

INTRUDECT

Technical Datasheet

Modular network monitoring and intrusion detection platform

Self-hosted · No telemetry · EU-built

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Overview

Intrudect is a modular, self-hosted security monitoring platform for internal network visibility. It combines passive network metadata analysis, isolated-network egress validation, decoy-service monitoring, and regex-based log monitoring in one centrally managed system.

The platform detects internal reconnaissance, lateral movement, unauthorized services, policy deviations, and outbound paths that should not exist. The emphasis is on actionable metadata and operational usability rather than broad packet-signature matching.

Architecture

Agents collect metadata and generate alerts in the monitored environment. Users interact only with the central Web UI for management, investigation, and configuration.

Component	Purpose
Network Agent	Passive traffic analysis, detection of internal attack behavior, service exposure, and policy violations
Egress Agent	Validates whether isolated or restricted segments can unexpectedly reach outside networks
Honeypot	Decoy TCP/UDP services as a low-noise tripwire for detecting reconnaissance and lateral movement
Log Agent	Regex-based monitoring of system and application log files
Central Web UI	Alert triage, search, dashboards, configuration, user management, integrations, and exports

Key Differentiator

Intrudect is the only NDR platform on the market that includes a built-in network honeypot and an egress isolation verification agent as native components – not add-ons or separate products.

Positioning

vs Enterprise NDR (Vectra AI, Darktrace, ExtraHop, Corelight)

- Lower price point with comparable internal visibility coverage
- Faster deployment and operational start
- No vendor lock-in or cloud dependency

vs Open-source stacks (Security Onion, Zeek, Suricata, Snort)

- More out-of-the-box functionality, less custom integration
- Fewer moving parts, lower operational maintenance
- Behavior-based detections with actionable metadata context

Network Agent – Detection Coverage

The Network Agent passively analyzes traffic metadata and selected protocol activity. It requires port-mirrored (SPAN) traffic from network switches.

Reconnaissance and Discovery

Detection	Description
Port scanning	Single-target and multi-target scan pattern detection
ARP scanning	ARP-based host discovery detection
DNS scanning	Dictionary-based host discovery and PTR-based network mapping
Unused IP scanning	Detection of probing against unused IP address space
LDAP/AD mapping	Active Directory enumeration and domain mapping anomalies

Lateral Movement and Segmentation

Detection	Description
Lateral movement	Movement on administrative protocols (SSH, WinRM, RDP, etc.) to unauthorized destinations. Protocol list and exceptions are user-managed.
Inter-segment policy	User-defined cross-segment traffic policy matrix. Unauthorized traffic initiation generates an alert.
Password spraying	Sequential short/low-packet connections on administrative protocols (SSH, RDP, etc.).

Policy and Threat Intelligence

Detection	Description
MISP IOC matching	API integration with MISP. Monitors active traffic for known malicious IP addresses, DNS names, and device names.
HTTP User-Agent	Alerts on suspicious, non-standard, or known offensive-tooling user-agent values. User-configurable exceptions.
TOR traffic	Detection of traffic to/from the TOR network
SMB to internet	Alerts when SMB traffic is directed to external destinations

DNS and DHCP Security

Detection	Description
DNS tunneling / C2	Detection of DNS-based command-and-control communication patterns
DGA domains	Detection of domain generation algorithm query patterns
Rogue DNS servers	Alerts on DNS queries directed to non-authorized DNS servers
Rogue DHCP servers	Unauthorized DHCP server detection
DHCP anomalies	Excessive request volume, same MAC with different hostnames, same hostname from different MACs, known offensive tool hostnames in DHCP requests

Asset and Service Visibility

Capability	Description
Device inventory	All network devices discovered from DHCP and traffic analysis. IP, MAC, vendor, hostname, first seen, last seen. Exportable.
New device alerting	Configurable per network segment. Alerts when a previously unseen device appears.
Service discovery	Passive discovery of TCP/UDP services from observed traffic. Each service tracked with first seen and last used timestamps.
Unauthorized services	Alert when an unauthorized TCP/UDP service is detected on the internal network.
Virtual sandbox	Per-device outbound traffic policy using DNS, ASN, and IP-based destination rules. Traffic outside the defined pattern generates an alert.

The screenshot shows a network management interface with the following components:

- Filters:** "Show all" (green), "Unauthorized only" (red), search "10.", "Sort: IP", "Asc", "Expand all", "Collapse all".
- Device Summary:**
 - IP: 10. [redacted] | First: 2025-10-30 09:52 | Last: 2026-02-27 09:41 | Unauthorized
 - IP: 10. [redacted] [P5787] | First: 2025-11-26 08:35 | Last: 2026-01-22 14:08 | Unauthorized
- TCP Ports Table:**

Port	First Seen	Last Seen	Authorized	Actions
80	2025-11-25 15:30	2025-12-08 11:03	Unauthorized	Shield, X
443	2025-11-25 15:30	2026-01-14 20:03	Unauthorized	Shield, X
515	2025-12-08 11:10	2025-12-08 11:10	Unauthorized	Shield, X
631	2025-11-26 08:35	2026-01-22 14:08	Unauthorized	Shield, X
- Additional Device Summary:**
 - IP: 10. [redacted] [S5791] | First: 2026-01-19 14:34 | Last: 2026-01-19 14:34 | Unauthorized
 - IP: 10. [redacted] [S5792] | First: 2026-01-21 15:18 | Last: 2026-01-21 15:18 | Unauthorized

Device inventory with service discovery and authorization status

Egress Agent

Validates whether an isolated or restricted network segment can unexpectedly reach outside networks. Runs 24/7, actively attempting outbound communication using multiple transport methods. Test methods and frequency are user-configurable.

- DNS channels (A / AAAA / TXT record queries)
- IPv4 and IPv6 pathways and fallback routes
- ICMP-based egress leak detection
- Proxy abuse and discovered gateway testing
- Temporary firewall or routing exceptions

Alerts identify the leaking network segment and the specific method that achieved outbound connectivity.

Honeypot

Decoy TCP/UDP services deployed on selected IP and port combinations. Generates high-signal alerts from activity that should not occur during normal operations.

- Configurable TCP and UDP port listeners
- Multiple IP address support per honeypot instance
- PCAP capture on connection for forensic evidence
- Alert on connection initiation, full session PCAP on disconnect

Log Agent

Extends platform coverage into host and application logs using user-defined regular expressions. Can be deployed on a central log collector or on individual servers.

- Unlimited concurrent log file monitoring per agent
- Custom alert message and severity per rule
- Syslog, application logs, web server logs, database logs, audit logs

Example use cases: web server 404/403 status codes, SQL injection patterns in database query logs, non-standard user agents, password-based logins where key-based is expected, auditd + honeyfile access detection.

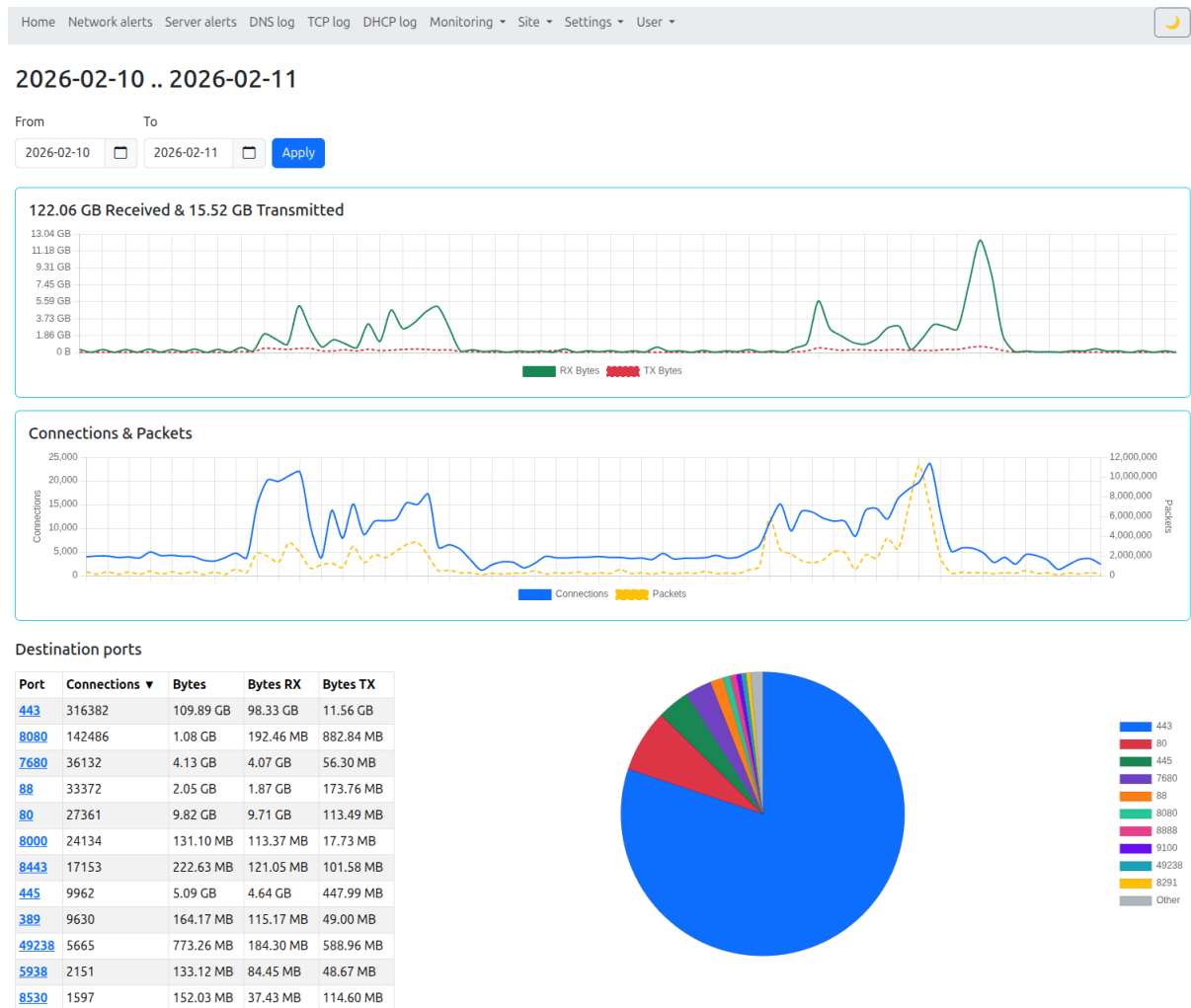
Investigation Metadata

Intrudect stores detailed metadata to make alerts actionable without requiring full packet capture review for every event.

Data Type	Stored Context
All traffic	Timestamp, source/destination IP, MAC, port, reverse PTR value, ASN
DNS	Query content, record type (A, AAAA, CNAME, etc.), query values, DNS server
TCP sessions	Connection duration, bytes and packets in both directions, PTR and ASN enrichment
DHCP	Requests and responses, hostname values, assigned IP addresses
HTTP	Request URL, host header, user-agent value
Devices	IP, MAC, vendor, hostname, first seen, last seen
Services	Observed internal TCP/UDP services with first seen and last used timestamps
Forensics	Optional PCAP snippets attached to qualifying alerts

Analysis and Dashboards

- Search and filter by time range, source/destination IP, port, MAC address, hostname
- Wildcard and list-based search support
- Aggregated daily overview: alerts, newly detected devices, traffic volumes, top initiators, destinations, DNS queries
- Ranked views and graphs for traffic destinations, ports, ASN/country breakdown
- DNS statistics: top domains, query types, DNS servers, volume graphs
- Data export: CSV, XLSX, JSON



Network dashboard – aggregated daily overview with traffic statistics and alert summary

Alerting and Integration

Alerts flow from agents through two filtering layers before reaching operators, reducing noise from long-running or repetitive events.

Alert Routing

- Agent-level pre-filtering: aggregation prevents repetitive flood from sustained attacks
- Web UI routing layer: filter by weekday, work hours, alert category, and priority
- Unlimited routing rule combinations
- Configurable data fields per export channel

Delivery Channels

- Web UI (triage, snooze, search, delete)
- E-mail notifications
- Webhooks (Slack, Microsoft Teams, Mattermost, Discord, and others)
- JSON export to downstream systems (Elastic, Wazuh, Security Onion, etc.)

Home Network alerts Server alerts DNS log TCP log Settings User

From: mm/dd/yyyy To: mm/dd/yyyy Level: All Agent: All

Type: Nothing selected Search:

Search Select/Deselect All Delete selected

Scroll or pinch to zoom or click-and-drag to select a region

Time

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Timestamp	Agent	Type	Status	Source	Device	Network	Destination	Device	Network	Subject	Message
2025-07-11 20:57:07	sw1	useragent	high	172.18.10.150:33652	VOIP	34.117.59.81:80				Known bad UA Found	User-Agent:'curl/7.88.1' Host:'ipinfo.io' URI: '/'
2025-07-11 20:57:07	sw1	newdevice	high	172.18.10.150	VOIP					New device	New device MAC:02:AC:12:0A:96 IP:172.18.10.150 in monitored network:VOIP
2025-07-11 20:53:00	sw1	useragent	medium	172.18.0.2:39918	DEVS	151.101.2.132:80				Non standard UA	User-Agent:'Debian APT-HTTP/1.3 (2.6.1)' Host:'deb.debian.org' URI: '/debian/dists/stable-updates/main/binary-amd64/Packages.diff?T=2025-06-13-1410.14-F=2025-06-13-1410.14.gz'
2025-07-11 20:53:00	sw1	useragent	medium	172.18.0.2:39918	DEVS	151.101.2.132:80				Non standard UA	User-Agent:'Debian APT-HTTP/1.3 (2.6.1)' Host:'deb.debian.org' URI: '/debian/dists/stable-updates/main/binary-amd64/Packages.diff/by-hash/SHA256/30aa35b1443d7208a447007745311b03e0a79660c8bb9b4182bb5c1a538d0d22'
2025-07-11 20:48:20	honey	honeypot	low	172.18.20.200:55118	OFFICE	172.18.0.1:25		DEVS		Honeypot TCP [25] data	PCAP: honeypot_172.18.20.200_172.18.0.1_25_202507111748.pcap
2025-07-11 20:48:18	honey	honeypot	high	172.18.20.200:55118	OFFICE	172.18.0.1:25		DEVS		Honeypot TCP [25] connection	
2025-07-11 20:42:29	sw1	portscan	medium	172.18.20.200	OFFICE					SYN counter > 500 in last 5 min	PCAP: portscan_172.18.20.200_202507111742.pcap

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Network alerts view – alert triage with filtering and search

Central Web UI

Management

- Agent creation, deletion, and configuration
- Detection module enable/disable per agent
- Threshold and exception tuning for all detection modules
- Network segment and allowed service management
- Agent health monitoring: alerts when an agent stops checking in or sending metadata
- Remote agent updates (signed packages uploaded centrally, agents self-update)

Access Control

- Password-based authentication with MFA (TOTP and YubiKey)
- Role-based permissions: control what each user can view or modify
- Audit log of all authentication events and configuration changes

Deployment and Operations

Area	Details
Packaging	Debian (.deb / APT) and RHEL (.rpm / DNF)
Architectures	amd64 / x86_64 and arm64
OS support	Ubuntu 24.04, RHEL 10
Configuration	JSON-based, generated and managed centrally through the Web UI
Connectivity	Does not require internet access for operation. No telemetry or call-home.
Updates	APT repository, manual, or centrally via Web UI (GPG-signed packages)
Licensing	Per-agent licensing. All detection features included in every plan.
Deployment model	Self-hosted. Supports single-site, multi-site, and reseller/SaaS operation.

Hardware Requirements

All components can run as virtual machines or directly on hardware.

Component	CPU	RAM	Storage	Notes
Web UI	8 cores	32 GB+	100 GB+	NVMe/SSD required. 16 GB RAM absolute minimum. ~10 GB/month per 100 devices.
Network Agent	4 cores	8 GB	20–40 GB	Dedicated capture NIC(s) for SPAN traffic. Bare metal preferred.
Honeypot	2 cores	4 GB	20–40 GB	Separate management IP recommended.
Egress Agent	2 cores	4 GB	20–40 GB	No special hardware requirements.
Log Agent	2 cores	4 GB	20–40 GB	Can run on central log collector or individual servers.