Attivo
N E T W O R K S®

INTERCEPTING LIVE ATTACKS WITH THE ATTIVO NETWORKS ADSECURE SOLUTION
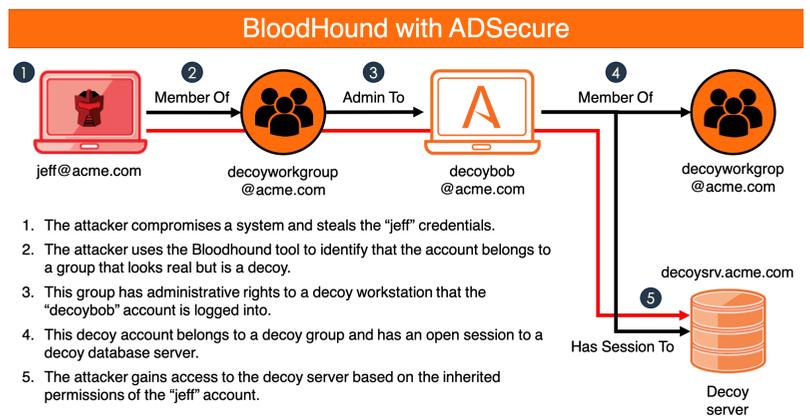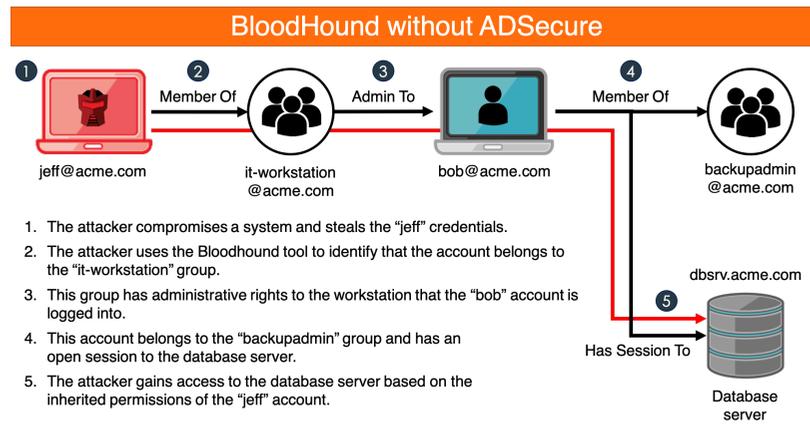
Active Directory (AD) is a Microsoft product that consists of several services to administer permissions and access to networked resources on a Windows Network. By design, AD will readily exchange information with any member system it manages. Attackers can also leverage this access to extract information on the entire domain quickly. Security teams may not realize that attacks on AD are occurring because the activities will appear as if AD is providing the data to a member system as part of normal operations. Attackers can extract user accounts, system accounts, and trusted domain information from any compromised member system on the AD domain to find privileged accounts, overlapping security rights that provide elevated privileges, or significant systems to target as part of their attacks. These can include trusted domain controllers, essential servers, or databases with critical data. Detection of AD attacks can be difficult because organizations must typically manually defend against such activities. The ADSecure solution that is part of the Attivo Networks ThreatDefend™ Detection Platform provides a new approach to preventing cyber criminals for successfully reaching and compromising AD.

THE ATTIVO NETWORKS THREATDEFEND PLATFORM

The Attivo Networks ThreatDefend Detection and Response platform uses deception technology to accurately and efficiently detect and derail the lateral movement of attacks across all primary attack vectors. With the Attivo deception fabric interwoven throughout the entire network infrastructure, from user segments, data centers, cloud, specialized networks, or remote locations, organizations create a virtual layer of landmines and lures designed to confuse, slow down and misdirect an attacker. The system alerts when an attacker engages with a decoy through network scans, stolen deceptive credentials, or other methods.

ADSECURE

The ADSecure solution is a modular component of the ThreatDefend platform, designed to defend against AD attacker data gathering. It augments the existing AD defense capabilities the platform already offers such as deceptive credentials based on production accounts and decoy AD infrastructure servers. ADSecure sits at every endpoint and intercepts any queries attempting to harvest AD data from an unauthorized system. The solution inserts deceptions to counter the AD attack by replying with deceptive data, hiding the privileged credentials, and altering real credentials values. This interception includes engagement of the activities into the deception environment where the system safely studies the attack and collects threat intelligence.

BloodHound without ADSecure

jeff@acme.com — ① Member Of → it-workstation@acme.com — ② Admin To → bob@acme.com — ④ Member Of → backupadmin@acme.com

dbsrv.acme.com — ⑤ Has Session To → Database server

1. The attacker compromises a system and steals the "jeff" credentials.
2. The attacker uses the Bloodhound tool to identify that the account belongs to the "it-workstation" group.
3. This group has administrative rights to the workstation that the "bob" account is logged into.
4. This account belongs to the "backupadmin" group and has an open session to the database server.
5. The attacker gains access to the database server based on the inherited permissions of the "jeff" account.

BloodHound with ADSecure

jeff@acme.com — ① Member Of → decoyworkgroup@acme.com — ② Admin To → decoybob@acme.com — ④ Member Of → decoyworkgrop@acme.com

decoysrv.acme.com — ⑤ Has Session To → Decoy server

1. The attacker compromises a system and steals the "jeff" credentials.
2. The attacker uses the Bloodhound tool to identify that the account belongs to a group that looks real but is a decoy.
3. This group has administrative rights to a decoy workstation that the "decoybob" account is logged into.
4. This decoy account belongs to a decoy group and has an open session to a decoy database server.
5. The attacker gains access to the decoy server based on the inherited permissions of the "jeff" account.

With ADSecure, organizations can efficiently intercept advanced attacks (APTs) and contain them automatically at the endpoint. With the engagement of activities into the deception environment, the ThreatDefend platform can safely study the attack and gather Tactics, Techniques, and Procedures (TTPs), along with company-specific threat intelligence.

The solution can be purchased standalone or as part of the ThreatDefend Endpoint Suite.

ABOUT ATTIVO NETWORKS®

Attivo Networks®, the leader in deception technology, provides an active defense for early detection, forensics, and automated incident response to in-network attacks. The Attivo ThreatDefend Deception Platform offers comprehensive and accurate threat detection for user networks, data centers, clouds, and a wide variety of specialized attack surfaces. A deception fabric of network, endpoint, application, and data deceptions efficiently misdirect and reveal attacks from all threat vectors. Advanced machine-learning simplifies deployment and operations for organizations of all sizes. Automated attack analysis, forensics, actionable alerts, and native integrations accelerate and streamline incident response. The company has won over 85 awards for its technology innovation and leadership.

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