Data Carveout

Selective SAP data carveouts for Dev/QA, Training, and Rollouts — powered by DMAG®

Executive Summary

Organizations often need SAP Development and Quality environments that mirror real production behavior—without copying the full production database. A data carveout addresses this by extracting only the subset of master, transactional, and configuration data required for a specific scenario. This reduces refresh time, lowers infrastructure costs, and enables focused testing and training.

Key outcome: faster, safer, and scenario-ready Dev/QA refreshes—while enforcing data privacy through masking and controlled exposure.

What is a Data Carveout

A data carveout is the selective extraction of a defined dataset from SAP Production into non-production environments. Instead of cloning the entire database, carveouts focus on a business-meaningful slice—such as a product line, region, time range, or process—so teams can develop and test with realistic data while minimizing volume.

- Carve by Business Process (e.g., OTC, P2P, Manufacturing)
- Carve by Timeframe (e.g., last 3/6/12 months of transactions)
- Carve by Geography / Business Unit / Plant
- Carve by Data Type (Master vs Transactional vs Configuration)

Why Full System Copies Don’t Scale

Full production copies into Dev/QA create recurring issues: long refresh windows, higher storage and compute requirements, greater risk of exposing sensitive data, and reduced agility for project teams. Carveouts provide a controlled, repeatable alternative.

- Reduced refresh downtime and improved environment availability
- Lower infrastructure footprint and faster transport cycles
- Better compliance posture (least-data principle)
- More relevant datasets for training, rollouts, and targeted testing

DMAG® Approach to SAP Data Carveouts

DMAG® enables scenario-based carveouts from SAP Production into SAP Development and QA systems without duplicating the full production database. It applies governed selection rules, identifies sensitive data elements, and supports scrambling/masking to keep confidential information protected.

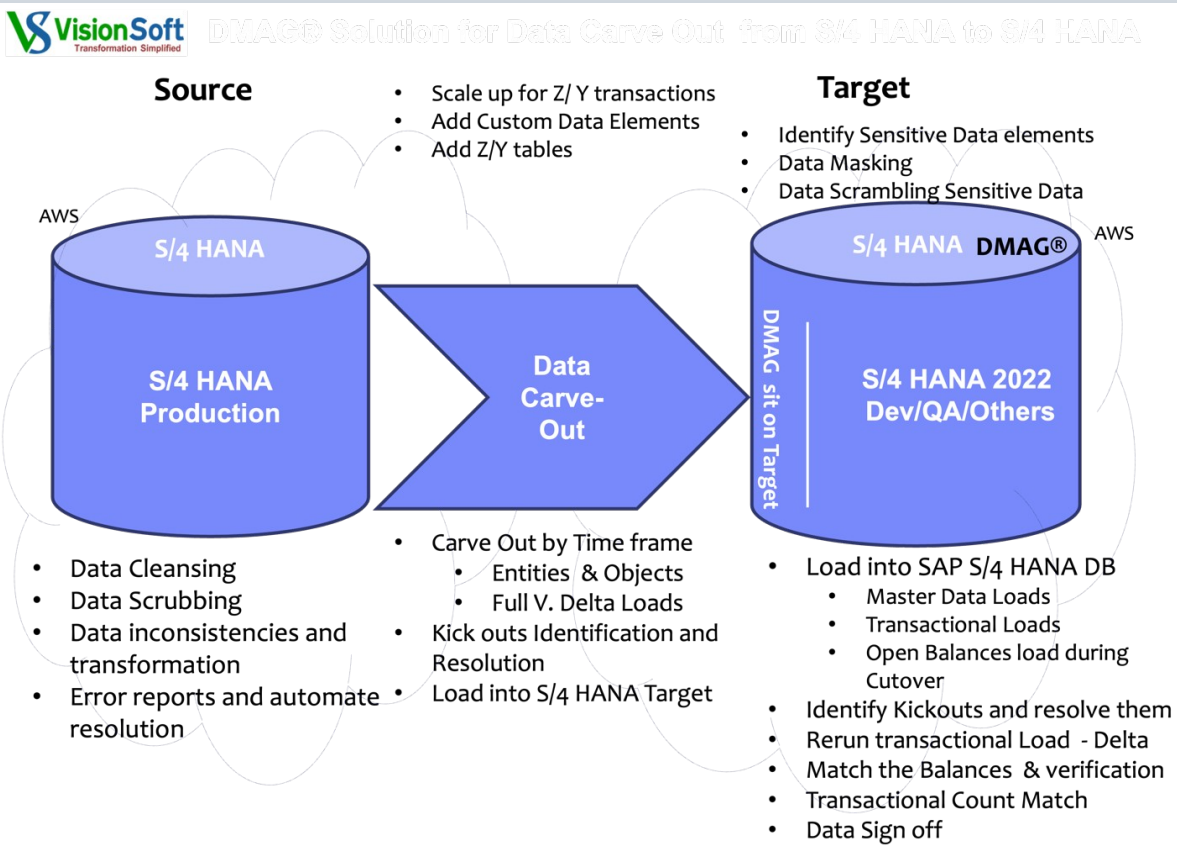
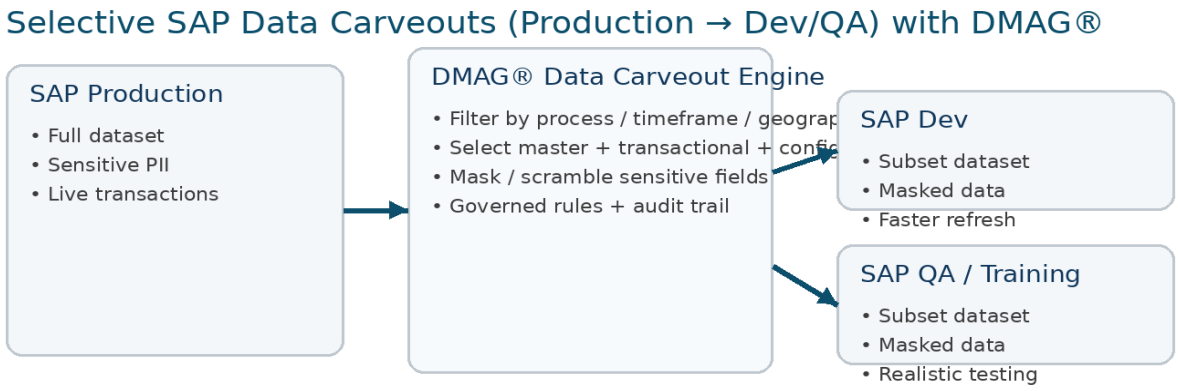


Figure 1: Diagram from the attached DMAG Data Carveouts reference.

What is a Data Carveout



Privacy, Security, and Regulatory Compliance

Data protection regulations and internal security policies often restrict the exposure of sensitive information in non-production systems. DMAG® supports compliance by identifying sensitive fields through rule sets and masking/scrambling them so confidential information is not visible to Dev/QA users.

- Sensitive data discovery using business-rule tables
- Scrambling/masking for PII and confidential attributes
- Controlled sharing of data subsets based on role and need
- Audit trail of what was extracted, transformed, and loaded

Primary Use Cases

Use Case	Why it matters	DMAG® outcome
Testing & QA refresh	Frequent refreshes without full DB copy	Targeted subset refresh with controlled downtime
Training environments	Realistic datasets without exposing PII	Masked data with production-like behavior
Rollouts & pilots	Focus on a region/business unit before scale-out	Carved datasets aligned to pilot scope
Upgrades / migrations	Reduce volume and complexity during transitions	Subset migrations for iterative dry runs
Analytics / focused dev	Work on specific product line/geography	High-signal dataset for faster iteration

Value Proposition

Selective Data Carveouts enable tailored extraction and loading processes that optimize speed, cost, and compliance:

- Efficiency & performance: refresh only the data needed for the scenario.
- Customization & flexibility: configure carveouts by time range, geography, business unit, or process.
- Focus on critical scenarios: prioritize datasets for high-impact testing and rollouts.
- Data privacy & security: reduce exposure by limiting non-production access to sensitive information.
- Lower transfer and storage costs: minimize volume compared with full system copies.

Implementation Roadmap

Phase	Key Activities	Deliverables
1. Scope	Identify business scenarios, objects, and selection criteria	Carveout scope + selection rules

2. Profile	Assess completeness/quality; identify sensitive fields	Profiling + sensitive data catalog
3. Extract	Extract master/transaction/config subsets from production	Staged carveout datasets
4. Protect	Mask/scramble sensitive values; validate rules	Privacy-safe carveout dataset
5. Load	Load into Dev/QA; reconcile counts and key totals	Loaded environments + reconciliation report
6. Operate	Schedule periodic refreshes; monitor KPIs	Refresh runbook + dashboards

KPIs to Track

- Refresh cycle time (end-to-end) and downtime per environment
- Carveout volume reduction vs full copy (records, GB)
- Masking coverage (% sensitive fields protected)
- Defect density from validation rules and exception queues
- User readiness metrics for training/pilot environments

Conclusion

Data carveouts are a practical strategy to keep Dev/QA environments realistic, refreshed, and compliant—without the burden of full database copies. DMAG® operationalizes carveouts through governed selection, privacy controls, and repeatable refresh processes so teams can move faster with confidence.