



# Why TIDE

Traditional detection programs emphasize rule quantity over quality, leading to alert fatigue, false positives, and missed attacks. TIDE reverses that equation by treating detection creation as a true engineering discipline. Every detection is threat-modeled, evidence-based, and validated through automation before deployment.

The result is a precision-built detection ecosystem that evolves with the threat landscape and delivers high-fidelity signals aligned to real attacker behavior.

| Traditional Detection Engineering | Threat-Informed Detection Engineering                         |
|-----------------------------------|---------------------------------------------------------------|
| Static rules built from intuition | Threat-modeled hypotheses derived from real attacker behavior |
| Manual rule updates and drift     | Detection-as-Code (DaC) with peer review and CI/CD automation |
| Alert fatigue and false positives | Empirical validation and fidelity scoring                     |
| Stagnant visibility               | Continuous improvement loop guided by telemetry feed          |

# Key Benefits:

- Precision detections aligned to real attacker behaviors
- Ongoing refinement as the threat landscape evolves
- ♦ High signal-to-noise ratio to reduce analyst fatigue
- Continuous validation and automation pipelines

# TIDE Core Principles

### Intelligence as Design Input:

Every detection starts with actionable threat intelligence. Engineers translate adversary TTPs into detection requirements that prioritize real, high-impact behaviors.

### Threat Modeling & Hypothesis Testing:

Detections begin with the development of threat models that are emulated in a controlled environment. Observations are taken to craft a formal detection hypothesis, which is then validated and ultimately refined until the detection produces consistent, explainable results.

### Detection-as-Code (DaC):

Detections are built, versioned, and deployed like software—enabling collaboration, traceability, and rapid automation.

### Continuous Validation *₹* Metrics:

Each detection is tracked against key performance metrics to ensure continued reliability, even as environments and attacker tactics evolve.

# TIDE Powers Binary Defense's MDR Solution

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### The TIDE Workflow

#### Define Threat Priorities

Identify adversaries and high-impact TTPs based on threat intel and internal telemetry.

#### Formulate Threat Model

Apply GOST (Goal, Objective, Strategy, and Tactics) to map attacker goals to observable behaviors and telemetry.

#### **Build Detection Logic**

Develop detection YAMLs using standardized schemas and peer review to maintain consistency.

### Validate Through Testing

Simulate attacker techniques using Atomic Red Team and Caldera. Measure fidelity, tune false positives, and record validation data.

### Deploy via CI/CD

Automate deployment to SIEM, EDR, or XDR systems with version control and rollback assurance.

#### Measure & Refine

Track fidelity, coverage, and drift metrics to guide ongoing improvement and tuning.

# TIDE Empowers Your Team

| Your Goal                       | How TIDE Helps You Achieve It                                  |
|---------------------------------|----------------------------------------------------------------|
| Reduce noise and alert fatigue  | Empirical validation and fidelity scoring remove excess alerts |
| Strengthen visibility           | Threat-modeled detections mapped to MITRE ATT&CK               |
| Improve SOC performance         | Analysts receive fewer, richer,<br>context-ready alerts        |
| Future-proof detection coverage | CI/CD pipelines ensure detection logic evolves automatically   |

The result of TIDE is a living system that learns, adapts, and strengthens with each iteration. Detection becomes not a static rulebook, but a dynamic reflection of the threat landscape itself.

TIDE transforms threat intelligence into engineered resilience.

Binary Defense is a trusted leader in Managed Detection and Response (MDR), helping organizations across industries stay ahead of modern cyber threats. Our team of SOC analysts, threat hunters, detection engineers, and researchers works around the clock to deliver outcomes that matter: earlier threat detection, faster response, and stronger long-term security.

We take an attacker's mindset to defense, combining deep expertise with proactive tradecraft to protect what matters most.

Learn more at <u>binarydefense.com</u>, explore our <u>blog</u> for the latest insights, or follow us on <u>LinkedIn</u>.



