**Flexswap Purge – Downstream Application Impact**

**Background**

The **Flexswap** trade portfolio has been growing steadily, resulting in large datasets within the ***t\_opt\_es\_trades*** table.  
As of **30/07/2025**, the table contains **~49.9M rows**.  
This growth is stretching the limits of the original data model and is starting to impact:

* Valuation run times
* Risk computation efficiency
* Stability of downstream feeds

A purge process will be implemented to reduce load and maintain optimal performance.

**Purge Approach**

Based on Quant Team analysis, the chosen approach is:

**Regular batch purge (periodicity to be decided)**  
Inactive trades will be periodically moved from the live table to a dedicated archive table.

**Purge Logic**

* **Inactive trades**: No pricing activity for a defined period.
* **Retention in live table**: Only trades still relevant for valuation or risk.
* **Archive table**: Retains historical trades for audit, reporting, and reference.

**Downstream Impact – Critical Assessment**

Changes in Flexswap trade content will **directly affect downstream systems**.  
A structured evaluation must be completed before purge execution.

| **Downstream Area** | **Potential Impact** | **Mitigation Required** |
| --- | --- | --- |
| **Pricing & Risk** | Sudden drop in trade population may alter aggregated metrics. | Validate calculation logic and ensure P&L / risk stability. |
| **Reporting & P&L** | Risk of reconciliation breaks post-purge. | Adjust reconciliation rules; align reference data pre/post purge. |
| **Data Warehousing / BI** | Historical queries may fail if run on live dataset only. | Point historical reports to archive dataset. |
| **Intraday & Overnight Jobs** | Initial purge event could overload pipelines. | Test throughput; adjust scheduling if needed. |

**Purge Execution Considerations**

**Initial Run**:

* Will trigger a **large one-off data change**.
* Downstream teams must confirm:
  + Capacity to handle **high event volume**.
  + Successful reconciliation against pre-purge dataset.

**Subsequent Runs**:

* Lighter but **regular** (weekly/monthly to be agreed).
* Must be included in BAU scheduling.

**Purge Workflow**

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flowchart LR

A[Live Flexswap Trades (\_t\_opt\_es\_trades\_)] -->|Identify inactive trades| B[Flag for purge]

B -->|Move| C[Archive: Purged Trades Table]

A --> D[Downstream Systems & Applications]

C --> E[Historical Data Queries]

**Mitigation Plan**

1. **Engage downstream owners** for dependency mapping.
2. **Simulate purge** in a non-production environment.
3. **Stress-test event processing** for the first purge run.
4. **Agree periodicity** based on downstream readiness.
5. **Document archive data access** for historical reporting.

**Next Steps**

* Finalise purge periodicity.
* Complete downstream readiness validation.
* Schedule controlled initial purge.
* Monitor performance & stability post-purge.
* Adjust process based on feedback.

📎 **Reference Links**

* Quant Team purge scenarios: Link to Quant page
* Archive access procedures: Link to doc

###### ChatGPT a dit :

Got it ✅  
You want your page to be **Confluence-ready**, **aligned in style** with the Quants’ page, but with a **strong downstream application impact focus** and reflecting that the chosen method will be **“Regular batch with periodicity to decide”**.

Here’s a **Confluence-ready draft**:

## ****Flexswap Purge – Downstream Application Impact****

### ****Overview****

The **Flexswap** trade store has been growing steadily, leading to extremely large datasets within the **t\_opt\_es\_trades** table.  
As of **30/07/2025**, the table contains **~49.9M rows**.  
This increasing volume is pushing the limits of the original data model and impacting:

* **Valuation performance**
* **Risk computation times**
* **Overall system stability**

To address this, a **purge strategy** will be implemented.

### ****Chosen Purge Method****

Following Quant Team analysis, the selected method is:

**Regular batch purge (periodicity to be decided)**  
Dead/inactive trades will be periodically removed from the live table and moved to a dedicated **purged-trades** table for historical reference.

### ****Purge Objective****

* **Reduce data volume** in live processing tables.
* **Maintain only active trades** in t\_opt\_es\_trades.
* **Improve performance** for valuation, risk runs, and downstream consumers.
* Ensure historical data remains accessible in a **separate archive table**.

### ****Downstream Impact – Key Considerations****

The purge will **directly affect** multiple **downstream systems** consuming Flexswap trade data. The impact must be evaluated and mitigated **before** the purge is executed.

| **Area** | **Potential Impact** | **Required Action** |
| --- | --- | --- |
| **Pricing & Risk Feeds** | Removal of inactive trades may cause sudden changes in aggregated metrics. | Validate downstream tolerance for missing historical trades in BAU calculations. |
| **P&L & Reporting** | Changes in trade population may trigger recalculations or reconciliation breaks. | Update reconciliation logic, ensure alignment between pre- and post-purge datasets. |
| **Data Warehousing / BI** | Downstream historical queries may fail if inactive trades are removed from live feed. | Redirect historical queries to archive table. |
| **Intraday / Batch Jobs** | Large first purge may cause spike in events, impacting job completion times. | Run capacity test, validate scheduler impact. |

### ****Initial Purge Run – Special Considerations****

* The **first purge** will generate a **large one-off event load**.
* All downstream teams must confirm:
  + Their **event processing pipelines** can absorb the spike.
  + They have performed **full data reconciliation** after purge.
* After the initial run, weekly (or agreed periodic) runs will be **lighter but continuous**.

### ****Proposed Purge Workflow****

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flowchart LR

A[Live Flexswap Table (\_t\_opt\_es\_trades\_)] -->|Identify inactive trades| B[Mark for purge]

B -->|Move to archive| C[Purged Trades Table]

A --> D[Downstream Applications]

C --> E[Historical Data Access]

### ****Mitigation Plan****

1. **Engage all downstream owners** early to assess impact.
2. **Run controlled POC** simulating purge volume on non-prod.
3. **Validate downstream stability** under purge event load.
4. **Define periodicity** based on downstream feedback and processing windows.
5. **Document archive access process** for historical queries.

### ****Next Steps****

* Confirm downstream dependencies with all application owners.
* Perform **impact simulation** on staging environment.
* Define and agree purge periodicity (weekly/monthly).
* Schedule **initial purge run** with downstream readiness sign-off.
* Monitor post-purge metrics and adjust process if needed.

📎 **Reference**

* Quant Team purge logic & scenarios: Quant Confluence Page
* Archive data access: Link to documentation

#### **Detailed Downstream Impact Table**

| **Downstream System** | **Risk Level** | **Potential Impact** | **Key Contact** |
| --- | --- | --- | --- |
| **Pricing Engine** | 🔴 High | Missing inactive trades could alter aggregation, potentially affecting live pricing results. | Pricing Team – [Name / Email] |
| **Risk Calculation (VaR / Stress)** | 🔴 High | Risk figures may drop unexpectedly if trade base changes suddenly. | Risk Systems – [Name / Email] |
| **P&L Reporting** | 🟠 Medium | Reconciliation mismatches between pre/post purge datasets. | Finance – [Name / Email] |
| **Data Warehouse / BI** | 🟠 Medium | Historical queries may fail if inactive trades are removed from live dataset. | BI / DWH Team – [Name / Email] |
| **Regulatory Reporting** | 🔴 High | Potential gaps in reporting if inactive but reportable trades are purged from live view. | Compliance – [Name / Email] |
| **Intraday / Overnight Batches** | 🟢 Low–Medium | Large first purge may overload pipelines and extend job runtimes. | Batch Ops – [Name / Email] |