

GOVERNED TEMPLATE RENDERING REFERENCE: DATA MIGRATION & SEEDING DEFAULT V2 (DRAFT)

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DATA MIGRATION & SEEDING · PROJECT ARTIFACT

SPECIRA

Data Migration & Seeding: Dispatch Modernization

Meridian Field Services: instructional example, not project evidence

DRAFT · WATERMARK POLICY: DRAFT_ONLY

template data_migration v2 · pack: specira_default_delivery

the window is a measured number: the rehearsal's duration, never an estimate

§1 Migration Inventory

mandatory

1 decision

1 evidence rule

validators: every_entity_row_cites_classification_label · no_blank_inventory_cells · exclusions_carry_rationale_and_retention_answer

Source to target per entity, volumes, classes, owners; no blank cells. Exclusions carry rationale and a retention answer for what stays behind.

Entity	Source → target	Volume	Class	Owner
Job master	Legacy dispatch job tables → <u>Job</u> ^[1] (status-code mapping per the closed set)	180 k rows (7 y)	CONFIDENTIAL (labels^[2])	R. Singh
Assignment history	Legacy → <u>Assignment</u> ^[1]	640 k rows	CONFIDENTIAL : clause 14's seven years drives inclusion (BR-06^[3])	R. Singh
Technician roster	NOT migrated: the HR directory remains authoritative (<u>INT-5</u> ^[4]); the board reads its sync; rationale recorded			n/a

Entity	Source → target	Volume	Class	Owner
Legacy radio logs	NOT migrated: no target entity, no retention obligation past the legacy system's own schedule (retention^[2]); stays under enterprise IT's retention			n/a
Positions	Nothing to migrate: the feed is live-only and the 30-day purge outruns any backfill value; stated so the absence is a claim			n/a

Freeze & delta: the nightly INT-3 sync keeps the target current to yesterday; the cutover window freezes legacy job WRITES; same-day deltas replay from the legacy change log; catch-up bound of 2 h of deltas at observed rates.

§2 Migration Approach & Seeding

mandatory

1 decision

1 evidence rule

validators: migration_approach_logged_with_alternatives · transitional_seam_retirement_cites_int_sunset · nonprod_seed_data_never_production_pii

Decision · phased, with a parallel-run proof

What: big-bang moves everything in one window; phased moves entity groups; parallel-run runs both systems live with comparison; trickle streams continuously. **Why considered:** the INT-3 nightly sync ALREADY IS a parallel-run in miniature ([INT-3^{\[5\]}](#)): the target has carried the job master for weeks, reconciled nightly, comparison evidence big-bang lacks; full trickle engineering buys nothing a 2-hour delta replay does not. **Who & how:** E. Sandoval with R. Singh, walked against the seam design August 5 ([migration approach^{\[6\]}](#)). **Findings:** phased wins. Assignments and jobs move in the cutover window; the roster never moves; INT-3 retires at cutover per its sunset ([INT-3 sunset^{\[4\]}](#)).

Environment	Seed	Rule
dev	Synthetic fleet: 300 vehicles, generated (the perf dataset's ancestor, datasets^[7])	Production personal data in dev is prohibited: hard rule, no exception path
staging	Masked production-shaped jobs and assignments: names and addresses masked per their labels (labels^[2]); positions synthetic ALWAYS; RESTRICTED never leaves production even masked (the conservative read, decided with N. Duval)	

§3 Validation & Reconciliation

mandatory

1 decision

1 evidence rule

validators: reconciliation_covers_count_checksum_and_sample · migration_window_from_timed_dry_run · rehearsal_includes_deliberate_rollback

Numbers, not vibes: every ladder level carries its criterion; the window is the rehearsal's measured duration.

Level	Check	Criterion
1	Row counts + per-status aggregates	exact match
2	Record-level comparison on business keys	100% presence; mismatches bucketed
3	Field-level SHA-256 over mapped columns; 5% random sample + every transformed row	zero unexplained mismatches (the status-code mapping's expected)

Dry-run: full rehearsal on the staging copy September 20, INCLUDING the deliberate rollback to source. Measured: migration 3 h 10 m, rollback 40 m; the runbook window is 4 h with the rehearsed buffer, not an estimate. **Post-cutover:** application-level checks (job counts on the board, assignment history renders, the response clock derives per BR-04^[3]) instantiate as cutover checks^[8].

§4 Rollback Plan & Cutover Runbook

mandatory

1 decision

1 evidence rule

validators: point_of_no_return_named_explicitly · go_no_go_gate_has_owner_and_numeric_threshold · cutover_step_has_owner_and_duration

The point of no return is a named step; a failed gate is an automatic no-go. The next window is pre-booked, so no-go costs a week, not a debate.

Point of no return: the write-authority transfer (the new system becomes the job master; legacy intake stops). Before it, rollback is restore-and-resync (40 rehearsed minutes). After it, forward-fix only, through the quarantine path ([FLW-03 exception^{\[9\]}](#)). **Fallback-to-source bounded:** 24 h post-cutover; past it the delta volume makes restore worse than forward-fix, measured from the rehearsal.

Gate	Criterion (numeric)	Owner
G1	Reconciliation ladder all-green (§3 criteria)	R. Singh
G2	The DV cutover checks pass (checks^[8])	Release owner
G3	The 4-hour window holds against the rehearsed timeline	E. Sandoval

Time	Step	Owner	Duration (rehearsed)
02:00	Freeze legacy writes	R. Singh	10 m
02:10	Final delta replay	Engineer	30 m
02:40	Reconciliation ladder	R. Singh	45 m
03:25	Gates G1 / G2	Owners above	15 m
03:40	Write-authority transfer: THE POINT OF NO RETURN	E. Sandoval	10 m
03:50	DV cutover checks	Release owner	30 m
04:20	INT-3 retirement flag (sunset^[4])	Engineer	10 m
06:00	Dispatch hours open; on-call doubled	On-call	n/a

§5 Open Questions

mandatory

1 decision

Question	Owner	Answer by	Blocks
Does the legacy change log retain deltas long enough if the cutover slips a week past the freeze rehearsal (retention on the legacy side is enterprise IT's)?	R. Singh	Sep 12, 2026	The catch-up bound only

Refs

References & Package Contents

In the Specira workspace

specira	[1] Data model: Job, Assignment entities app.specira.ai/projects/dispatch-modernization/artifacts/data-model
specira	[2] Data classification: labels, retention rules app.specira.ai/projects/dispatch-modernization/artifacts/data-classification
specira	[3] Business rules: BR-04 response clock, BR-06 retention app.specira.ai/projects/dispatch-modernization/artifacts/business-rules
specira	[4] Integration inventory: INT-3 sunset, INT-5 roster authority app.specira.ai/projects/dispatch-modernization/artifacts/integration-inventory
specira	[5] Architecture: the INT-3 transitional seam design app.specira.ai/projects/dispatch-modernization/artifacts/architecture#int-3
specira	[6] Decision log: the migration-approach decision app.specira.ai/projects/dispatch-modernization/artifacts/decision-log
specira	[7] Performance test scenarios: the synthetic dataset app.specira.ai/projects/dispatch-modernization/artifacts/performance-test-scenarios#datasets
specira	[8] Deployment verification: the cutover checks app.specira.ai/projects/dispatch-modernization/artifacts/deployment-verification
specira	[9] Process flows: FLW-03 quarantine exception path app.specira.ai/projects/dispatch-modernization/artifacts/process-flows#flw-03