

1) UAT Scope Definition

| Scope Item | Description | Source |
|--------------------------------------|---|----------------------------|
| Account Opening Workflow | Full, end-to-end workflow: intake → validation → packet build → review → DocuSign → write-back | Agentic Workflow Def, Arch |
| Agentic Agents | All agents: Orchestrator, Intake, Validation, Packet Assembly, Human Review, DocuSign Envelope, Submission, Write-back, Audit/Trace, Continuous Improvement | Agent Inv, Arch Blueprint |
| Agent Decisions | All business-meaningful decisions made by any agent (e.g., validation pass/fail, route for manual review, escalate error) | Agent Def, Control Flow |
| Data Flows (Bronze/Silver/Gold) | Data ingestion, normalization, transformation, audit trail, and artifact generation | Data Map, Arch Blueprint |
| Human-in-the-Loop Integration | Manual review and feedback, including escalation and override logic | Agent, Control Flow |
| Feedback Loop | Capture/action of UAT feedback mapped to agents, workflows, data, and architecture | Principles, Agent Def |
| Audit/Traceability | End-to-end event and decision logging for compliance and continuous improvement | Audit, Arch Blueprint |
| Out-of-Scope: BI/Analytics | Business analytics, downstream reporting, dashboarding | Non-Goals |
| Out-of-Scope: Model Training | Automated model retraining, ML outside specified agent prompts/logic | Non-Goals |
| Out-of-Scope: Legacy Automation | RPA/non-agentic automation, direct integration bypassing agentic core | Non-Goals |
| Out-of-Scope: External Data Handling | Any processing or storage outside NorthRock IT environment | Non-Goals, Constraints |
| Out-of-Scope: Portfolio Management | Account maintenance/changes after onboarding completion | Non-Goals |

2) UAT Objectives (Business-Aligned)

| Objective ID | Business Objective | Expected Outcome | Success Signal |
|--------------|---|---|------------------------------------|
| O1 | Efficient and accurate new account onboarding with full audit/tracing | Accounts opened correctly, on time, and traceably to all agent and workflow decisions | SLA adherence, 100% traceability |
| O2 | Compliance with custodial/regulatory/account-type rules | All validation outcomes, packet assemblies, and write-backs conform to explicit rules | Zero NIGO due to rule breach |
| O3 | Minimized manual effort and fast exception handling | Agent auto-resolves routine scenarios; humans only intervene when needed | High auto-completion %, low manual |
| O4 | End-to-end data consistency and fidelity across systems (Salesforce/Edge, Custodians) | All lifecycle states, documents, and status updates are synchronized and complete | No broken syncs, zero mismatch |
| O5 | Continuous improvement and rapid response to process/rule issues | All actionable UAT/stakeholder feedback mapped, tracked, and closed in improvement loop | Feedback loop closure rate 100% |

3) UAT Scenarios (Derived from Agentic Workflow)

| Scenario ID | Workflow | Agents Involved | Trigger | Expected Behavior |
|-------------|------------------------------------|------------------------------------|---|--|
| S1 | Account Intake | Intake Agent, Orchestrator | New client intake event (API/form/manual) | All forms/documents are ingested, normalized, and properly associated |
| S2 | Intake Validation | Validation Agent, Orchestrator | After intake completes | Fields checked for completeness, consistency, custodian/account rule alignment; exceptions flagged |
| S3 | Packet Assembly | Packet Assembly Agent | After validation passes | Custodian forms correctly mapped, all fields pre-populated, digital packet built |
| S4 | Human-in-the-Loop Exception Review | Human Review Agent | Validation/package error/ambiguous scenario | Reviewer receives relevant context, approves/rejects/requests correction, and action is logged |
| S5 | DocuSign Envelope Routing | DocuSign Envelope Agent | Packet ready for signature | Envelope generated, routed, and tracked through completion |
| S6 | Submission and Synchronization | Submission Agent, Write-back Agent | Packet (signed if needed) ready | Submission to custodian, confirmation obtained, all updates/artifacts written to Salesforce/Edge |
| S7 | Audit/Traceability Pass | Audit/Trace Agent | At any workflow transition/finalization | All agent actions, human interventions, and state transitions recorded and retrievable |
| S8 | Data Layer Consistency Check | All Agents (data-writing stages) | Post-writeback or per batch | Consistency, completeness, and lineage validated for Bronze/Silver/Gold data |
| S9 | | | | |

| Scenario ID | Workflow | Agents Involved | Trigger | Expected Behavior |
|-------------|--|---|--|---|
| | Continuous Improvement Loop Activation | Continuous Improvement Agent, Audit/Trace, Orchestrator | Quarterly/on-demand/feedback receipt | Agent/process rules assessed, improvements recommended, tracked, and verified |
| S10 | Failure/Escalation Path | Any agent (on error), Human Review Agent | Detection of unrecoverable error or unresolved state | Exception routed for manual remediation, status and audit trail preserved |

4) Acceptance Criteria (Agent-Level)

| Agent | Decision / Output | Acceptance Criteria | Validation Method |
|-------------------------|--|---|--|
| Intake Agent | Normalized intake record | All required intake data present; proper client/household link | Output inspection, conformance check |
| Validation Agent | Validation result log | 100% rule coverage, pass/fail/exception flagged auditable | Rule conformance, trace audit |
| Packet Assembly Agent | Pre-populated custodian packet/form | All mapped fields, no missing/incorrect mapping, template current | Output inspection, stakeholder confirm |
| Human Review Agent | Review action (approve/reject/correct) | Annotated action, rationale captured, audit entry persists | Log inspection, replay verification |
| DocuSign Envelope Agent | Envelope generation, signature, status | Correct packet attached, recipient/routing valid, status tracked | Output/state, stakeholder confirmation |
| Submission Agent | Submission outcome, receipt | Successful transmission, confirmation code, fallback/notify on fail | Output inspection, log check |
| Write-back Agent | SFDC/Edge update, artifact persistence | Status, artifacts, and lifecycle state updated and retrievable | Output/state, record query |
| Audit/Trace Agent | Full trace log | All events/decisions are immutable and tied to workflow/agents | Trace replay, event audit |
| Continuous Improvement | Improvement advisory/log | Recommendations are actionable, logged, and tracked | Advisory review, closure tracking |

5) Acceptance Criteria (Workflow-Level)

| Workflow | Path / Branch | Expected End State | Pass Condition |
|------------------------------|------------------------------------|--|---|
| Account Opening | Core (no errors) | Account open, all data/packets in sync, audit pass | All agents succeed, customer onboarded, audit log closed |
| Account Opening | Exception (validation/packet fail) | Human review performed, decision/action logged | Human action trace exists, result path restarts/ends per correct process |
| Account Opening | DocuSign required | Signed envelope attached to submission | Valid signature present, status tracked/completed, failover if not possible |
| Account Opening | Submission error | Escalation or retry paths, audit preserved | Retry logic applied, manual escalation if automated fix not possible, all steps auditable |
| Audit/Continuous Improvement | Assessment cycle completed | Improvement applied or explicitly deferred w/ reason | Recommendation reviewed, action/deferral logged, effect visible in new run |

6) Data Validation Criteria (Bronze / Silver / Gold)

| Data Layer | Validation Focus | Agent Responsible | Failure Handling |
|-------------|---|---|--|
| Bronze | Intake data completeness, traceability | Intake Agent | Route to Human Review Agent, log exception |
| Silver | Normalization, structure, field mapping, validation log | Validation Agent, Packet Assembly Agent | Mark as exception, require correction/approval |
| Gold | End-state correctness for submission, artifact availability | Packet Assembly Agent, Submission Agent, Write-back Agent | Block submission, send to exception/human queue |
| Silver/Gold | Audit log event trace, replayability | Audit/Trace Agent | Halt process if non-replayable, compliance alert |
| Gold | Post-writeback lifecycle/ownership | Write-back Agent | Reconciliation on mismatch, manual intervention |

7) UAT Execution Plan

| Step | Action | Responsible | Artifact Produced |
|------|--|-------------------------|------------------------------------|
| 1 | Prepare UAT test data sets and workflow triggers | UAT Lead / Data Analyst | Intake test cases, intake docs |
| 2 | Run full agentic workflow with simulated and real life cases | Test Operator, UAT Lead | Agent step logs, workflow run logs |

| Step | Action | Responsible | Artifact Produced |
|------|--|-------------------------|------------------------------------|
| 3 | Capture outputs, decision traces at each workflow stage | All Agent Owners | Decision snapshots, trace files |
| 4 | Perform data layer inspection (Bronze/Silver/Gold) | Data Quality Analyst | Layer conformance reports |
| 5 | Solicit in-workflow stakeholder feedback per manual review | Business SME, Reviewer | Structured feedback records |
| 6 | Aggregate scenario-level metrics, compare to targets | UAT Lead, Metrics Owner | Metric dashboard/export |
| 7 | Feed feedback/artifacts to continuous improvement agents | UAT/DevOps, CI Agent | Feedback queue/update log |
| 8 | Run closure verification on improvement recommendations | Process Architect | Change request log, closure status |
| 9 | Prepare UAT summary and pass/fail dossier | UAT Lead | UAT summary, pass/fail report |

8) Metrics Definition (Mandatory)

8.1 Agent Performance Metrics

| Metric | Agent | Definition | Target |
|--------------------------|-----------------------|--|------------|
| Decision Accuracy | Validation Agent | % of automated decisions correctly matching stakeholder review | >98% |
| Intake Exception Rate | Intake Agent | % of intakes requiring manual correction | <5% |
| Retry/Recovery Rate | Submission Agent | # of retries per submission event | <1 per 100 |
| Fallback Invocation Rate | Any (on failure path) | % of workflows requiring escalation to manual | <2% |
| Trace Completeness | Audit/Trace Agent | % of agent actions/events traceable and replayable | 100% |

8.2 Workflow Metrics

| Metric | Workflow | Definition | Target |
|----------------------------|------------------------|---|----------------------------------|
| End-to-End Completion Rate | Account Opening | % of initiated runs leading to success | ≥95% |
| Average Execution Time | Account Opening | Mean time from intake event to lifecycle close | <60 mins |
| Branch Distribution | All | % per path: core, exception, manual, retry | As designed; monitored for drift |
| Escalation Frequency | All | % of workflows triggering human/manual escalation | <3% |
| Feedback Loop Closure Rate | Continuous Improvement | % of actionable UAT feedback resulting in change | >95% |

8.3 Data Quality Metrics

| Metric | Data Layer | Definition | Target |
|------------------------|----------------------|---|----------|
| Completeness | Bronze/Silver/Gold | % data artifacts with all required fields present | 100% |
| Freshness | Silver/Gold | Median time lag from event to visibility | <10 mins |
| Structural Conformance | Silver/Gold | % meeting expected normalized/validated structure | 100% |
| Replay Success Rate | Audit Trace (Silver) | % of traceable workflows 100% replayable | 100% |

8.4 Stakeholder Satisfaction Metrics

| Metric | Stakeholder | Capture Method | Target |
|-------------------------------|--------------------------|---------------------------------|--------|
| Confidence Score | Operations/Compliance | Structured survey (0-5 scale) | ≥4 |
| Trust Rating | Operations/Compliance | UAT debrief/rating (0-10 scale) | ≥8 |
| Manual Override Frequency | Client Service, Reviewer | # of per-100 workflows | <3 |
| Feedback Satisfaction Closure | All | % of feedback closed/resolved | >95% |

9) Feedback Capture Mechanism

| Feedback Source | Trigger Point | Capture Method | Structured Fields |
|-----------------------------------|------------------------------|--------------------------------------|---|
| Agent Output Error/Exception | On validation/packet failure | Automated log and reason-coding | Agent, workflow stage, error code, data ref |
| Human Review/Override | On manual review | Structured entry in review UI | Decision, reason, related agent/scenario |
| Continuous Improvement Assessment | On periodic/triggered CI | Logged in CI agent audit trail | Process/rule/metric, outcome, action |
| Post-Workflow UAT Session | End of UAT workflow | UAT survey (structured, 1-5 scale) | Scenario, agent, workflow, rating, comment |
| Stakeholder UAT Debrief | After UAT batch | Facilitated form, captured digitally | Goal, experience, pain point, suggestion |
| Automated Data Layer Check | After write-back/batch | Scripted audit log with diff/alerts | Data layer, anomaly type, affected record |

10) Feedback Classification & Routing

| Feedback Type | Routed To | Action Type |
|-------------------|-------------|----------------------|
| Agent logic issue | Agent Owner | Prompt/policy update |

| Feedback Type | Routed To | Action Type |
|--------------------------|------------------------|-----------------------------|
| Workflow step flaw | Workflow Designer | Workflow control refinement |
| Data mapping error | Data Layer Owner | ETL/transformation fix |
| Rule/process gap | Continuous Improvement | Rule/process adjustment |
| Audit/integrity gap | Compliance Architect | Trace/persistence revision |
| System integration issue | IT/Integration Owner | Adapter upgrade/bugfix |
| Architecture flaw | Solution Architect | Blueprint revision |

11) Feedback-to-Change Loop

| Feedback Input | Analysis Performed | Change Applied To | Verification Method |
|-----------------------------|--|-------------------------------|--------------------------------|
| Validation exception surge | Root cause (rule gaps? mapping? data structure?) | Validation Agent logic, rules | UAT rerun, metric improvement |
| High fallback/manual rate | Analyze failure reasons by agent/workflow path | Agent fallback/policy prompt | Path frequency metrics, re-UAT |
| NIGO due to data mismatch | Data lineage/tracing, ETL log review | Data mapping/transformation | Data re-ingestion test, trace |
| Slow end-to-end timing | Pinpoint agent/step delays, resource bottlenecks | Workflow config/timeout param | SLA & timing re-measurement |
| Unreplayable audit logs | Audit pipeline/event sourcing check | Audit/trace pipeline fix | Replay test, trace hash verify |
| Stakeholder dissatisfaction | Specifics coded, sentiment analysis | Human step/UX process | Stakeholder rating improvement |

12) Governance & Approval Gates

| Gate | Criteria | Approver | Artifact Required |
|------------------------|---|------------------------------|--------------------------------|
| UAT Pass Gate | All UAT objectives/scenarios passed, metrics on target | Principal Architect/UAT Lead | UAT summary, metric report |
| Production Readiness | Feedback closure rate >95%, audit drain clean, stable | Product Owner, Compliance | Closure log, system test certs |
| Architecture Deviation | Any agent/workflow/data path changed from blueprint | Solution Architect | Diff/impact log, rationale |
| Rule/Process Update | Policy/rule changes validated and signed off | Continuous Improvement, SME | Rule update log, approval note |
| Data Governance | Any critical data change meets security/retention rules | IT/Data Governance | Data change/tracing log |
| Audit Compliance | 100% trace/replay, WORM/immutable event logs present | Compliance Officer | Audit trial, replay log |

13) Explicit Non-Goals

| Out of Scope Item | Reason |
|--|--|
| General analytics/BI/reporting | Not in onboarding workflow/UAT remit |
| External audit exposure to clients | Ops/compliance only, for security/compliance |
| Direct RPA/process automation | System is Agentic-core by policy |
| Ad hoc, unstructured feedback | Only structured, map-able feedback allowed |
| Portfolio/account maintenance | Only new onboarding is in scope |
| Data/model training outside agentic core | Security, compliance, scope |
| Code/implementation specifics | UAT/feedback is for architecture, not code |
| Non-system/non-agent integrations | Not approved by architectural constraints |