



## ALSID FOR ACTIVE DIRECTORY

Anticipate threats, Detect attacks, Respond to breaches

Forum Sécurité - Loire-Atlantique – 18/03/2019

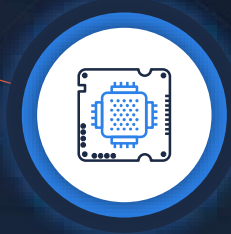
SINGHEALTH HACK  
(2018)



PRIVATEBANK CABARNAK  
(2015)



ALTRAN  
(2019)



MAERSK  
(2017)



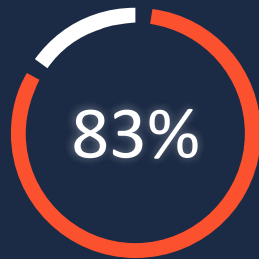
BELGACOM REGIN  
(2015)



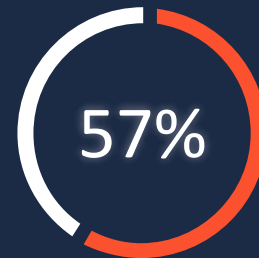
# COMMON SECURITY STRATEGIES ARE INEFFICIENT



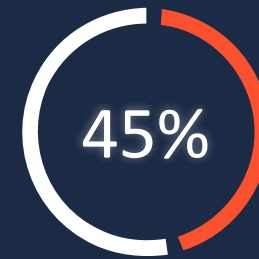
had an Information Systems Security Policy



have been making security assessment of their Active Directory



had a SIEM to collect security event log



have been using Active Directory security related product



# THE SUBCONTRACTING ATTACK VECTOR

SUBCONTRACTOR

DOMAIN CONTROLLER

CORPORATE  
ACTIVE DIRECTORY



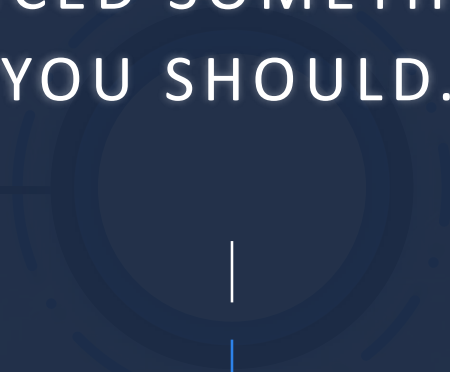
# THE SUBCONTRACTING ATTACK VECTOR

SUBCONTRACTOR

DOMAIN CONTROLLER

CORPORATE  
ACTIVE DIRECTORY

NOTICED SOMETHING?  
YOU SHOULD.



# THE SUBCONTRACTING ATTACK VECTOR

ACTIVE DIRECTORY

DOMAIN CONTROLLER

SUBCONTRACTOR



OBJECT OWNER

```
Set-ADAccountPassword -Identity DC.company.com -NewPassword "Hi CLUSIR!" -Reset
```

# ENSURING SECURITY RESILIENCY REQUIRES TO ADDRESS FOUR CONCERNS

SECURITY  
CONCERNS



Master known attack techniques against AD to evaluate risk exposure



Follow the ever-changing threats to act accordingly



Detect AD security regressions to quickly remediate them



Detect weak signals created by ongoing cyberattacks

SOLUTION



Manage up-to-date vulnerability databases



Subscribe to threat intelligence sources and review them



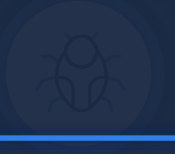
Continuously review the implementation of security policies



Deploy tailor-made detection capabilities for Active Directory



# PROVIDED BY SECURITY MONITORING SOLUTION





LET'S FACE IT,  
CURRENT MONITORING SOLUTIONS  
ARE COSTLY AND INEFFECTIVE

# HOW TO IMPLEMENT PROPER AD MONITORING ?

## SECURITY AUDITS

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- Easy to put in motion with “Wow effect”
- Numerous qualified audit firms (PASSI)



- Snapshot becomes obsolete in a few days
- Lack of attackers' hunt
- Poor understanding of business context

## EVENT LOG ANALYSIS

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- Capability to detect on-going attacks
- Built in Active Directory



- Extremely costly to implement  
(requires advanced audit policy and log centralization)
- No correlation capabilities  
(requires sharp SOC team)
- No proactive capabilities

# ALSID MONITORS AD SECURITY FLOWS TO PROTECT CORPORATE NETWORKS



## BRING AD SECURITY HEARTBEAT TO LIGHT

- Display AD security activity in real time
- Live analysis to detect breaches or new vulnerabilities
- Detect and alert on security incident weak signals



## A MODERN AND EFFICIENT SECURITY MONITORING SOLUTION

- Agent free and NO administration rights required
- Ability to monitor multiple AD infrastructures simultaneously
- Interact with SIEM, automation platform or AD admin tools



## RELY ON AD REPLICATION FLOWS TO ENSURE SECURITY

- Real-time monitoring without event logs
- Act as a Domain Controller sibling without access rights
- Technical breakthrough, patent pending



Indicators-of-Exposure with Trailflow  
LIVE DEMONSTRATION

# THIS IS WHAT YOU ARE ABOUT TO SEE



## REAL TIME DISPLAY OF THE AD SECURITY FLOW

New AD objects creation, user password renewal, access rights delegation, etc.

1



## DETECTION OF A DCSHADOW ATTACK

Demonstration of the latest AD post-exploitation tool designed to not create event logs

3



## LIVE DETECTION OF A SECURITY LEVEL REGRESSION

Adding a SPN attribute to an administrative account allowing Kerberoast attacks

2



## IN-CONTEXT REMEDIATION PLAN COMPUTATION

Pragmatic remediation plan to help security team keep AD safe

4



DEMONSTRATION

# WHY USING ALSID TO MONITOR AD SECURITY



## Drastically **improve SOC performance**

Alsid R&D team writes and maintains up-to-date detection rules, hence **eliminating the burden of false-positive** treatment and help SOC teams focus on alerts that matter.



## Bring **intelligence** back to the SIEM

By providing **correlated and refined information**, Alsid restores the primary purpose of the SIEM which is to **manage security alerts** and not raw event logs.



## Built-in **scalability feature** to fit trusted core footprint

Complex architecture requires seamless solutions to prevent harmful side-effects. Using **admin-free, configuration-free and agent-free solution**, Alsid redefines what a modern security product should be.



## Real-time detection of all **security regressions** and **attack attempts**

Trusted Core's security team can **ensure the effectiveness** of the security barriers in place by using **customization capabilities** of Alsid's correlation engine.





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# THANK YOU

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