

Model Refresh Issues

1. VNet Gateway Resource Contention

- **Cause:** The VNet Gateway is under-resourced to handle the **simultaneous data load for refresh** and **report queries** accessing the model. This concurrency places significant stress on the gateway, which cannot scale to meet the workload demands.
- **Impact:**
 - **Resource contention** results in random mashup errors and degraded performance during refreshes and query execution.
 - The issue is amplified by the model size (40GB), which significantly increases memory and CPU requirements.

2. Resource Contention During Replica Switchover

- **Cause:** During incremental refresh, both the **old replica** (serving queries) and the **new replica** (being refreshed and recalculated) coexist in memory.
- **Impact:**
 - High memory consumption (80GB for a 40GB model), leading to resource contention.
 - Degraded query performance or possible dataset evictions due to insufficient capacity.
 - Longer refresh times, delaying the switchover and impacting user access to up-to-date data.