

# V3 Database Service – Throughput aka. Plans for V3 and V4

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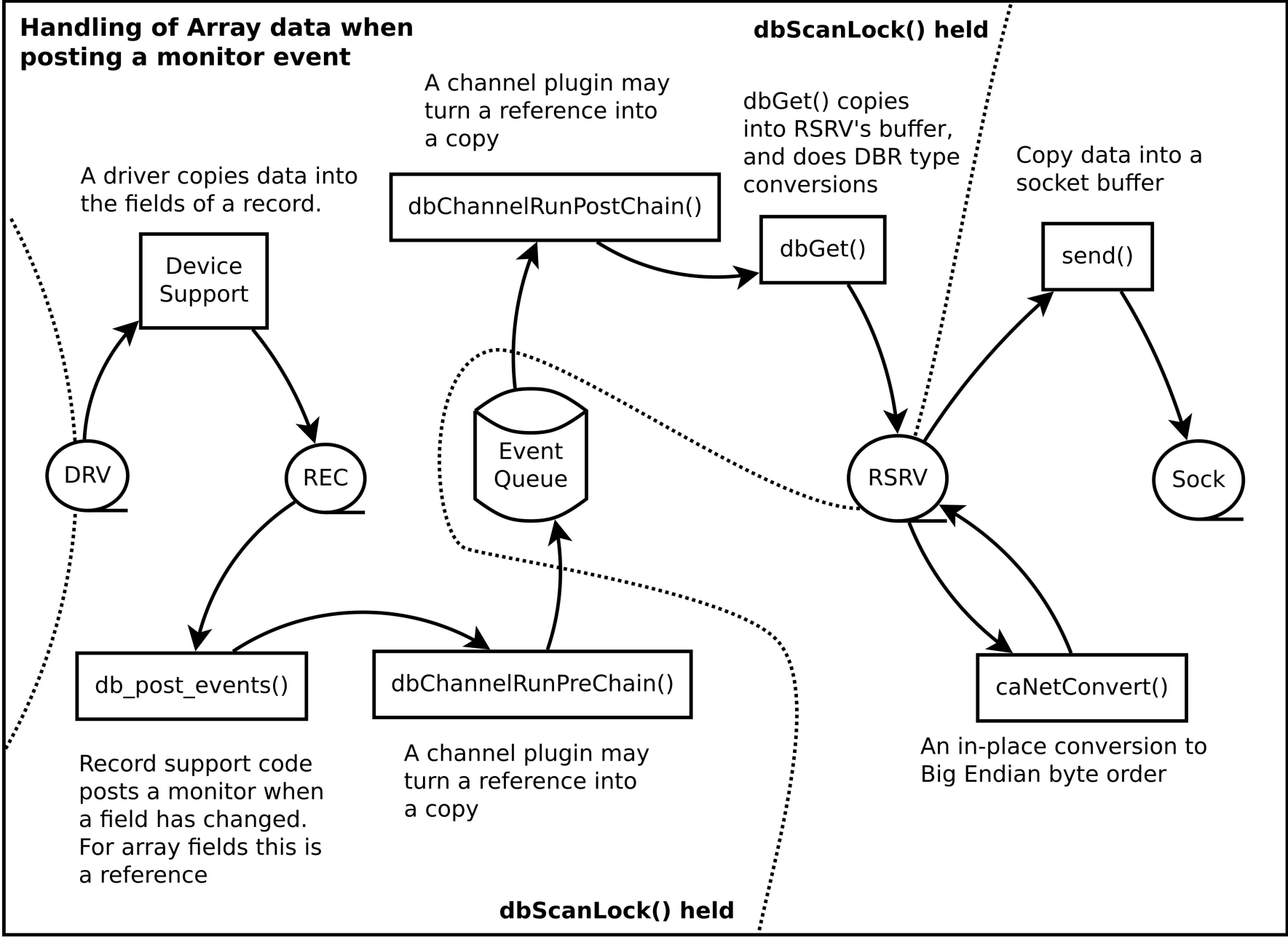
# Goals

- Dual purpose work (Base and pvData)
- Improve array handling
- Monitor synchronization
- Enable better device scripting

# •Improve array handling

- Avoid copying
- pvData add reference counted immutable arrays (Almost Done)
- Device support move data in/out of waveform w/o copy (Done)
- dbget/put move data in/out of waveform w/o copy (Concept)

# Pushing array data w/ RSrv



# Monitor synchronization

- 3.14 no ordering of monitors
  - comparing timestamps
- 3.15 provides ordering
- pvAccess ordering is intrinsic
- Need synchronization marker
  - Post monitor on PROC when lockset is unlocked.
  - Add API for callback before unlock. (In progress)

# Enable better device scripting

- Complex data
  - Doesn't fit in a single record field
  - Table data
  - pvAccess can transport this, now make DB provide it.
- Complex operations
  - More than single get/put
  - More than single fields/records
  - eg. Replace or Compare+Swap

# Batch DB Operations

- Batch is a list of gets/puts performed w/o releasing locks.
- Rewrite of locksets (Prototyped)
  - Parallel recompute of locksets (a nice side effect)
- Compatibility Implementation (Beta)
  - A migration path

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