



Gold Finger

Active Directory Effective Permissions Calculator

Datasheet



Gold Finger

Active Directory Effective Permissions Calculator

At the **foundation** of cyber security of all organizations that operate on the Microsoft Windows Server platform lie their foundational Active Directory (AD) deployments.

Organizations absolutely require the ability to calculate effective permissions in their foundational Active Directory deployments to maintain security, accurately identify and manage privileged access and fulfill governance, risk and compliance driven audit needs.

Architected by former Microsoft Program Manager for Active Directory Security, and endorsed by Microsoft, the *Active Directory Effective Permissions Calculator* from Paramount Defenses is the world's only accurate effective permissions calculator for Active Directory.

“We are very pleased to see Paramount Defenses, a valued Microsoft partner, offer an innovative security solution (in Gold Finger) that helps enhance security and compliance in Active Directory environments.”

- Charles Coates, Senior Product Manager
Identity and Security Business Group

Microsoft



Active Directory Effective Permissions Calculator



Technical Overview

The entirety of an organization's building blocks of cyber security i.e. all organizational domain user accounts, computer accounts, and all domain security groups that protect almost all organizational IT resources, are stored, managed and secured in Active Directory.

Each one of these building blocks is represented as an object within Active Directory and is protected by an access control list (ACL), which contains access control entries (ACEs) that specify who is allowed and denied what security permissions on the object.

Together, there exist many security permissions in the ACL of every Active Directory object, granted to various users and groups, and it is the net resulting cumulative i.e. effective permissions that actually govern exactly who has what privileged access on each object.

To secure Active Directory, accurately identify privileged users, maintain security and fulfill various GRC driven audit needs, organizations absolutely need to be able to accurately calculate effective permissions on a large number of their Active Directory objects.

The *Active Directory Effective Permissions Calculator* is unique in its ability to be able to accurately and automatically calculate effective permissions in Active Directory. It can –

- ✓ Accurately calculate effective permissions on any Active Directory object
- ✓ Calculate the complete set of effective permissions on an Active Directory object
- ✓ Identify the underlying permissions that entitle a user to a specific effective permission

It thus uniquely enables and empowers organizations to easily perform mission-critical audits required to accurately assess and lockdown privileged access and maintain cyber security.



Active Directory Effective Permissions Calculator



Features

The *Active Directory Effective Permissions Calculator* embodies numerous thoughtful features specially designed to help IT personnel easily perform effective permissions analysis –

1. Accurate Effective Permissions Analysis – Accurately determine effective permissions
2. Complete Effective Permissions Insight – Determine complete set of effective permissions
3. Real-time Effective Permissions Analysis – Determine effective permissions in real-time
4. Source Identification – Identify the exact underlying permission entitling a specific user
5. Effortless Analysis Exports – Easily export effective permissions analysis results



Benefits

The *Active Directory Effective Permissions Calculator* delivers numerous tangible benefits that have a real and measurable impact on the organization's foundational cyber security posture –

1. Accurately Audit Effective Permissions – Accurately fulfill a paramount cyber security need
2. Accurately Audit Privileged Access – Find out who actually has what privileged access
3. Secure Active Directory – Accurately assess and trustworthily lockdown privileged access
4. Complete first 3 steps of PAM – Accurately identify, secure and control privileged users
5. Correctly Fulfill GRC Needs – Correctly fulfill audit and regulatory compliance needs

Active Directory Effective Permissions Calculator



Audit/Reporting Capabilities

The *Active Directory Effective Permissions Calculator* lets organizations accurately, easily and instantly generate numerous Active Directory effective permissions reports, such as –

1. Determine exactly who has what effective permissions on an Active Directory object
2. Identify all users that have a specific effective permission on an Active Directory object
3. Find out how a specific user has a specific effective permission on a specific object
4. Identify all users that have effective permissions today due to a specific permission
5. Uncover why a specific user is able to make a specific change in Active Directory



Audience

- ✓ IT Managers
- ✓ Domain and Network Admins
- ✓ Cyber Security Analysts
- ✓ IT and Cyber Security Auditors
- ✓ Internal Application Developers
- ✓ Pen Testers and Ethical Hackers

Requirements

- ✓ Any computer running Windows
- ✓ Any domain-user credentials
- ✓ Network access to Active Directory
- ✓ No privileged access required
- ✓ No installation on DCs required
- ✓ No deployment of services/agents

Active Directory Effective Permissions Calculator



Top-10 Reports

The *Active Directory Effective Permissions Calculator* **uniquely** empowers organizations to obtain paramount cyber security insights by generating high-value reports, such as –



The only way to accurately generate these paramount insights involves accurately determining effective permissions on Active Directory objects, and only Gold Finger can accurately determine effective permissions in Active Directory.

1. Identify all individuals who can change the membership of any default unrestricted privileged group in Active Directory, such as *Domain Admins*, *Enterprise Admins* etc.
2. Identify all individuals who can reset the password of any privileged user's account
3. Identify all individuals who can disable the use of Smartcards for authentication
4. Identify all individuals who can modify the ACL protecting the *AdminSDHolder* object
5. Identify all individuals who can manage any executive's (e.g. the CEO's) user account
6. Identify all individuals who can change privileged access on the domain root object
7. Identify all individuals who can change privileged access on an Organizational Unit (OU)
8. Identify all individuals who can replicate secrets (passwords) from Active Directory
9. Identify all individuals who can change the keywords on the service connection point of a mission-critical service such as *Microsoft Entra Connect*, resulting in a DoS attack
10. Identify all individuals who can link a GPO to an OU, resulting in the modification of a security or configuration setting on all (possibly thousands of) computers in that OU



Gold Finger

Gold Finger is the world's most capable, valuable and trustworthy suite of access assessment tools for Microsoft Active Directory, and is the gold standard for Active Directory Assessment.



The *Gold Finger* Suite is architected by former Microsoft Program Manager for Active Directory Security, endorsed by Microsoft, trusted worldwide, and comprised of 8 specialized tools –

1. Active Directory Security Auditor
2. Active Directory Membership Auditor
3. Active Directory ACL Analyzer
4. Active Directory ACL Exporter
5. Active Directory Permissions Analyzer
6. The world's only accurate Active Directory Effective Permissions Calculator
7. The world's only accurate Active Directory Effective Access Auditor
8. The world's only accurate Active Directory Privileged Access Assessor

Today these tools deliver paramount cyber security insight to organizations worldwide.

Gold Finger's **uniqueness** is in its unrivaled ability to deliver accurate effective permissions and privileged access insight, which are paramount for Active Directory security and cyber security.

For more information, please visit – www.paramountdefenses.com/products/goldfinger

About Paramount Defenses



Paramount Defenses is the world's only cyber security company that possesses the paramount capability to be able to **accurately** assess privileged access in Active Directory deployments.



Microsoft Active Directory Domain Services are the foundation of cyber security and the heart of privileged access at 85% of all business and government organizations worldwide.

Paramount Defenses was founded by and is led by former Microsoft Program Manager for Active Directory Security. The company's unique, innovative, patented technology governs the accurate assessment of all access, including privileged access, in IT environments worldwide.

Its unrivaled solutions can accomplish the remarkable feat of being able to automatically and accurately assess privileged access across entire Active Directory domains, at a button's touch.

From the United States of America to Australia, its global customer base spans six continents and includes numerous prominent business and government organizations across the world.

www.paramountdefenses.com

