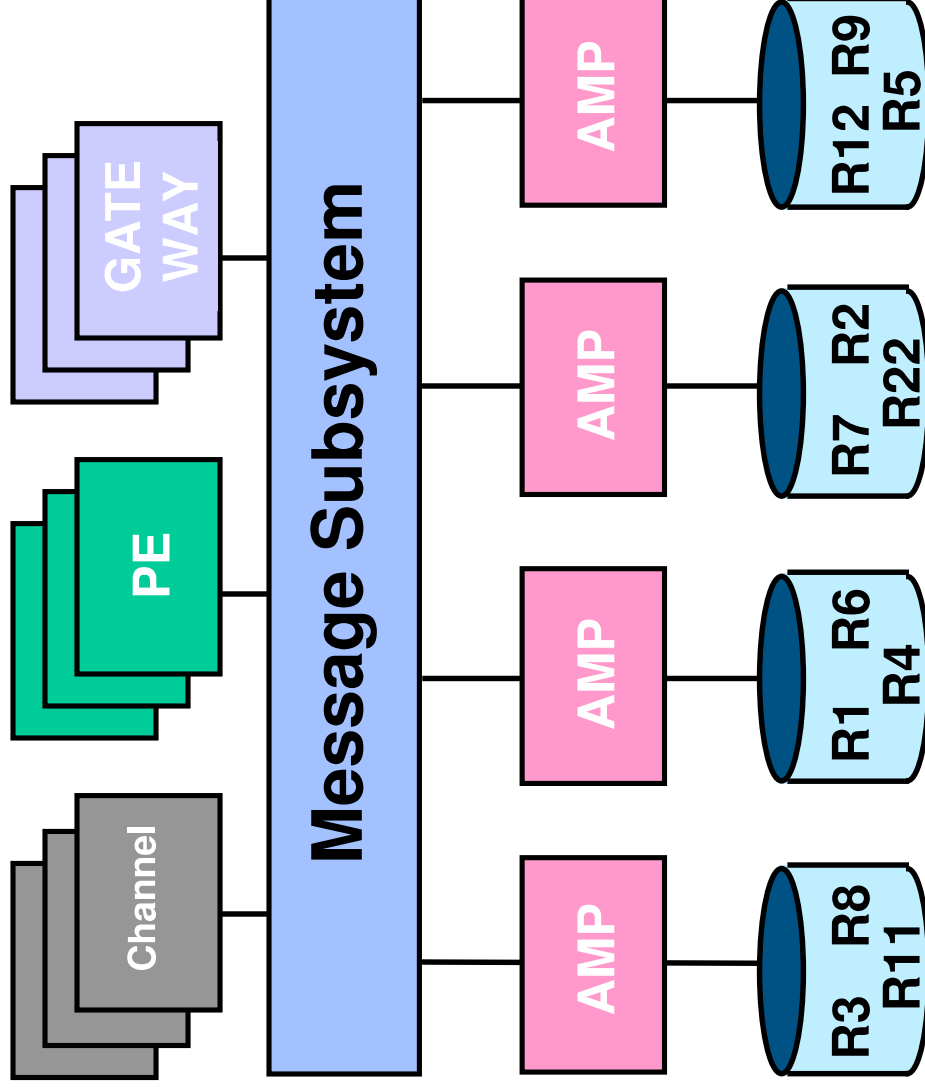
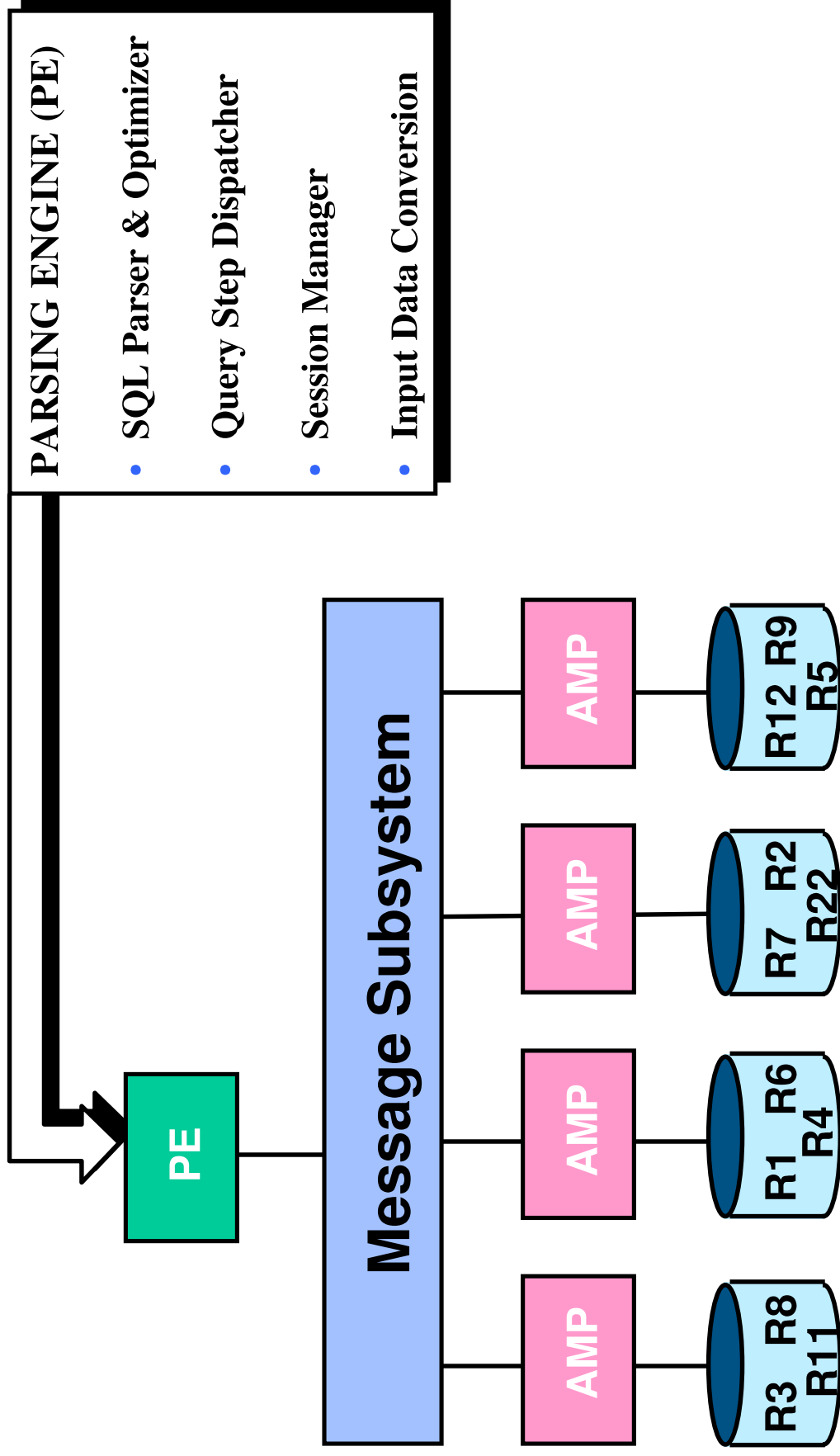


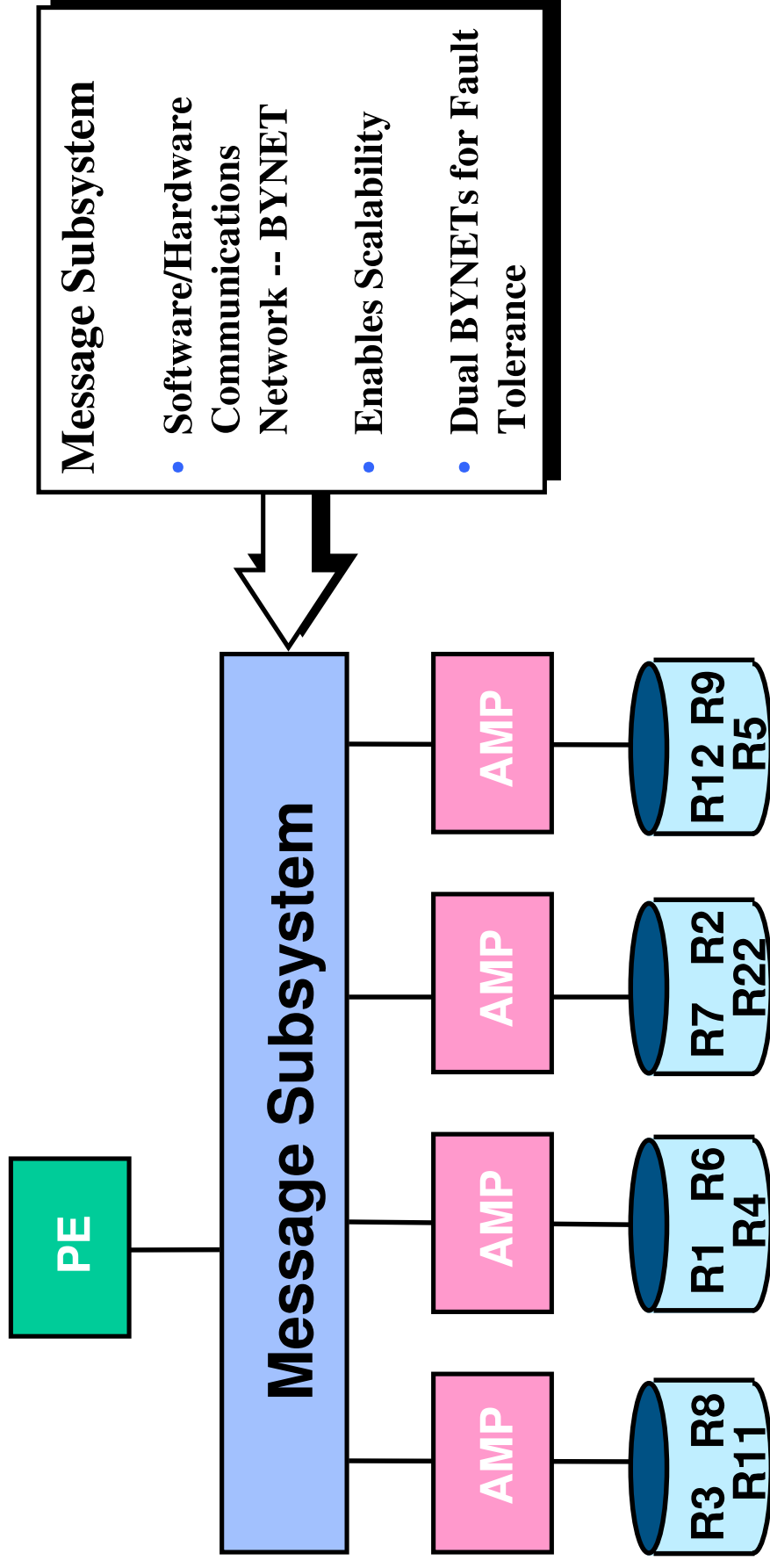
# DBMS Parallel Architecture



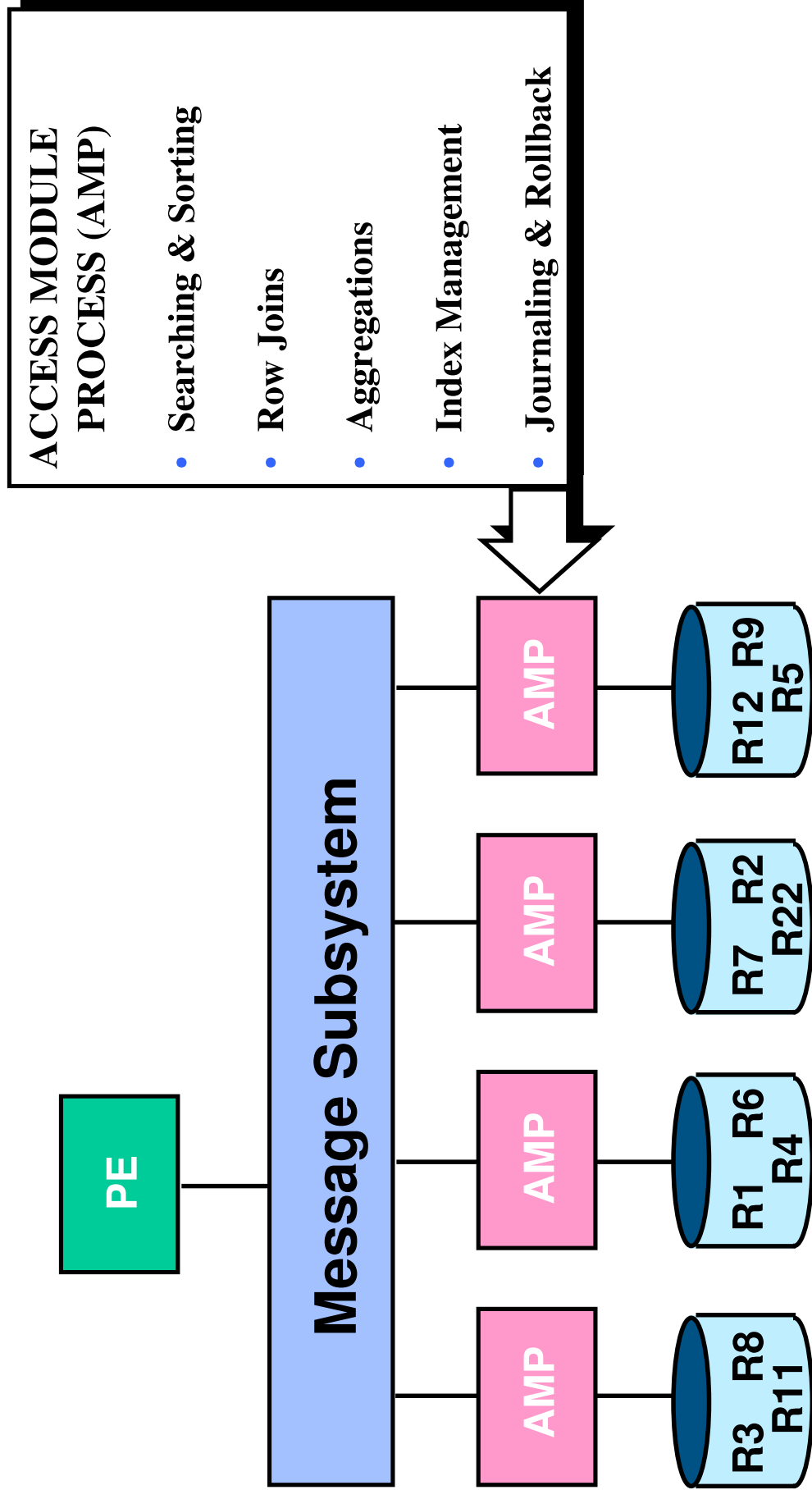
# DBMS Parallel Architecture



# DBMS Parallel Architecture

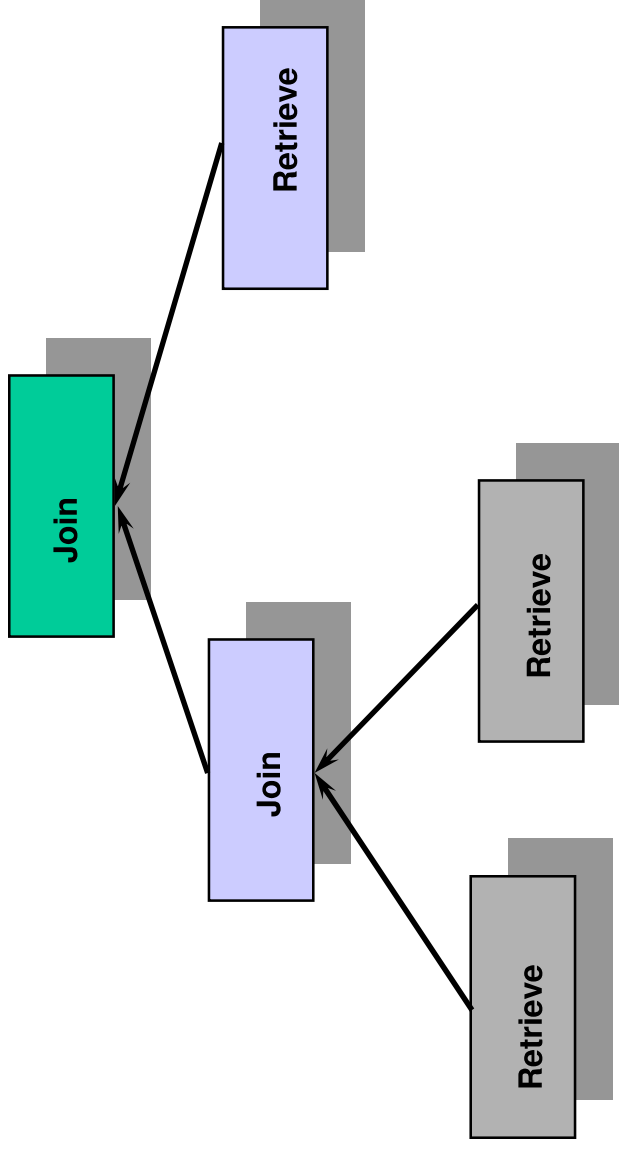


# DBMS Parallel Architecture

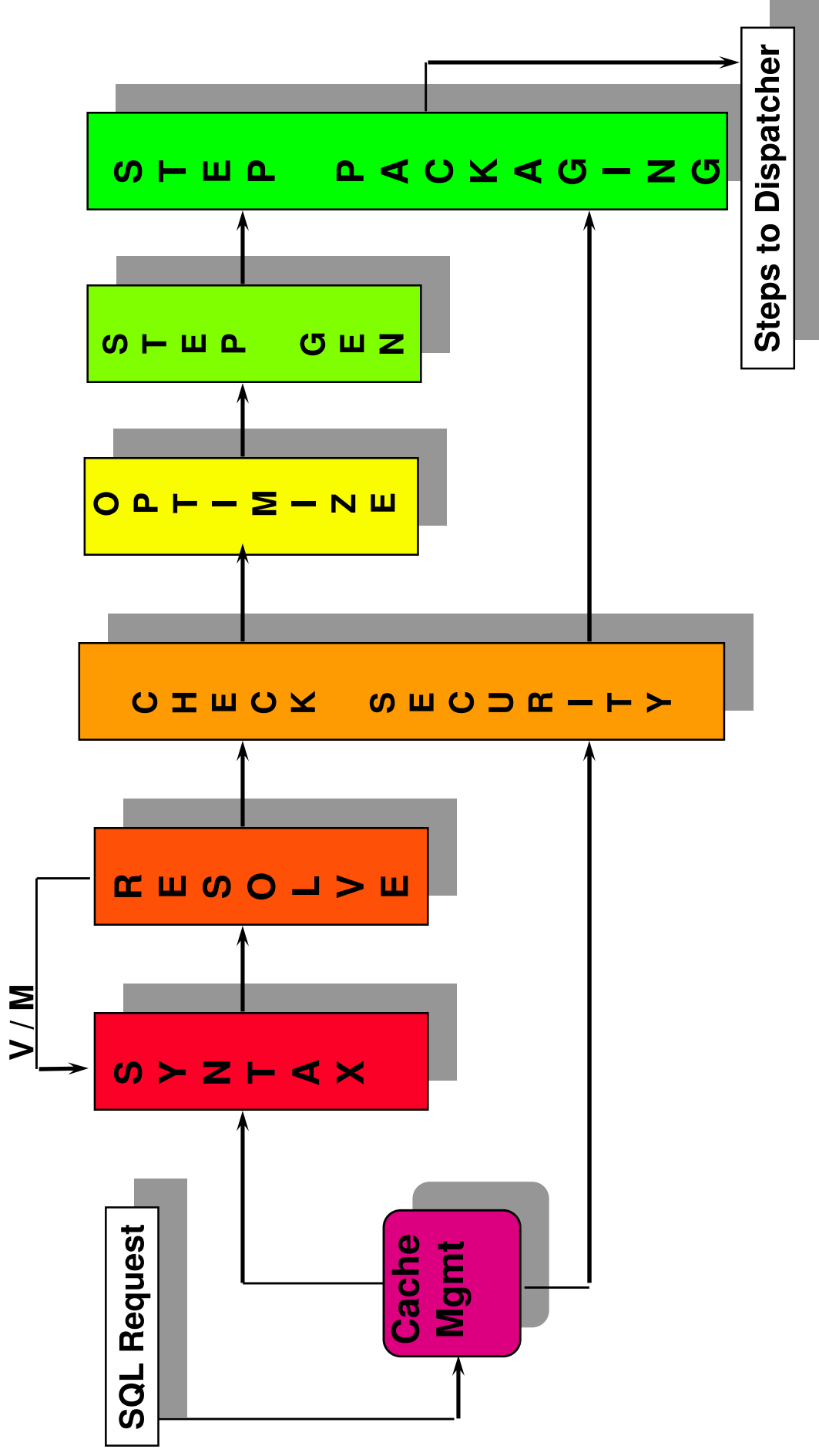


# Parallelization

- User request parallelized by optimizer
  - Single processing step sent to all vprocs simultaneously
    - Optimized to only affected vprocs as appropriate
  - Multiple steps launched concurrently for a single request
  - Multiple requests launched concurrently for multiple users
- Allows hundreds of in flight requests for thousands of concurrent users



# PARSER FLOW



# Resolver

- Retrieve dictionary information
  - From dictionary cache if possible
  - Annotate skeleton tree (database, table, column)
- Derive new conditions using transitivity
- Handle views and macros
- Handle derived tables
- Identify access requirements
- Report semantic errors

# Optimizer Input and Output

