

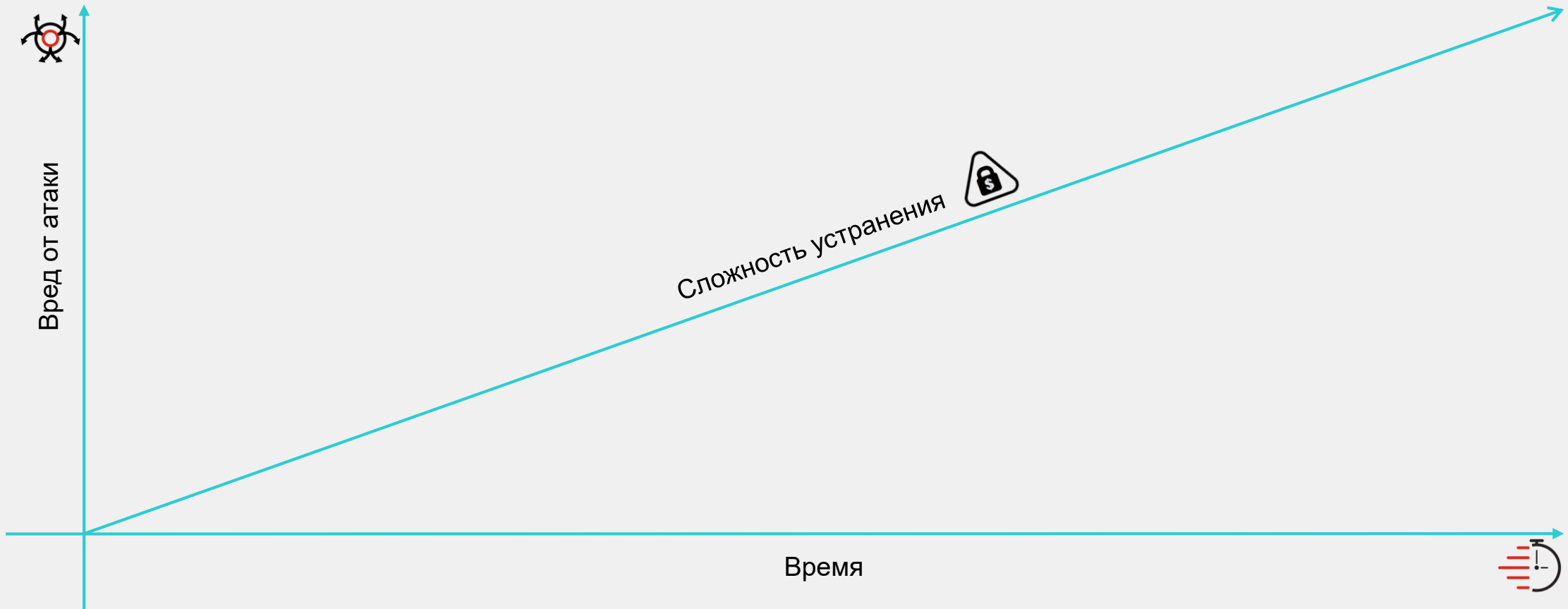


Решения и сервисы Fortinet для защиты конечных узлов от комплексных кибератак

Кирилл Михайлов, системный инженер EDR/XDR

kmikhaylov@fortinet.com

Снижение издержек от кибератак



Fortinet: автоматизация



FortiGuard Security Services

SOC & NOC

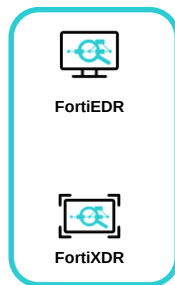


User Security

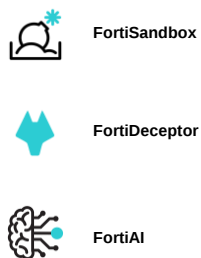


Fabric Management Center - SOC

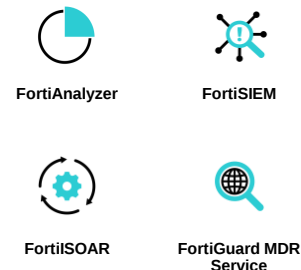
Endpoint



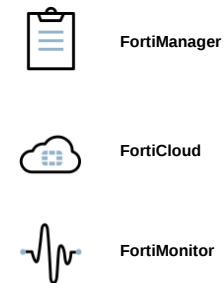
Breach



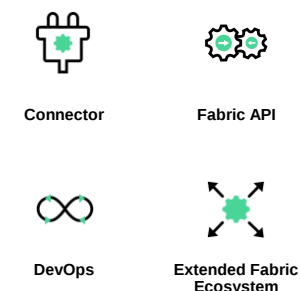
Incident Response



Fabric Management Center - NOC



Open Ecosystem



Zero Trust Access



FortiClient



FortiNAC



FortiVoice



FortiToken



FortiAuthenticator



FortiCamera



Security-Driven Networking

LAN Edge



FortiAP



FortiSwitch

WAN Edge



FortiGate SD-WAN



FortiExtender

DC Edge



FortiGate



FortiProxy

Cloud Edge



FortiSASE

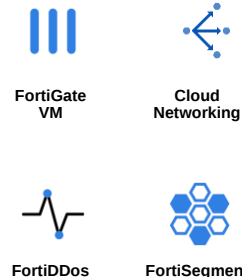


FortiSolator

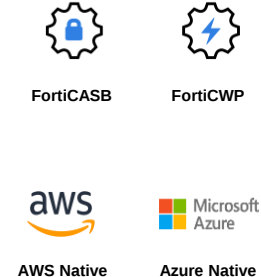


Adaptive Cloud Security

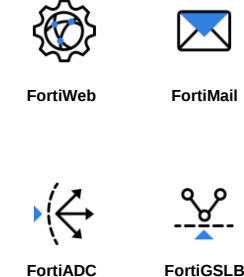
Network



Platform



Applications



Appliance



VM



Hosted



Cloud

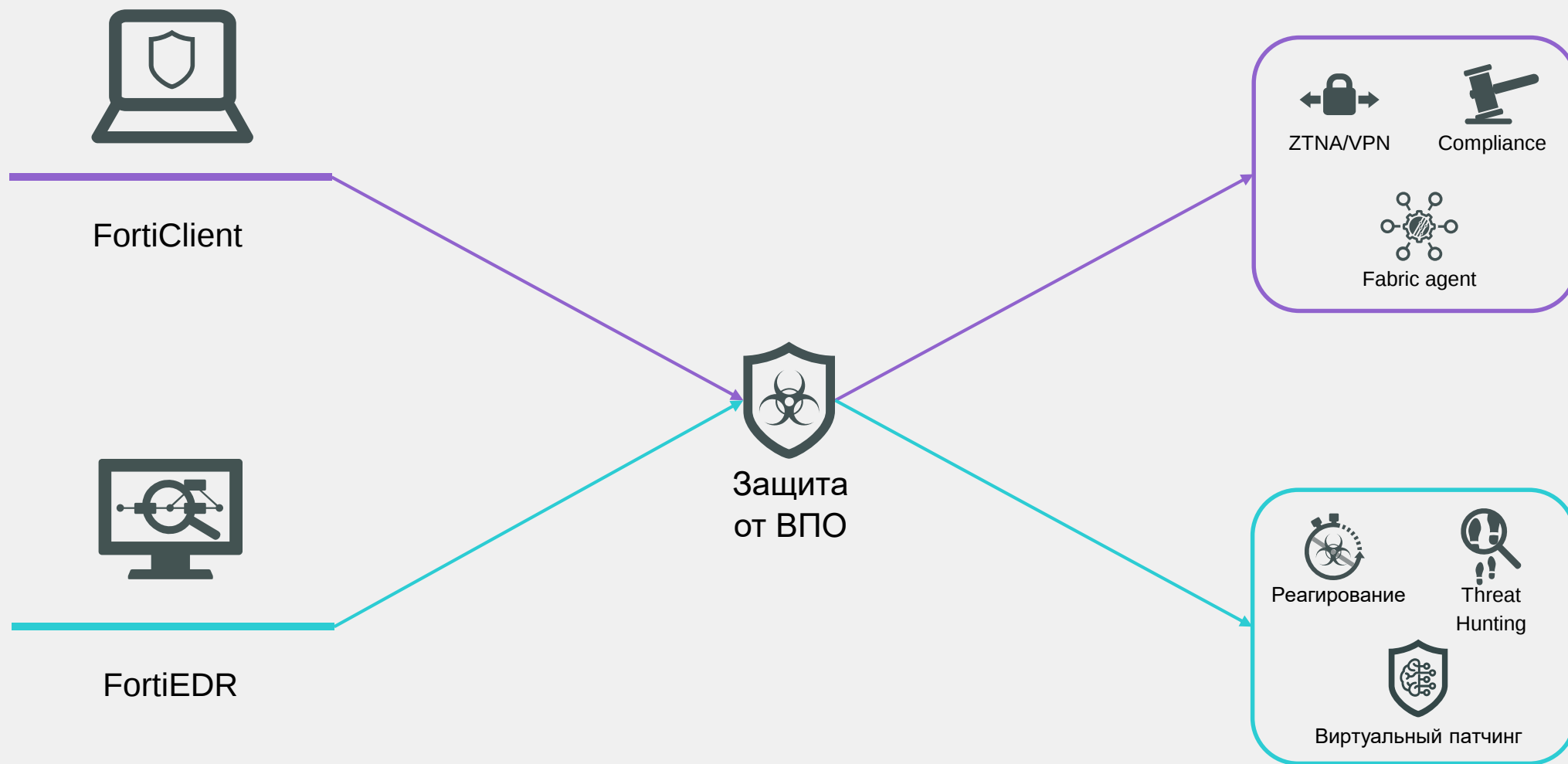


Software

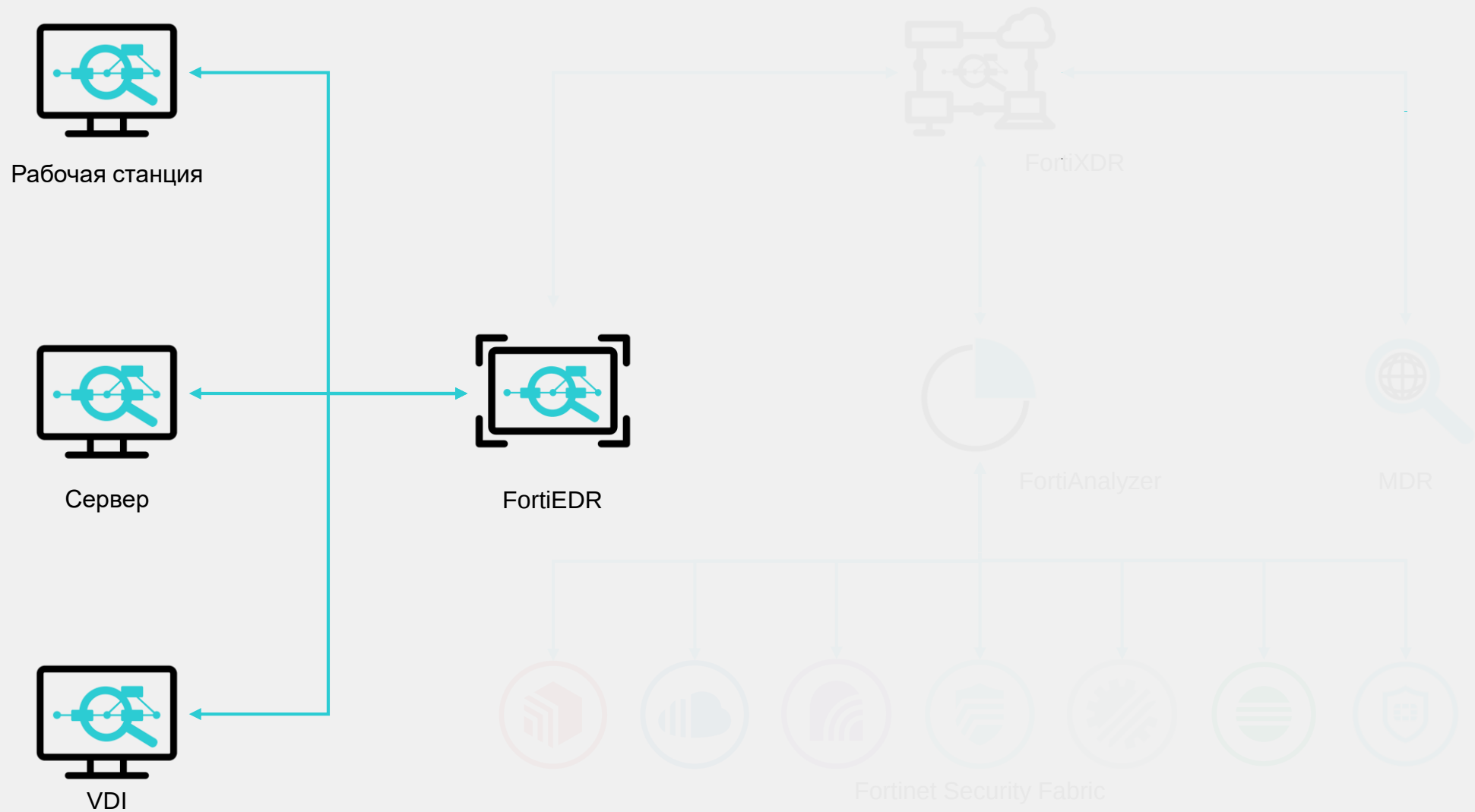


Container

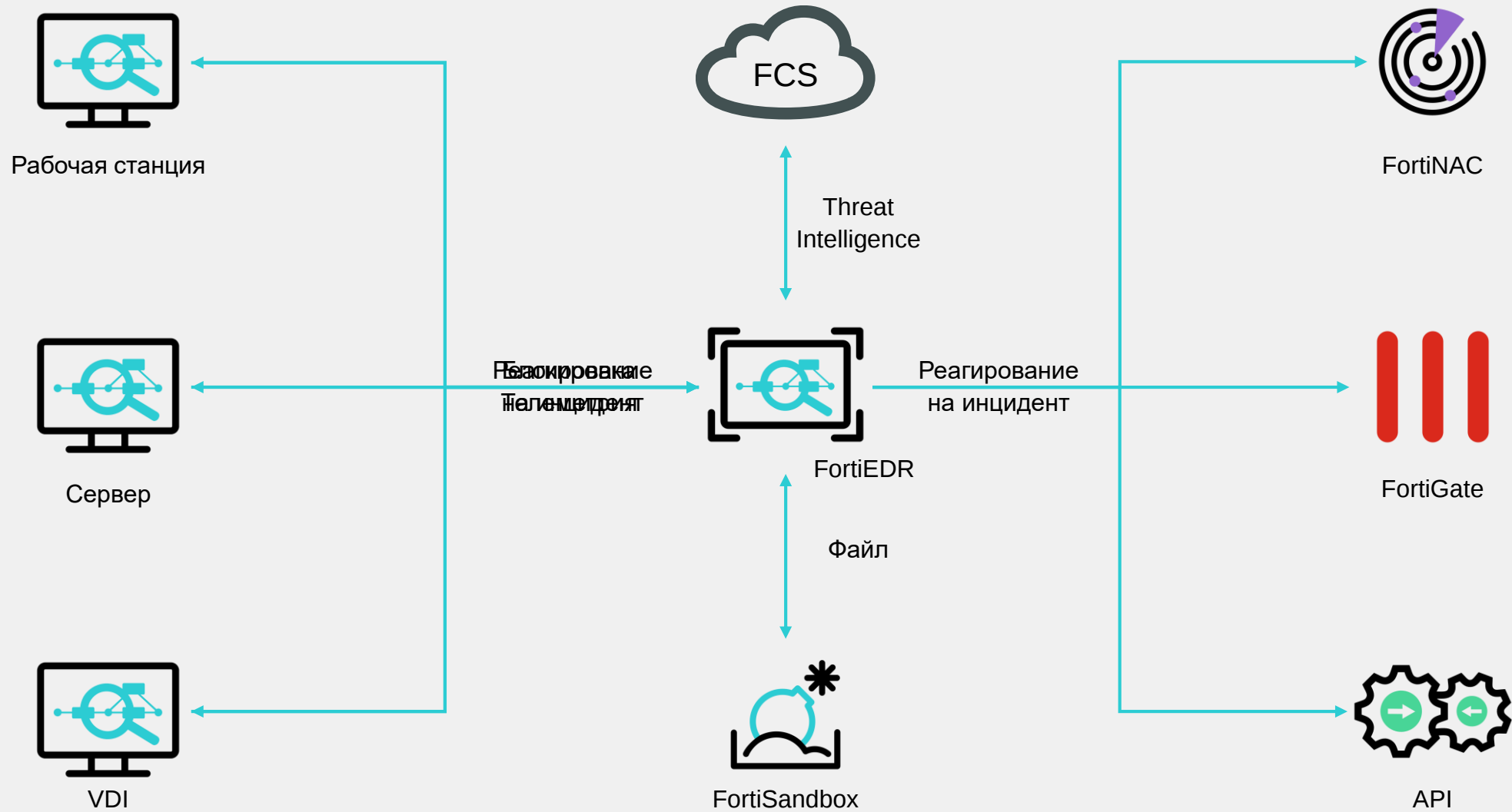
EDR и/или EPP?



FortiEDR



FortiEDR



Расширенные обнаружение и реагирование



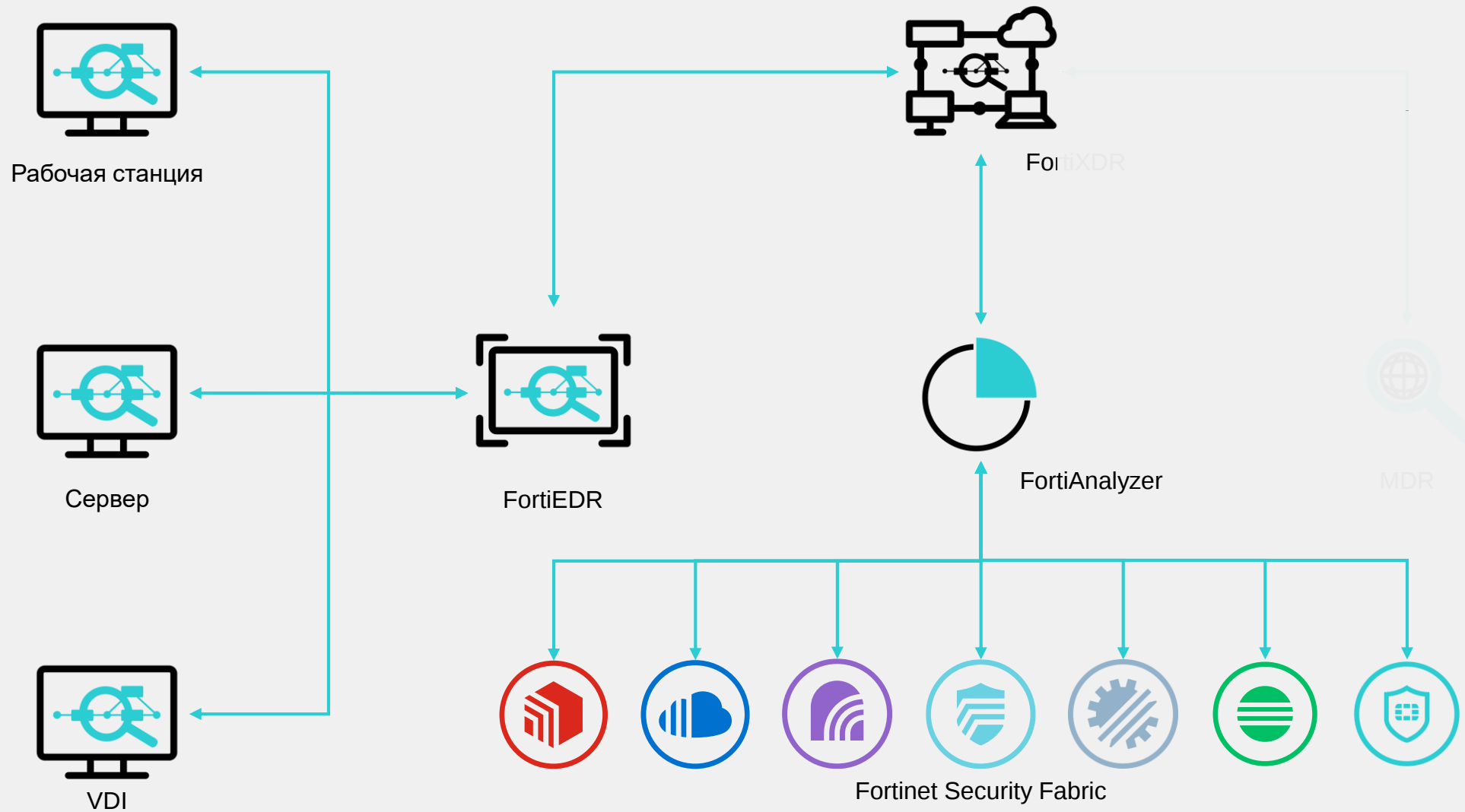
FortiEDR



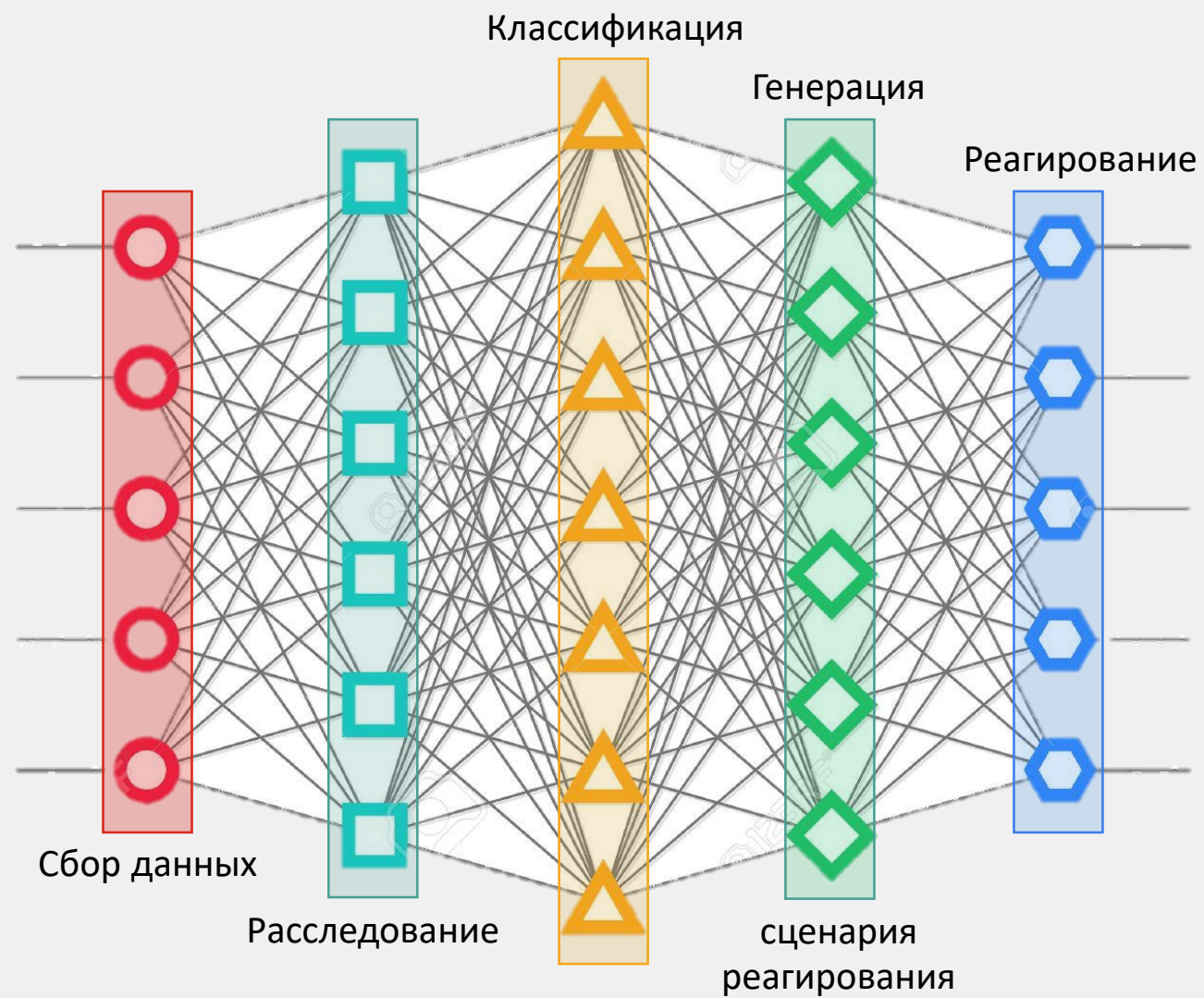
Fortinet Security Fabric



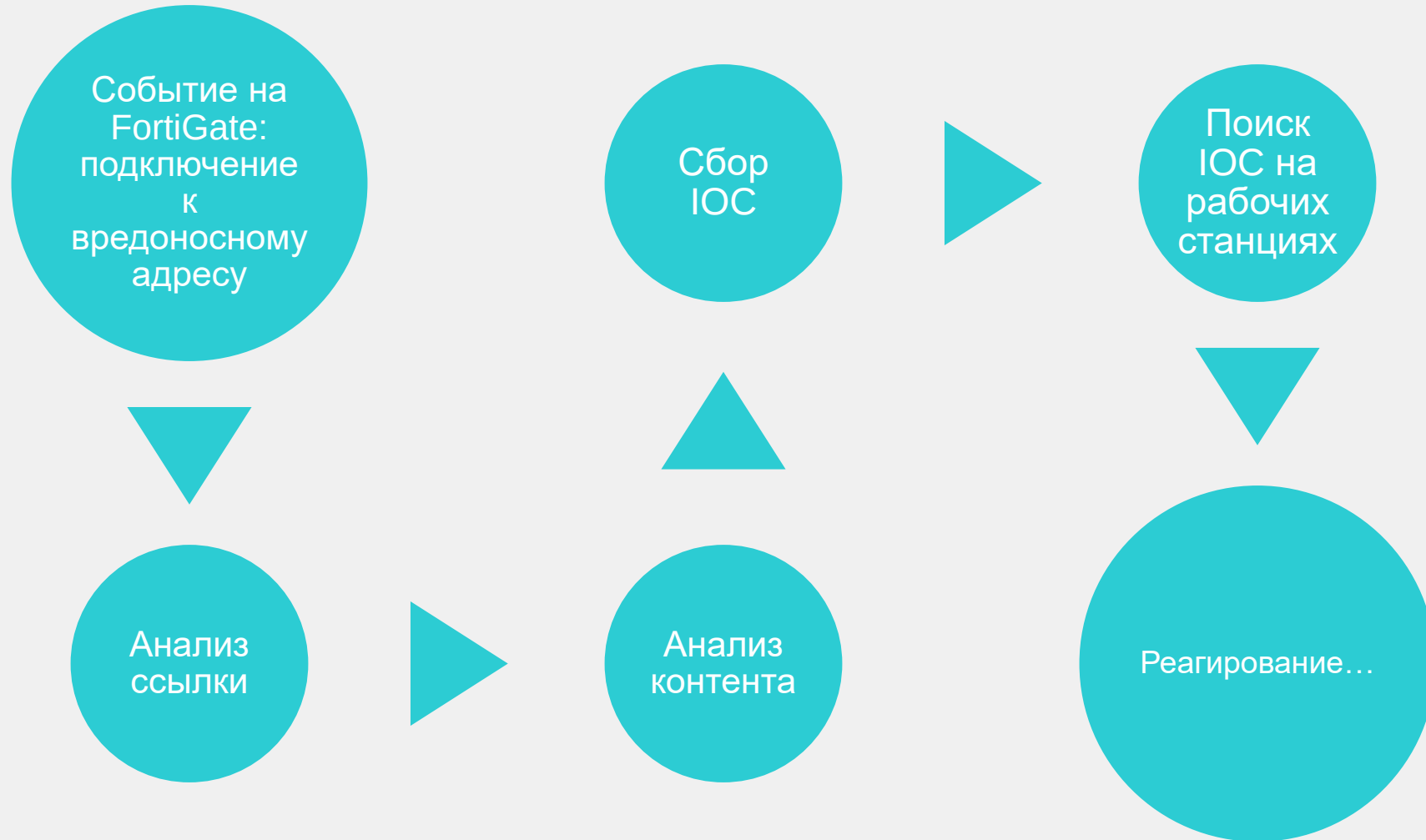
FortiXDR



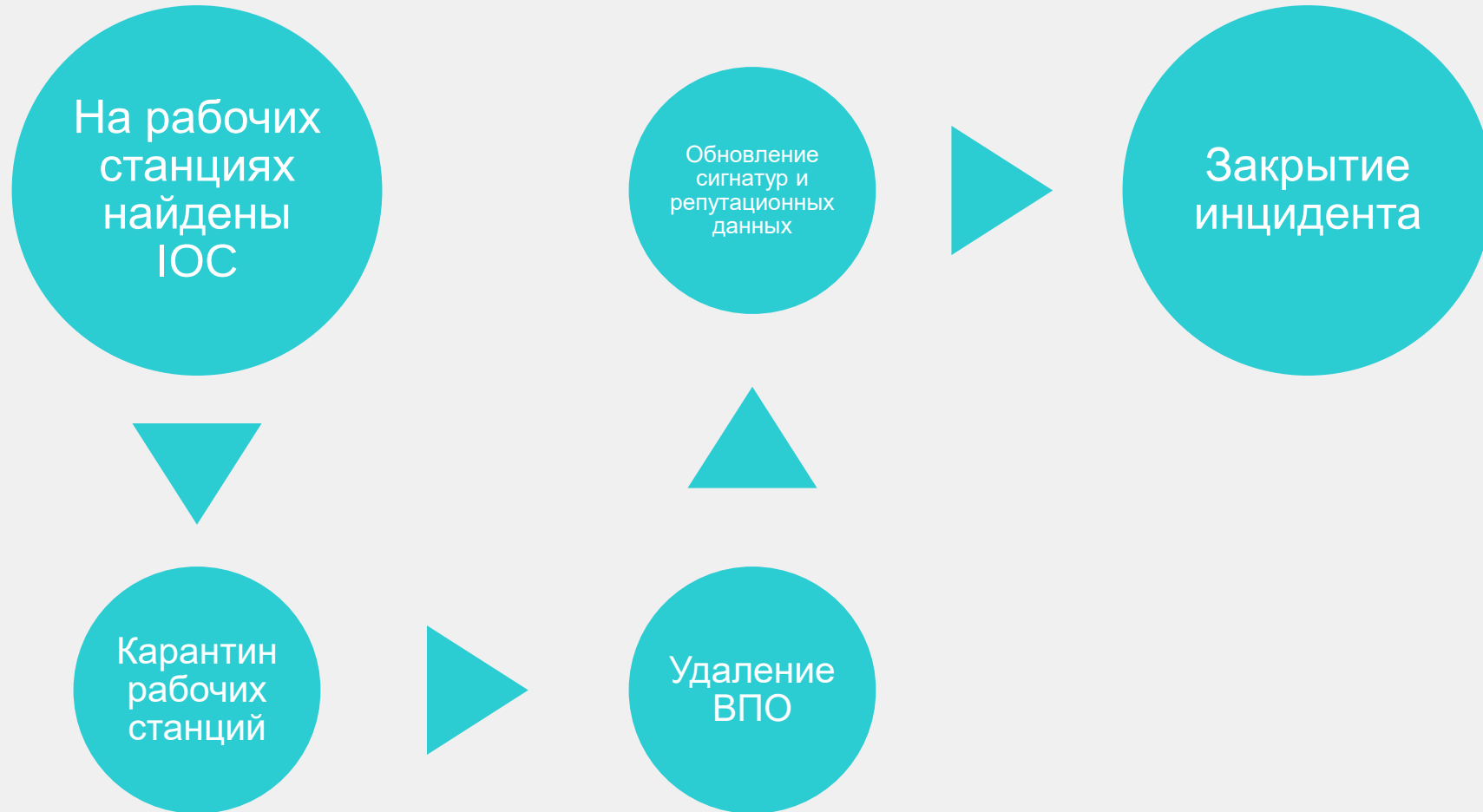
ANN



FortiXDR: пример расследования



FortiXDR: пример реагирования



FortiXDR

DASHBOARD

EVENT VIEWER

FORENSICS

COMMUNICATION CONTROL

237

SECURITY SETTINGS

INVENTORY

1

ADMINISTRATION

Simulation

kmikhaylov

EVENTS

Showing 1-17/234

Search Event

Archive

Mark As...

Export

Handle Event

Delete

Forensics

Exception Manager

	ID	DEVICE	PROCESS	CLASSIFICATION	DESTINATIONS	RECEIVED	LAST UPDATED
☐	RDPWInst.exe (2 events)			PUP		08-Feb-2021, 18:50:49	
☐	mshta.exe (1 event)			Malicious		22-Jun-2021, 17:46:44	
☐	12047723	win10-vm	mshta.exe	Malicious	http://72.133.71....	22-Jun-2021, 17:46:44	22-Jun-2021, 18:12:41
Certificate: Signed Process path: Windows\System32\mshta.exe Raw data items: 1							
☐	curl (1 event)			Inconclusive		04-Dec-2020, 14:05:08	
☐	TeamViewer_Service.exe (2 events)			PUP		06-Oct-2020, 13:21:37	

CLASSIFICATION DETAILS

Malicious

Automated analysis steps completed by Fortinet

History

Malicious, by FortinetCloudServices, on 22-Jun-2021, 17:46:53

Simulation IP 72.133.71.61 was added to malicious IP addresses on firewall FortiGate fg

Simulation Device win10-vm was isolated once

ADVANCED DATA

Event Graph

Geo Location

Automated Analysis

Malicious

FortiCloudServices on 22-Jun-2021 17:46:45

Fortinet Cloud Services comment

The file mshta.exe is classified as Good. The IP address 72.133.71.61 was found to be ClassificationMalicious

File (1)

Memory (0)

Network & Extended Data (1)

mshta.exe

SHA1

99a0a1b05e60a5f1fc8a068f953f0510e0230efa

Hash reputation

Safe

IP reputation

Suspicious

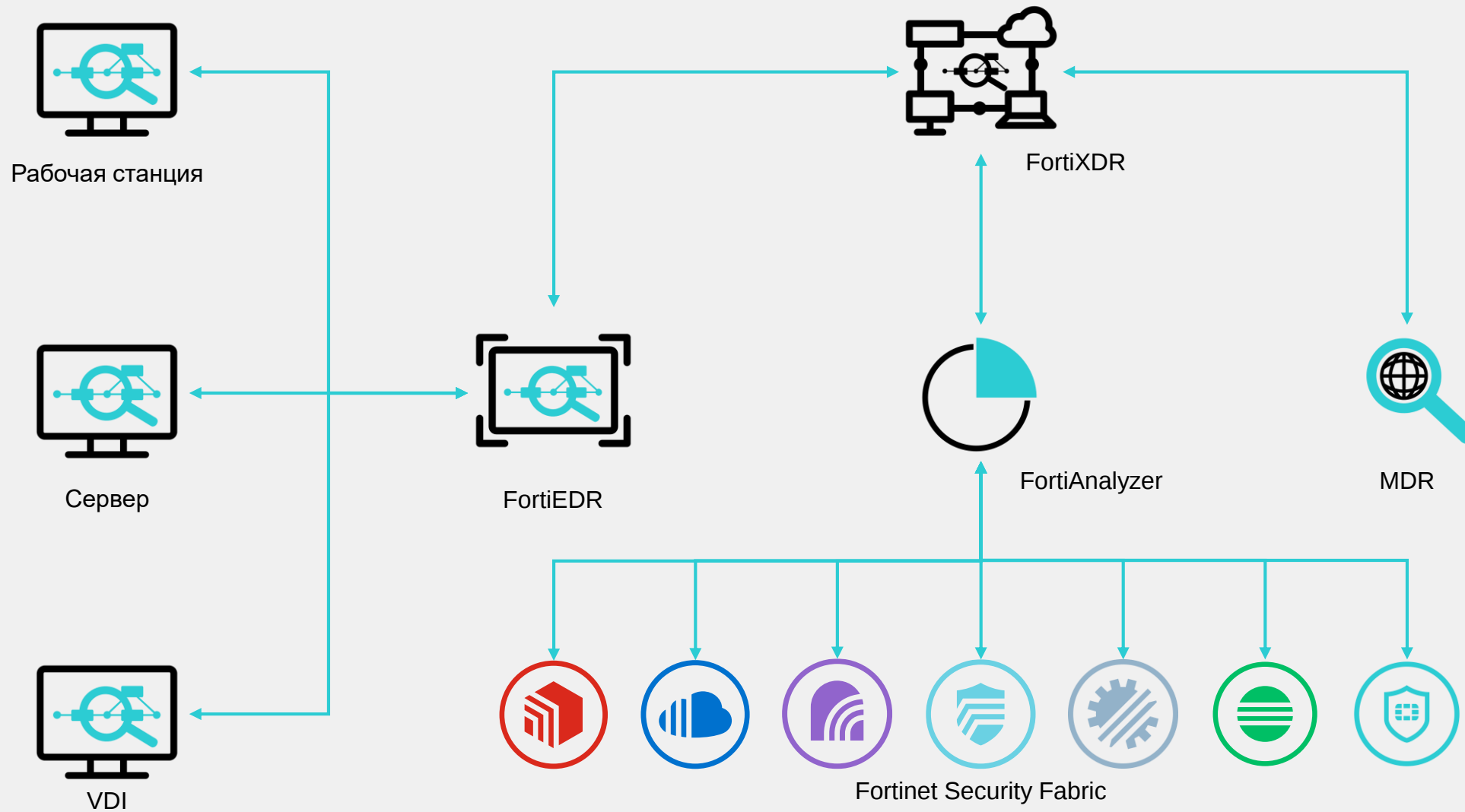
Copyright © Fortinet Version 5.0.2.197

System Time (UTC +02:00) 10:17:57

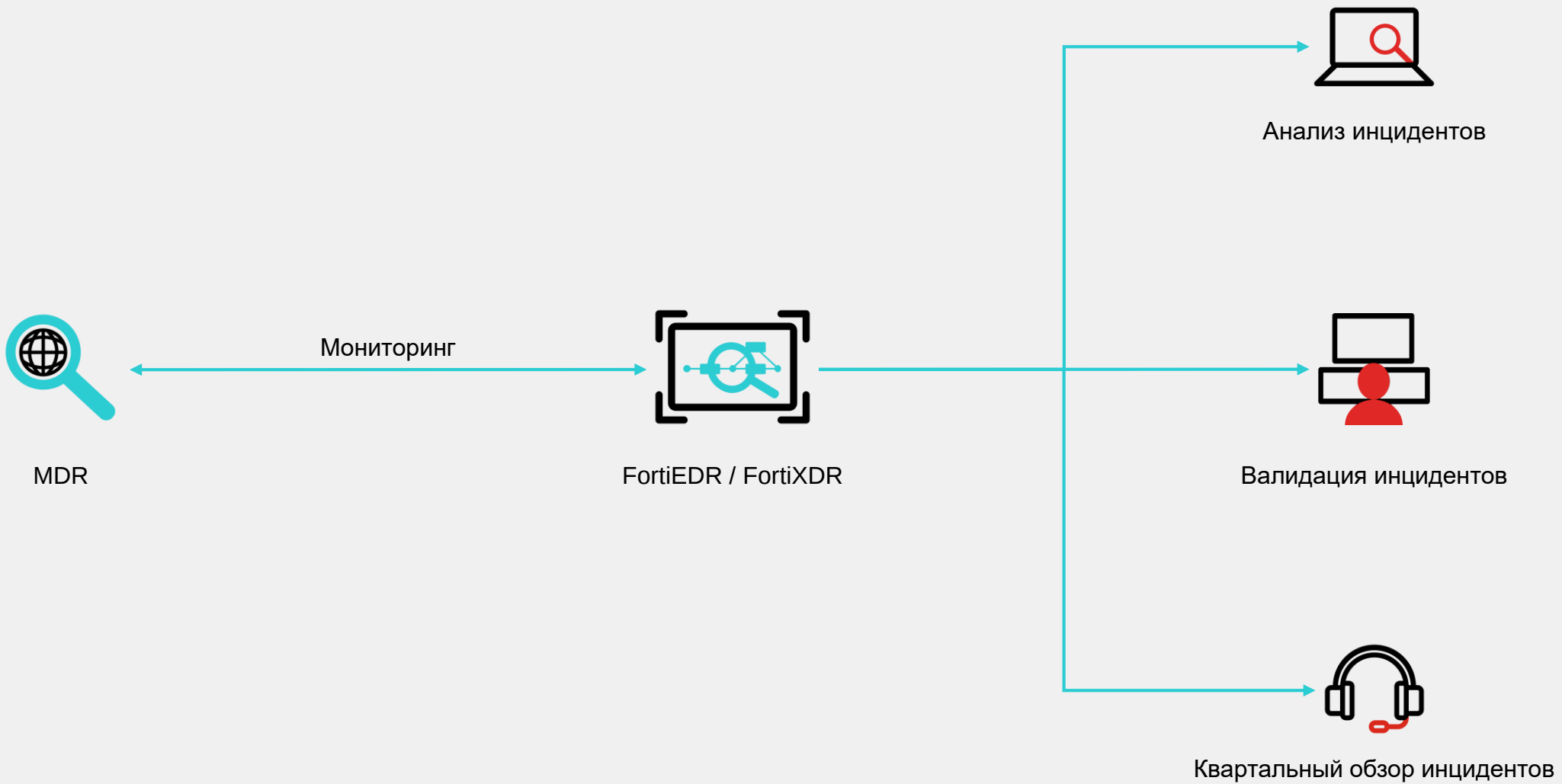
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FortiEDR



Сервис MDR



Независимое

тестирование



Тестирование EDR решений

- Новость: https://therecord.media/state-of-the-art-edrs-are-not-perfect-fail-to-detect-common-attacks/?__cf_chl_jschl_tk__=4HIL4eDYh2NMoRJdiRj5Q1QoR.it9suyOxI9BSIXLCU-1642758123-0-gaNycGzNCiU
- Вебкаст: <https://www.fortinet.com/resources-campaign/ai-driven-security-operations/webcast-hear-it-yourself-researchers-cover-their-edr-assessment?bypassCta=>

EDR	CPL	HTA	EXE	DLL
BitDefender GravityZone Plus	✗	✗	✓	✗
Carbon Black Response	•	✗	✓	✓
Check Point Harmony	✗	◊	✗	✓
Cisco AMP	✗	✗	✓	⊙
Comodo OpenEDR	✗	✓	✗	✓
CrowdStrike Falcon	✓	✓	✗	✓
Elastic EDR	✗	✓	✓	✗
F-Secure Elements Endpoint Detection and Response	◊	†	✓	✗
FortiEDR	✗	✗	✗	✗
Microsoft Defender for Endpoints	*	✗	✗	✓
Panda Adaptive Defense 360	✗	✓	*	✓
Sentinel One (without test features)	✓	✓	✓	✗
Sentinel One (with test features)	✗	✗	✗	✗
Sophos Intercept X with EDR	✗	✗	✓	-
Trend micro Apex One	•	•	✓	✓
Endpoint Protection				
ESET PROTECT Enterprise	✗	✗	✓	✓
F-Secure Elements Endpoint Protection Platform	✓	✓	✓	✓
Kaspersky Endpoint Security	✗	✗	✗	✓
McAfee Endpoint Protection	✗	✗	✓	✓
Symantec Endpoint Protection	✓	✗	✓	✓

Table 1: Aggregated results of the attacks for each tested solution.

Notation: ✓: Successful attack, ◊ Successful attack, raised medium alert, •: Successful attack, raised minor alert, *: Successful attack, alert was raised ◊: Unsuccessful attack, no alert raised, ✗: failed attack, alerts were raised. † In two experiments supplied by the vendor, in the first it was detected after five hours, in the second it was detected after 25 minutes. ⊙ Initial test was blocked due to file signature, second one was successful with another application.



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