REFERENCE ARCHITECTURE / ENGINEERING STANDARDS LIBRARY

SIEM, SOAR, NDR, and Security Operations Center

A federated, evidence-bearing security operations architecture integrating telemetry, SIEM, detection engineering, SOAR, NDR, case management, response, and incident learning.

PERMANENT DOCUMENT ID
RA-002

PUBLICATION
Candidate Reference Architecture

ARCHITECTURE SET
Canonical Set

Architecture identity and operating position

ARCHITECTURE SET	DOMAIN	LAYERS	COMPONENTS	ACCEPTANCE	DEPENDENCIES
Canonical Set	Cybersecurity and Network Security	6	6	18	0

SYSTEM CONTEXT

EXECUTIVE OUTCOMES

1. Normalize high-value security telemetry into queryable, governed schemas.
2. Treat detections, parsers, enrichments, and playbooks as versioned engineering artifacts.
3. Automate safe containment while preserving human authority for destructive or ambiguous response.
4. Produce complete incident evidence and continuous detection-quality feedback.

ARCHITECTURE DOCTRINE

Interpret the architecture as a bounded operating model: explicit ownership, least authority, separable desired/runtime/observed/evidence state, safe degradation, reversible change, measurable outcomes, and evidence-backed acceptance.

Layered architecture and component model

LAYER 01
Telemetry and Sensing

LAYER 02
Collection and Normalization

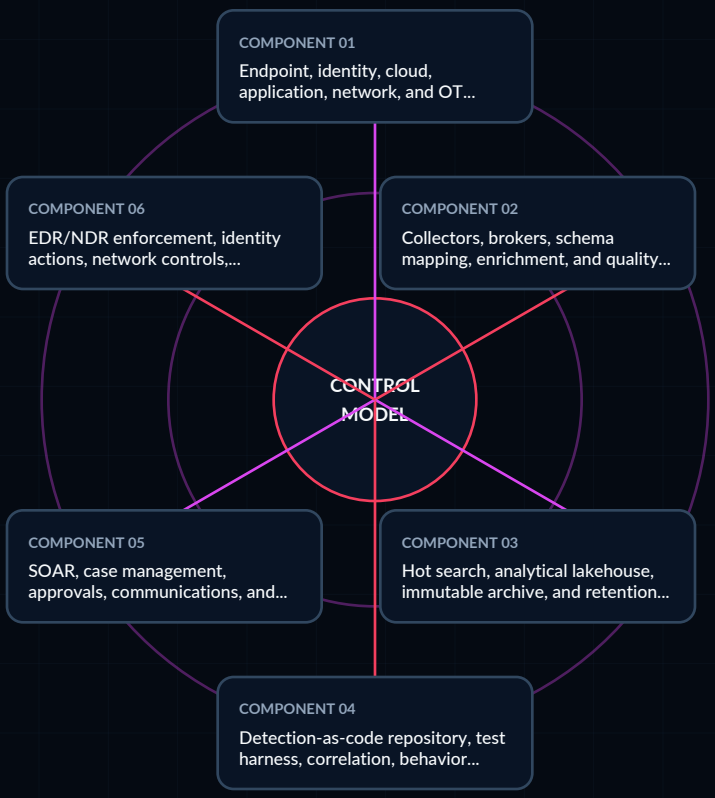
LAYER 03
Security Data and Search

LAYER 04
Detection and Analytics

LAYER 05
Orchestration and Case Management

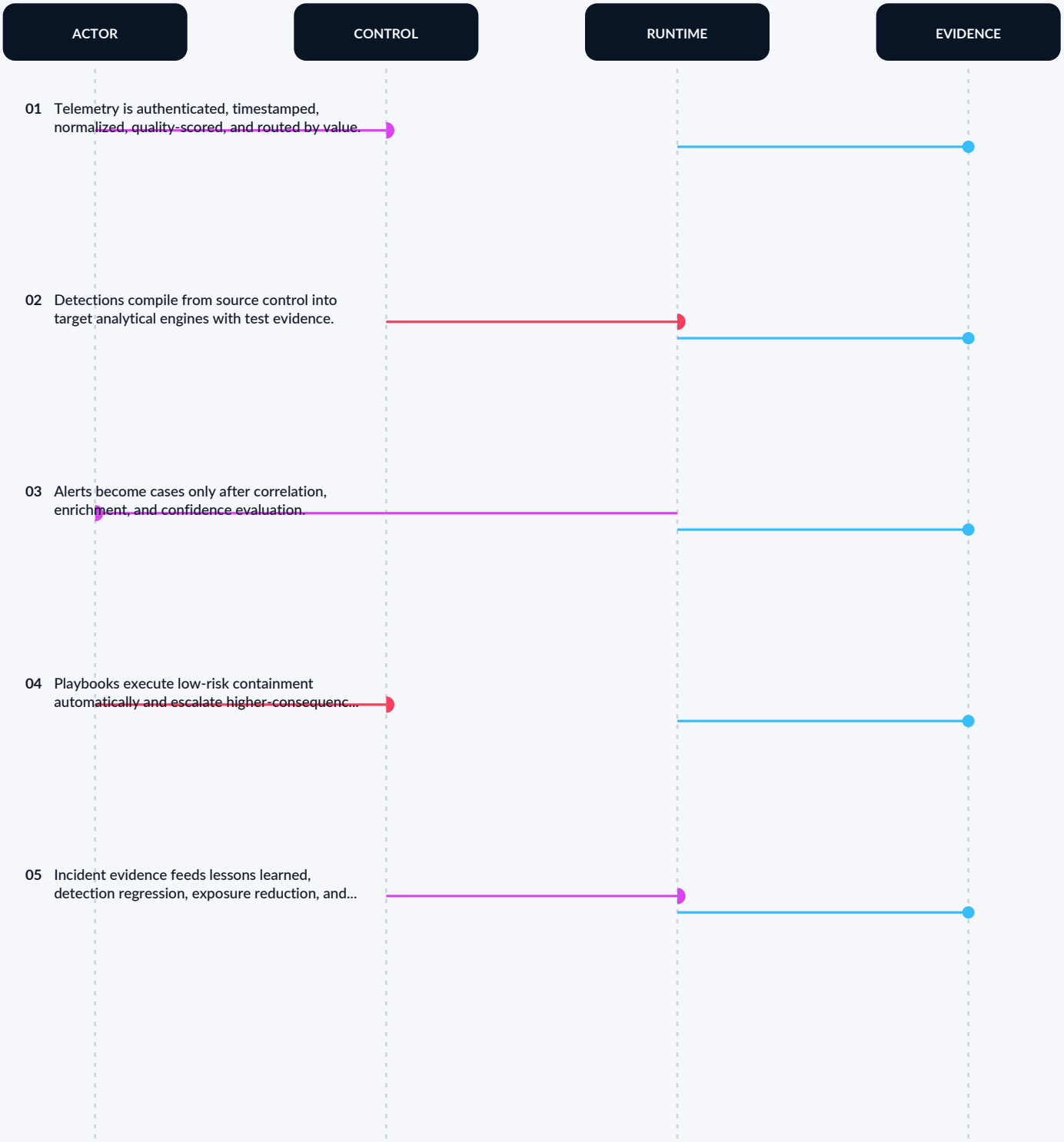
LAYER 06
Response and Evidence

CORE COMPONENTS



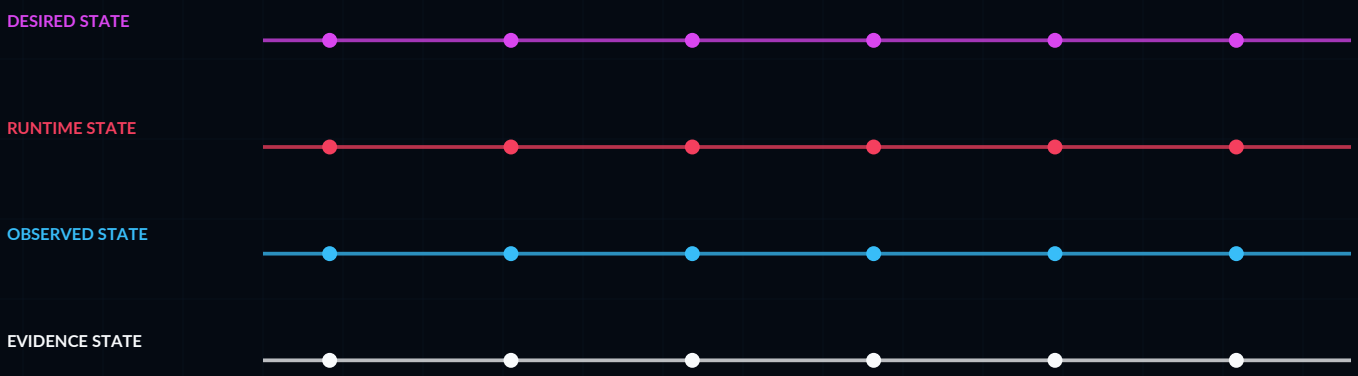
Each layer and component owns an explicit interface, state model, authority boundary, failure behavior, telemetry contract, recovery path, and evidence obligation.

Primary sequence and control flow



EVIDENCE THREAD Identity + authorization + version + state transition + output + validation + error + timing + accountable disposition.

State, data, authority, and trust flow

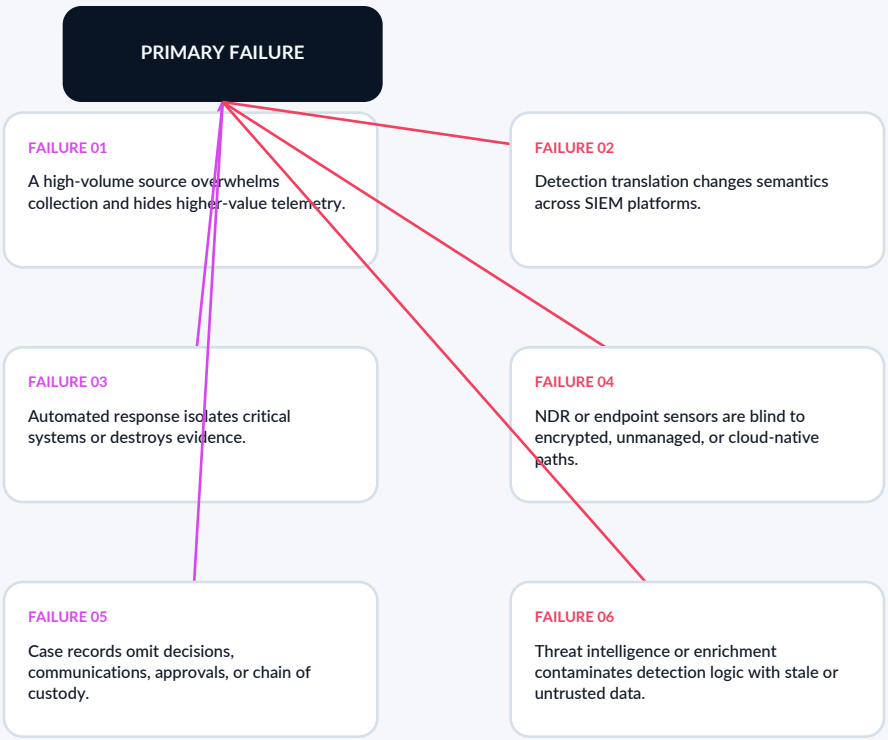


TRUST BOUNDARY REGISTER

TB-01 Sensor and collector trust	**TB-02** Security data plane and analytical tenant	**TB-03** Detection source repository and deployment path
TB-04 SOAR authority and target control planes	**TB-05** Case data and regulated evidence	**TB-06** Analyst workstation and privileged response session

Failure propagation and observability

FAILURE PATHS



OBSERVABILITY STACK

OUTCOME
User / mission result

SERVICE
SLOs / availability

CONTROL
Policy / authorization

EXECUTION
State / errors / retries

DEPENDENCY
External health / latency

EVIDENCE
Trace / artifact / receipt

RECOVERY RULE Closure requires containment, causal explanation, restored service, reconciled intended vs observed state, preserved evidence, and an explicit residual-risk decision.

Deployment profiles and implementation roadmap

DEPLOYMENT PROFILES

PROFILE 01	SMALL ENTERPRISE MANAGED SOC	Bounded proof
PROFILE 02	FEDERATED ENTERPRISE SOC	Team-scale governance
PROFILE 03	HIGH-ASSURANCE REGULATED SOC	Sovereign / high-assurance
PROFILE 04	HYBRID IT/OT SECURITY OPERATIONS	Distributed enterprise

IMPLEMENTATION ROADMAP

0-30 DAYS	31-90 DAYS	3-6 MONTHS	6-12 MONTHS	ONGOING
Scope / baseline	Pilot / contracts	Scale / integrate	Assure / automate	Measure / revalidate

Progression is evidence-gated. Architecture adoption does not advance because a component is installed or demonstrated; each stage requires measurable service, safety, security, recovery, and evidence outcomes.

Verification plan, dependencies, and reading map

ACCEPTANCE CRITERIA - REPRESENTATIVE SET

AC-01	The architecture has a named service owner, technical owner, security owner, data owner, and recovery authority.
AC-02	The system boundary, external dependencies, retained responsibilities, and trust transitions are documented and
AC-03	Identity, authorization, secrets, policy, and privileged operations are explicit and independently auditable.
AC-04	Desired state, runtime state, observed state, and evidence state are distinguishable and reconciled.
AC-05	Consequential changes require preconditions, approval policy, bounded execution, verification, and rollback.
AC-06	Telemetry supports service health, security detection, forensic reconstruction, and conformance evidence.
AC-07	Failure modes include safe degradation, dependency loss, corrupted state, operator error, and malicious action.
AC-08	Backup, restoration, reconstitution, and exit procedures are exercised against defined recovery objectives.

RELATED REFERENCE ARCHITECTURES

No mandatory RA dependencies declared

MAPPED MYTHOS STANDARDS

MYTHOS-SEC-0013, MYTHOS-SEC-0016, MYTHOS-DAT-0002, MYTHOS-DAT-0005, MYTHOS-PLT-0001, MYTHOS-SRE-0003

DETAILED SPECIFICATION READING MAP

09 Executive direction
10 Scope and system context
12 Logical architecture
15 Flow contracts
16 Trust boundaries
17 Deployment profiles
20 Failure modes
21 Dependencies and standards
22 Implementation roadmap
23 Acceptance criteria
25 Metrics and decision gates
26 Source authority
27 Publication control

The following pages preserve the detailed candidate architecture specification while this visual dossier adds explicit architecture diagrams, sequence views, state and evidence flows, observability, failure propagation, and implementation gates.

PART I - EXECUTIVE DIRECTION

OUTCOMES, RISKS, AND DECISIONS

ARCHITECTURE MANDATE

A federated, evidence-bearing security operations architecture integrating telemetry, SIEM, detection engineering, SOAR, NDR, case management, response, and incident learning.

EXECUTIVE OUTCOMES

- Normalize high-value security telemetry into queryable, governed schemas.
- Treat detections, parsers, enrichments, and playbooks as versioned engineering artifacts.
- Automate safe containment while preserving human authority for destructive or ambiguous response.
- Produce complete incident evidence and continuous detection-quality feedback.

DECISIONS REQUIRED

- Accountable service and risk ownership.
- Accepted architecture profile and consequence class.
- Authoritative identity, data, policy, configuration, and evidence systems.
- Mandatory approval, recovery, privacy, safety, and supplier-exit gates.
- Funding for operations, observability, validation, and lifecycle—not only implementation.

PART II - SCOPE, PRINCIPLES, AND SYSTEM CONTEXT

CYBERSECURITY AND NETWORK SECURITY

IN SCOPE

A federated, evidence-bearing security operations architecture integrating telemetry, SIEM, detection engineering, SOAR, NDR, case management, response, and incident learning.

OUT OF SCOPE

Vendor selection, exact sizing, contractual obligations, detailed low-level design, product certification, regulatory approval, and proof that any named platform is implemented.

ARCHITECTURE INVARIANTS

Explicit ownership; least authority; separable desired, runtime, observed, and evidence state; bounded automation; tested recovery; product-neutral interfaces; source and claim currency.

ASSUMPTIONS

Organizations tailor the pattern through documented risk, environment, criticality, data, safety, regulatory, workforce, and supplier analysis.

SYSTEM CONTEXT AND RESPONSIBILITY MODEL

ACTORS, ENVIRONMENTS, AND EXTERNAL DEPENDENCIES

ACTORS AND RESPONSIBILITY

- Service consumers and affected users
- Product, platform, network, security, data, reliability, and support teams
- Human administrators, operators, reviewers, incident commanders, and risk owners
- Machine identities, agents, workloads, devices, controllers, and external services
- Suppliers, providers, carriers, integrators, assessors, and regulators where applicable

RESPONSIBILITY BOUNDARY

- The adopting organization retains accountability for purpose, risk, configuration, data, identity, operation, recovery, and evidence even where a provider performs underlying functions.
- Inherited controls are recorded with provider, scope, evidence, limitations, shared responsibility, incident path, and exit conditions.
- No component is considered trusted solely because it is internal, managed, signed, cloud-hosted, model-generated, or supplied by a recognized vendor.

ARCHITECTURE POSITION

The architecture prioritizes governed detection and response over monolithic log accumulation, while preventing automation from outrunning evidence, authorization, or business safety.

PART III - LOGICAL ARCHITECTURE

LAYERS AND RESPONSIBILITIES

01

Telemetry and Sensing

Telemetry and Sensing owns a bounded set of responsibilities, interfaces, state, controls, failure behavior, telemetry, recovery procedures, and evidence. It does not silently absorb authority assigned to another layer.

02

Collection and Normalization

Collection and Normalization owns a bounded set of responsibilities, interfaces, state, controls, failure behavior, telemetry, recovery procedures, and evidence. It does not silently absorb authority assigned to another layer.

03

Security Data and Search

Security Data and Search owns a bounded set of responsibilities, interfaces, state, controls, failure behavior, telemetry, recovery procedures, and evidence. It does not silently absorb authority assigned to another layer.

04

Detection and Analytics

Detection and Analytics owns a bounded set of responsibilities, interfaces, state, controls, failure behavior, telemetry, recovery procedures, and evidence. It does not silently absorb authority assigned to another layer.

05

Orchestration and Case Management

Orchestration and Case Management owns a bounded set of responsibilities, interfaces, state, controls, failure behavior, telemetry, recovery procedures, and evidence. It does not silently absorb authority assigned to another layer.

06

Response and Evidence

Response and Evidence owns a bounded set of responsibilities, interfaces, state, controls, failure behavior, telemetry, recovery procedures, and evidence. It does not silently absorb authority assigned to another layer.

CORE COMPONENTS - A

COMPONENTS 01-03

COMPONENT 01

Endpoint, identity, cloud, application, network, and OT sensors

Required contract: owner, purpose, inputs, outputs, authority, data, dependencies, health, failure behavior, recovery, lifecycle, and evidence.

COMPONENT 02

Collectors, brokers, schema mapping, enrichment, and quality gates

Required contract: owner, purpose, inputs, outputs, authority, data, dependencies, health, failure behavior, recovery, lifecycle, and evidence.

COMPONENT 03

Hot search, analytical lakehouse, immutable archive, and retention policy

Required contract: owner, purpose, inputs, outputs, authority, data, dependencies, health, failure behavior, recovery, lifecycle, and evidence.

CORE COMPONENTS - B

COMPONENTS 04-06

COMPONENT 04

Detection-as-code repository, test harness, correlation, behavior analytics, and threat intelligence

Required contract: owner, purpose, inputs, outputs, authority, data, dependencies, health, failure behavior, recovery, lifecycle, and evidence.

COMPONENT 05

SOAR, case management, approvals, communications, and incident command

Required contract: owner, purpose, inputs, outputs, authority, data, dependencies, health, failure behavior, recovery, lifecycle, and evidence.

COMPONENT 06

EDR/NDR enforcement, identity actions, network controls, recovery workflows, and evidence vault

Required contract: owner, purpose, inputs, outputs, authority, data, dependencies, health, failure behavior, recovery, lifecycle, and evidence.

PART IV - DATA, CONTROL, AUTHORITY, AND EVIDENCE FLOW

FLOW CONTRACTS

1. Telemetry is authenticated, timestamped, normalized, quality-scored, and routed by value.

   Evidence: request and actor identity, policy decision, versions, state transitions, outputs, tests, errors, timing, and accountable disposition.

2. Detections compile from source control into target analytical engines with test evidence.

   Evidence: request and actor identity, policy decision, versions, state transitions, outputs, tests, errors, timing, and accountable disposition.

3. Alerts become cases only after correlation, enrichment, and confidence evaluation.

   Evidence: request and actor identity, policy decision, versions, state transitions, outputs, tests, errors, timing, and accountable disposition.

4. Playbooks execute low-risk containment automatically and escalate higher-consequence steps.

   Evidence: request and actor identity, policy decision, versions, state transitions, outputs, tests, errors, timing, and accountable disposition.

5. Incident evidence feeds lessons learned, detection regression, exposure reduction, and recovery.

   Evidence: request and actor identity, policy decision, versions, state transitions, outputs, tests, errors, timing, and accountable disposition.

TRUST BOUNDARIES AND ENFORCEMENT

EVERY CROSSING REQUIRES AN EXPLICIT CONTRACT

TRUST BOUNDARY 01

Sensor and collector trust

Minimum contract: authenticated parties, authorized actions, data classification, protocol, encryption, validation, rate and resource limits, observability, failure behavior, revocation, and evidence.

TRUST BOUNDARY 02

Security data plane and analytical tenant

Minimum contract: authenticated parties, authorized actions, data classification, protocol, encryption, validation, rate and resource limits, observability, failure behavior, revocation, and evidence.

TRUST BOUNDARY 03

Detection source repository and deployment path

Minimum contract: authenticated parties, authorized actions, data classification, protocol, encryption, validation, rate and resource limits, observability, failure behavior, revocation, and evidence.

TRUST BOUNDARY 04

SOAR authority and target control planes

Minimum contract: authenticated parties, authorized actions, data classification, protocol, encryption, validation, rate and resource limits, observability, failure behavior, revocation, and evidence.

TRUST BOUNDARY 05

Case data and regulated evidence

Minimum contract: authenticated parties, authorized actions, data classification, protocol, encryption, validation, rate and resource limits, observability, failure behavior, revocation, and evidence.

TRUST BOUNDARY 06

Analyst workstation and privileged response session

Minimum contract: authenticated parties, authorized actions, data classification, protocol, encryption, validation, rate and resource limits, observability, failure behavior, revocation, and evidence.

PART V - DEPLOYMENT PROFILES

PROFILE CHANGES SCALE, NOT ASSURANCE OUTCOMES

PROFILE 01 / SMALL ENTERPRISE MANAGED SOC

Use this profile to establish a bounded implementation with explicit scale, criticality, users, data, autonomy, external dependencies, recovery objectives, staffing, and validation depth. The profile may simplify technology or topology but must preserve identity, least authority, evidence, safe failure, recovery, lifecycle, and accountable risk acceptance.

PROFILE 02 / FEDERATED ENTERPRISE SOC

Use this profile to establish a bounded implementation with explicit scale, criticality, users, data, autonomy, external dependencies, recovery objectives, staffing, and validation depth. The profile may simplify technology or topology but must preserve identity, least authority, evidence, safe failure, recovery, lifecycle, and accountable risk acceptance.

PROFILE 03 / HIGH-ASSURANCE REGULATED SOC

Use this profile to establish a bounded implementation with explicit scale, criticality, users, data, autonomy, external dependencies, recovery objectives, staffing, and validation depth. The profile may simplify technology or topology but must preserve identity, least authority, evidence, safe failure, recovery, lifecycle, and accountable risk acceptance.

PROFILE 04 / HYBRID IT/OT SECURITY OPERATIONS

Use this profile to establish a bounded implementation with explicit scale, criticality, users, data, autonomy, external dependencies, recovery objectives, staffing, and validation depth. The profile may simplify technology or topology but must preserve identity, least authority, evidence, safe failure, recovery, lifecycle, and accountable risk acceptance.

PART VI - OPERATING LIFECYCLE

FROM DISCOVERY THROUGH RETIREMENT

01 / Onboard source and data contract

Entry and exit criteria, owner, evidence, exceptions, dependencies, rollback, and next decision are recorded. No phase is complete solely because components were purchased, configured, or demonstrated.

02 / Validate schema, clock, identity, and retention

Entry and exit criteria, owner, evidence, exceptions, dependencies, rollback, and next decision are recorded. No phase is complete solely because components were purchased, configured, or demonstrated.

03 / Engineer and test detections

Entry and exit criteria, owner, evidence, exceptions, dependencies, rollback, and next decision are recorded. No phase is complete solely because components were purchased, configured, or demonstrated.

04 / Triage and correlate

Entry and exit criteria, owner, evidence, exceptions, dependencies, rollback, and next decision are recorded. No phase is complete solely because components were purchased, configured, or demonstrated.

05 / Authorize and execute response

Entry and exit criteria, owner, evidence, exceptions, dependencies, rollback, and next decision are recorded. No phase is complete solely because components were purchased, configured, or demonstrated.

06 / Recover and preserve evidence

Entry and exit criteria, owner, evidence, exceptions, dependencies, rollback, and next decision are recorded. No phase is complete solely because components were purchased, configured, or demonstrated.

07 / Measure coverage and improve

Entry and exit criteria, owner, evidence, exceptions, dependencies, rollback, and next decision are recorded. No phase is complete solely because components were purchased, configured, or demonstrated.

SECURITY, PRIVACY, SAFETY, AND RIGHTS

CROSS-CUTTING ASSURANCE

SECURITY

Threat model identities, trust boundaries, supply chain, control planes, data, protocols, privilege, abuse, detection, response, recovery, and residual risk.

PRIVACY

Purpose limitation, minimization, transparency, consent where required, access, correction, retention, deletion, sovereignty, metadata, and third-party processing.

SAFETY

Hazards, unsafe states, human intervention, physical consequence, dependency failure, automation limits, emergency stop, recovery sequence, and validation.

RIGHTS AND USABILITY

Accessibility, contestability, explanation, operator workload, affected-user communication, grievance, misuse prevention, and equitable performance.

SUPPLY CHAIN

Provenance, version, SBOM or component inventory, signature, vulnerability, support, update, provider, subcontractor, and exit.

EVIDENCE

Design decisions, tests, telemetry, incidents, approvals, exceptions, recovery exercises, source currency, and review findings remain linked to the architecture version.

FAILURE MODES AND RESILIENCE

DESIGN FOR SAFE DEGRADATION AND TRUSTWORTHY RECOVERY

FAILURE SCENARIO 01

A high-volume source overwhelms collection and hides higher-value telemetry.

Required response: detect, contain, preserve evidence, maintain or enter safe service, communicate, recover, verify, learn, and prevent recurrence.

FAILURE SCENARIO 02

Detection translation changes semantics across SIEM platforms.

Required response: detect, contain, preserve evidence, maintain or enter safe service, communicate, recover, verify, learn, and prevent recurrence.

FAILURE SCENARIO 03

Automated response isolates critical systems or destroys evidence.

Required response: detect, contain, preserve evidence, maintain or enter safe service, communicate, recover, verify, learn, and prevent recurrence.

FAILURE SCENARIO 04

NDR or endpoint sensors are blind to encrypted, unmanaged, or cloud-native paths.

Required response: detect, contain, preserve evidence, maintain or enter safe service, communicate, recover, verify, learn, and prevent recurrence.

FAILURE SCENARIO 05

Case records omit decisions, communications, approvals, or chain of custody.

Required response: detect, contain, preserve evidence, maintain or enter safe service, communicate, recover, verify, learn, and prevent recurrence.

FAILURE SCENARIO 06

Threat intelligence or enrichment contaminates detection logic with stale or untrusted data.

Required response: detect, contain, preserve evidence, maintain or enter safe service, communicate, recover, verify, learn, and prevent recurrence.

PART VII - INTEGRATION AND DEPENDENCY MODEL

CONNECTED REFERENCE ARCHITECTURES AND STANDARDS

REFERENCE ARCHITECTURE DEPENDENCIES

- RA-009 - Zero-Trust Identity, Policy, Secrets, and Access Fabric
- RA-012 - Enterprise Observability, SRE, and Incident Command Platform
- RA-019 - Sovereign Browser, Remote Access, and Web Automation

MAPPED MYTHOS STANDARDS

- MYTHOS-SEC-0013
- MYTHOS-SEC-0016
- MYTHOS-DAT-0002
- MYTHOS-DAT-0005
- MYTHOS-PLT-0001
- MYTHOS-SRE-0003

DEPENDENCY DOCTRINE

A dependency is not a blanket trust grant. Each connection requires an interface, identity, policy, data, availability, version, failure, recovery, and evidence contract. Correlated failure and circular authority must be analyzed across the full architecture graph.

PART VIII - IMPLEMENTATION AND ADOPTION ROADMAP

PHASED, EVIDENCE-DRIVEN TRANSITION

0-30 DAYS	Inventory purpose, owners, users, systems, data, dependencies, risks, current diagrams, incidents, recovery, and evidence gaps.
31-90 DAYS	Establish authoritative identity, configuration, policy, data, source, and architecture records; define target profile and acceptance tests.
3-6 MONTHS	Implement bounded foundations, isolation, telemetry, change control, backup, recovery, and representative pilot workflows.
6-12 MONTHS	Expand through standard patterns, automation, service ownership, SLOs, independent assessment, failure injection, and supplier-exit exercises.
ONGOING	Reconcile drift, review sources, reassess risk, measure outcomes, exercise recovery, renew exceptions, migrate dependencies, and retire obsolete paths.

ARCHITECTURE ACCEPTANCE CRITERIA - A

CRITERIA 01-09

AC-01	The architecture has a named service owner, technical owner, security owner, data owner, and recovery authority.
AC-02	The system boundary, external dependencies, retained responsibilities, and trust transitions are documented and reviewed.
AC-03	Identity, authorization, secrets, policy, and privileged operations are explicit and independently auditable.
AC-04	Desired state, runtime state, observed state, and evidence state are distinguishable and reconciled.
AC-05	Consequential changes require preconditions, approval policy, bounded execution, verification, and rollback.
AC-06	Telemetry supports service health, security detection, forensic reconstruction, and conformance evidence.
AC-07	Failure modes include safe degradation, dependency loss, corrupted state, operator error, and malicious action.
AC-08	Backup, restoration, reconstitution, and exit procedures are exercised against defined recovery objectives.
AC-09	Data classification, retention, privacy, sovereignty, and disposition controls follow the actual information flow.

ARCHITECTURE ACCEPTANCE CRITERIA - B

CRITERIA 10-18

AC-10	Supplier, model, protocol, platform, and software dependencies have provenance, version, support, and replacement records.
AC-11	Representative performance and capacity tests include saturation, contention, latency, and degraded conditions.
AC-12	Exceptions are time-bounded, visible, approved by accountable risk owners, and linked to compensating controls.
AC-13	Every production detection is versioned, tested against positive and negative cases, peer-reviewed, deployed through controlled automation, and linked to coverage objectives.
AC-14	Telemetry quality measures include completeness, latency, parsing success, identity resolution, clock integrity, and dropped-event evidence.
AC-15	Response playbooks classify actions by reversibility, blast radius, evidence impact, and approval requirement.
AC-16	Security data retention separates rapid analysis, investigation, legal hold, and immutable archival needs.
AC-17	The SOC can operate through loss of one SIEM, identity provider, case platform, or response integration.
AC-18	Incident closure requires recovery validation, evidence completeness, detection regression, and accountable lessons learned.

METRICS, EVIDENCE, AND DECISION GATES

MEASURE SERVICE OUTCOMES AND ASSURANCE

COVERAGE

Percent of components, interfaces, identities, data flows, dependencies, risks, and controls represented in current architecture evidence.

CHANGE QUALITY

Plan success, rollback, verification pass, escaped defect, drift, and emergency-change rates.

RELIABILITY

Availability, latency, saturation, dependency health, recovery time, recovery point, and safe-degradation success.

SECURITY

Privilege exposure, policy denial, identity compromise, vulnerable dependency, detection coverage, response, and evidence completeness.

HUMAN OUTCOME

Task success, operator workload, accessibility, override, contestability, training, and user-impact measures.

LIFECYCLE

Version currency, unsupported component, exception age, migration readiness, restore exercise, and retirement completeness.

Release or expansion gate: mandatory acceptance criteria pass; failed safety, privacy, identity, recovery, evidence, or legal gates block promotion regardless of aggregate score.

SOURCE AUTHORITY REGISTER

CURRENT PRIMARY AND OFFICIAL REFERENCES

SOURCE 01 **NIST Cybersecurity Framework 2.0**

https://doi.org/10.6028/NIST.CSWP.29

SOURCE 02 **NIST SP 800-53 Rev. 5**

https://doi.org/10.6028/NIST.SP.800-53r5

SOURCE 03 **NIST SP 800-207, Zero Trust Architecture**

https://csrc.nist.gov/pubs/sp/800/207/final

SOURCE 04 **Open Cybersecurity Schema Framework**

https://ocsf.io/

SOURCE 05 **Sigma Detection Format and Rule Specification**

https://sigmahq.io/sigma-specification/specification/sigma-rules-specification.html

SOURCE 06 **MITRE ATT&CK**

https://attack.mitre.org/

Source currency note. Official frameworks, specifications, and implementation guidance evolve. Assessors must verify the current version, status, errata, applicability, and effective date at adoption and scheduled review. NIST AI RMF 1.0 was under revision at the publication date.

PUBLICATION CONTROL AND REVISION

PERMANENT IDENTITY / CONTROLLED EVOLUTION

PERMANENT DOCUMENT IDENTITY	RA-002
VERSION	1.0.0-candidate
PUBLICATION DATE	2026-07-24
SCHEDULED REVIEW	2027-01-24
STATUS	Candidate Reference Architecture
ARCHITECTURE SET	Canonical Set
CLASSIFICATION	Public
PUBLISHER	Mythos Systems

REVISION RECORD

1.0.0-candidate (2026-07-24) - Permanent-publication candidate edition regenerated under the Mythos Systems architecture publication system. Production sequence metadata is excluded from public identity.