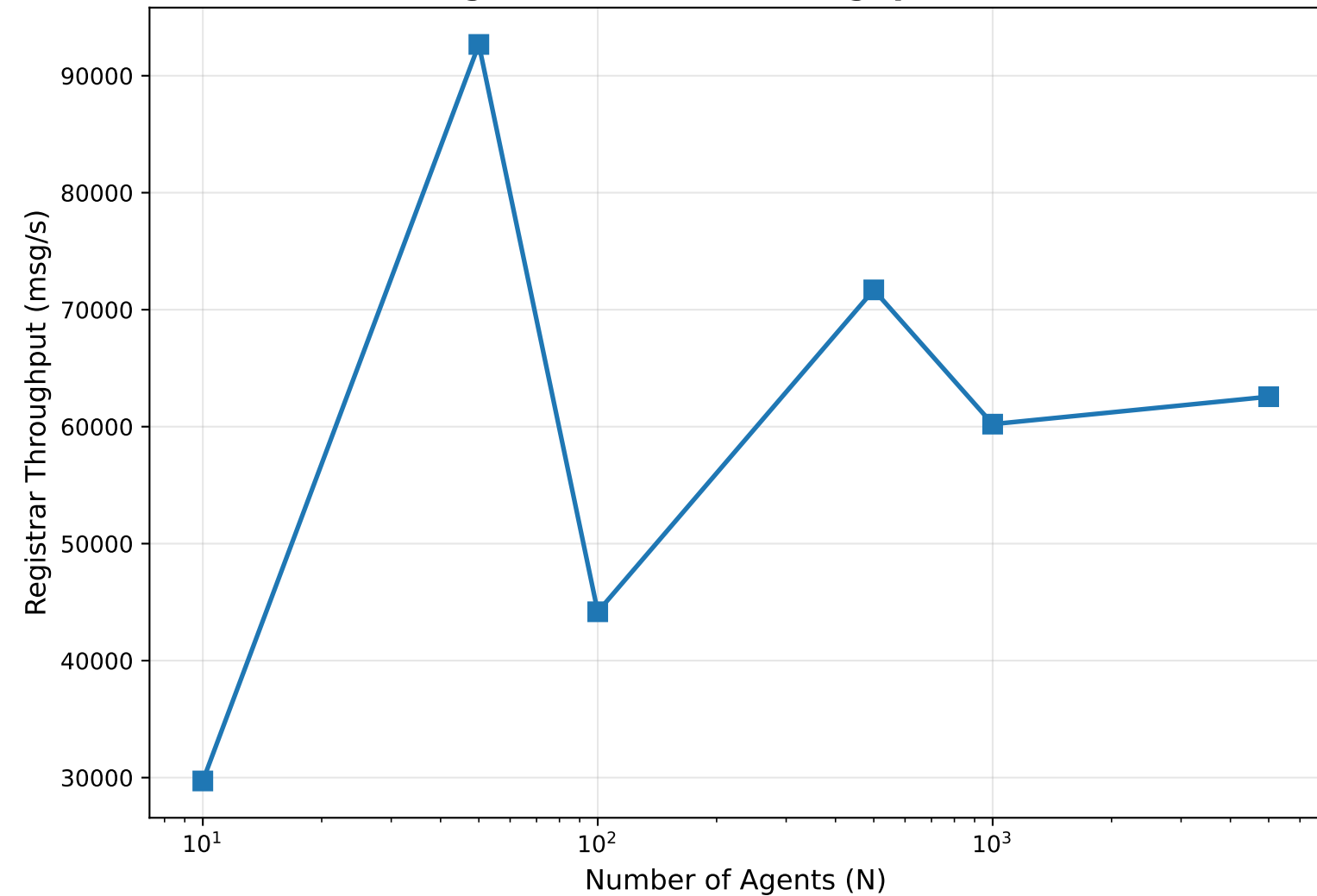
MARL Decision Latency (ms)

Number of Agents (N)

Comparative Performance Impact

Semantic Matching (normalized)
Registrar Throughput (inverted)
MARL Decision (normalized)

Normalized Performance Impact

Number of Agents (N)