TEST PLAN AND ACCEPTANCE RECORD

# Test plan for SDD-AI-001 against the design specifications of SRA-AI-001

Test document — plan complete; results are recorded at acceptance

| CAPABILITY | DOCUMENT | VERSION | DATE |
|---|---|---|---|
| AI & Data | STP-AI-001 | 1.3 | Oct 10, 2026 |

WRITTEN BY

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## Document control

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| Capability | AI & Data | Author | Diksha Shah |
| Role | Principal AI Infrastructure Architect | | |
| Tests | SRA-AI-001 §4.1–4.8, §6 and §7<br>SDD-AI-001 staging and delivery<br>SRA-AI-001 R5 is an input and R15 is verified by inspection under S1 (full-SU positions cabled); its Rubin half is a new-hall decision, not tested | | |
| Credentials | NVIDIA Certified Professional: AI Operations, NVIDIA Certified Associate: AI Infrastructure and Operations, Google Cloud Professional Cloud Architect, AWS Certified Data Engineer | | |
| Approval | Approved by Edwin Ozer, Founder, Oct 10, 2026. Issued by Symbeeo, Oct 10, 2026. | | |
| Sign-off | "The customer's named acceptor signs the results; the practice lead countersigns. Acceptance = every T-case marked pass or waived with a reason, and the acceptor's signature in §4." | | |

## Contents

1 · Scope, environment, entry and exit 3
2 · Test cases 3
3 · Validated components and versions 5
4 · Acceptance record 6

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CONVENTIONS

Structure: validation goals and scope, validated devices, test results summary, as in Dell H19686.1 §5 (validation results; superseded by H19686.2) and the Juniper AI JVD's validation framework. Staging tests run at Symbeeo before shipment; acceptance tests run on site. Results are recorded at acceptance. [S] vendor figure or release; versions in §3 read Sep 24, 2026 from the sources in SRA-AI-001 §1. [A] assumption, to be confirmed by the signing engineer. A row with more than one tag is counted once: as a published figure if any tag is [S] or [S*], otherwise as an assumption if any tag is [A], otherwise as a design target.

**Table 1.** Revision history

| Date | Version | Change |
|---|---|---|
| Sep 15, 2026 | 1.0 | First issue. |
| Sep 21, 2026 | 1.1 | Corrections to wording, figure numbering and citations. |
| Sep 27, 2026 | 1.2 | Revised to current platform versions and the current document format. |
| Oct 10, 2026 | 1.3 | Approval line now reads: approved by the Founder, issued by Symbeeo. Diksha Shah remains the author. |

# 1 · Scope, environment, entry and exit

**Scope.** Sixteen DGX B300, compute fabric, storage fabric, management, power and cooling. **Environment.** S-cases at Symbeeo staging; T-cases on site. **Entry.** SDD-AI-001 signed; P1–P7 closed; hall power and cooling commissioned; every "pinned at entry" version in §3 written in. **Exit.** All cases pass or waived; burn-in hours and first-time power-on rate recorded (measures 2 and 3 of the eight).

# 2 · Test cases

"Evidence it produces" names the record each case leaves; the Result and Evidence ref columns stay empty until the case runs.

## 2.1 Staging cases (at Symbeeo, before shipment)

**Table 2.** Staging cases (at Symbeeo, before shipment)

| ID | Tests | Method | Pass criterion | Evidence it produces | Result | Evidence ref | Date · initials |
|---|---|---|---|---|---|---|---|
| S1 | rack build (SRA §4.1, §4.3) | per-rack elevation vs as-built photo | matches drawing; full-SU positions cabled | photograph per rack against the elevation drawing | ☐ pass ☐ fail | | |
| S2 | power-on | first power-on of each DGX | all 16 boot first time; count recorded | per-device quality record: serial, firmware, first-boot result | ☐ pass ☐ fail | | |
| S3 | GPU diagnostics | DCGM diagnostics (§3) on every GPU | 128 GPUs pass | DCGM diagnostic log extract per node | ☐ pass ☐ fail | | |

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| ID | Tests | Method | Pass criterion | Evidence it produces | Result | Evidence ref | Date · initials |
|---|---|---|---|---|---|---|---|
| S4 | burn-in | sustained GPU load for the burn-in hours set in SDD-AI-001 §6 | no errors, no thermal throttling; hours recorded | burn-in log extract with start, end and error count; per-device quality record | ☐ pass ☐ fail | | |
| S5 | intra-rack NCCL | all-reduce across the 4 DGX in one rack | bandwidth within the RA's expectation | NCCL test log extract (bus bandwidth by message size) | ☐ pass ☐ fail | | |
| S6 | firmware baseline | record DGX, NIC, switch firmware | matches baseline in §3 | firmware inventory export per device | ☐ pass ☐ fail | | |

## 2.2 Acceptance cases (on site)

**Table 3.** Acceptance cases (on site)

| ID | Tests | Method | Pass criterion | Evidence it produces | Result | Evidence ref | Date · initials |
|---|---|---|---|---|---|---|---|
| T1 | SRA §4.2 power | measure per-rack draw at full load | within the commissioned budget; > 50 kW racks on A+B [S] | power reading per rack and feed, with meter serial | ☐ pass ☐ fail | | |
| T2 | SRA §4.4 cooling | inlet and outlet temperatures at full load, rear doors active | inlet within spec; no throttling | temperature log extract; throttle counters | ☐ pass ☐ fail | | |
| T3 | SRA §4.6 fabric topology | UFM topology vs the RA's SU cabling plan | rail-optimized twin-plane fat tree; partial-SU positions cabled [S] | UFM topology screenshot and cable-map export | ☐ pass ☐ fail | | |
| T4 | SRA §4.6 fabric bandwidth | all-to-all across 16 nodes | within the RA's expectation for XDR | NCCL all-to-all log extract | ☐ pass ☐ fail | | |
| T5 | NCCL all-reduce, 16 nodes (SRA §7) | NCCL test across the block | scales as expected from S5; no variability beyond 5 % [A] | NCCL all-reduce log extract, repeated runs | ☐ pass ☐ fail | | |
| T6 | SRA §4.5 storage | read/write from all 16 nodes to the storage fabric | throughput as designed [A]; checkpoint write time recorded | storage benchmark log extract; checkpoint timing | ☐ pass ☐ fail | | |
| T7 | SRA §4.7 scheduler | submit a 16-node job through Slurm or Kubernetes under Mission Control | job runs on all nodes; accounting correct; users and projects resolve from the client's identity provider | job record and accounting extract | ☐ pass ☐ fail | | |
| T8 | reference fine-tuning run (SRA §7) | a defined model fine-tuned end to end | completes; throughput recorded | training log extract with throughput | ☐ pass ☐ fail | | |
| T9 | SRA §4.8 isolation | two projects on the block | no cross-project access to data or nodes | denied-access log extract per project | ☐ pass ☐ fail | | |

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| ID | Tests | Method | Pass criterion | Evidence it produces | Result | Evidence ref | Date · initials |
|---|---|---|---|---|---|---|---|
| T10 | node failure (SRA §6 F1) — failover test | power off one DGX under a job | job checkpoint recoverable; scheduler drains node | failover timing: fault to drain to restart; scheduler log extract | ☐ pass ☐ fail | | |
| T11 | fabric leaf failure (SRA §6 F2) — failover test | power off one leaf | traffic continues on the other plane; job survives [A] | failover timing; UFM event log extract | ☐ pass ☐ fail | | |
| T12 | power feed failure (SRA §6 F3) — failover test | drop feed A on one rack | rack continues on feed B | failover timing; PDU or busbar event log | ☐ pass ☐ fail | | |
| T13 | cooling failure (SRA §6 F4) | stop one rear door | throttling alarm; job survives for the agreed window [A] | alarm log extract; temperature and throttle trace | ☐ pass ☐ fail | | |
| T14 | encryption in transit (SRA §4.8, SRA-SEC-001) | inspect management-plane sessions (Mission Control, UFM, BMC, switch management) and storage access where the certified storage supports it [A] | sessions use TLS or equivalent; no clear-text management protocols | configuration extract and a packet-capture excerpt showing the negotiated protocol | ☐ pass ☐ fail | | |
| T15 | encryption at rest (SRA §4.8, SRA-SEC-001) | inspect the storage system's encryption setting and key custody | encryption enabled on all tiers; keys held as SRA-SEC-001 sets [A] | storage configuration screenshot; key-management record | ☐ pass ☐ fail | | |
| T16 | security logs reach the client's collector | generate a test event on a DGX, a switch, UFM and Mission Control | each event arrives at the client's collector, timestamped | log extract from the client's collector, one line per source | ☐ pass ☐ fail | | |

## 3 · Validated components and versions

Baseline = the current release read Sep 24, 2026 [S]. "Pinned at entry": no version was verified on Sep 24, 2026; the test lead writes the exact version before the first case runs (§1 entry). The As-tested column stays empty until the test runs.

**Table 4.** Validated components and versions

| Component | Model | Baseline version | As tested | Serial / count | Validated in |
|---|---|---|---|---|---|
| DGX system | DGX B300 (8 × ConnectX-8 VPI, 2 × BlueField-3) | DGX OS 7.6.0 (Sep 14, 2026): GPU driver 580.178.04, CUDA 13.0 Update 3, DOCA OFED 3.2.3-020000 [S] | | 16 | S2–S6, T5–T10 |
| DGX firmware (BMC, GPU, NIC, DPU) | DGX B300 | pinned at entry (S6) | | 16 | S6 |
| Compute fabric switch | Quantum-X800 Q3400-RA | switch OS pinned at entry | | per RA SU tables | T3, T4, T11 |
| Storage fabric switch | Spectrum-4 SN5610 | switch OS pinned at entry | | 2 | T6 |
| OOB switch | SN2201 | pinned at entry | | per SDD | T16 |
| Fabric manager | UFM 3.5 Appliance, Enterprise Edition [S] | 3.5 [S]; build pinned at entry | | | T3, T11 |

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| Component | Model | Baseline version | As tested | Serial / count | Validated in |
|---|---|---|---|---|---|
| Cluster management | NVIDIA Mission Control | 2.3.1: Base Command Manager 11.33.1, Run:ai 2.25 [S] | | | T7, T10, T16 |
| Scheduler | Slurm or Kubernetes (SDD P5) | as shipped in Mission Control 2.3.1; pinned at entry | | | T7 |
| Storage system | from the DGX SuperPOD certified list (SDD P4) | pinned at entry | | | T6, T15 |
| **Test tools** | | | | | |
| GPU diagnostics | DCGM | 4.6.1, as in DGX OS 7.6.0 [S] | | | S3, S4 |
| Collective library | NCCL | 2.31.2, as in DGX OS 7.6.0 [S] | | | S5, T4, T5 |
| Collective benchmark | nccl-tests | pinned at entry | | | S5, T4, T5 |
| Storage benchmark | chosen with the storage vendor [A] | pinned at entry | | | T6 |
| Power meter | calibrated instrument | model and calibration date recorded | | | T1, T12 |
| Temperature logging | rack sensors and rear-door controller | pinned at entry | | | T2, T13 |

## 4 · Acceptance record

**Acceptance terms.**

- **Acceptance is positive and signed** by the client's named acceptor below. It is never given by silence or by use of the block.
- **Review window: 10 business days** from delivery of the results to review them [A].
- **Fix window: 10 business days** for any failed case, followed by **one re-review** [A].
- **The warranty starts on the date of signed acceptance.**

The 10-and-10 are defaults from the contract range of 5–30 days and are marked [A]; the Founder may set others per contract.

**Table 5.** Acceptance record

| | Name | Role | Signature | Date |
|---|---|---|---|---|
| Client acceptor | | | | |
| Symbeeo test lead | | | | |
| Symbeeo practice lead | | | | |

Delivery measures recorded from this test: first-time power-on rate = S2 count / 16; burn-in hours per build = S4.

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Figures are as published by their sources on the dates given in this document; figures marked [A] are assumptions.

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