

THREAT ADVISORY

Several Zoho ManageEngine products have been exploited		TA202154
Threat Level	RED	Publish Date – Dec 5, 2021

Multiple vulnerabilities have been discovered in Zoho ManageEngine products. The affected products include Zoho ManageEngine ServiceDesk Plus , Zoho ManageEngine SupportCenter Plus, Zoho ManageEngine Desktop Central, Zoho ManageEngine AssetExplorer.

CVE-2021-44077 is a vulnerability that could allow an attacker to run arbitrary code. It was discovered on November 20, 2021. This vulnerability, however, may be easily fixed by updating to Zoho version 11306, which was released in September. Attackers are focusing on the healthcare, financial services, electronics, and IT consulting businesses by exploiting this vulnerability.

CVE-2021-44515 & CVE-2021-44526 are authentication bypass vulnerabilities. CVE-2021-44515 only affects Zoho ManageEngine ServiceDesk and Zoho ManageEngine AssetExplorer who uses Desktop Central Agent for asset discovery and CVE-2021-44526 affects all vulnerable versions of Zoho ManageEngine ServiceDesk and Zoho ManageEngine AssetExplorer.

Two of these vulnerabilities (CVE-2021-44077 and CVE-2021-44515)have been exploited in the wild so organizations should upgrade their Zoho ManageEngine products to their latest versions to eliminate these vulnerabilities.

The Techniques used by an unknown actor to exploit CVE-2021-44077 includes:

- T1190 - Exploit Public-Facing Application
- T1505.003 - Server Software Component: Web Shell
- T1027 - Obfuscated Files or Information
- T1140 - Deobfuscate/Decode Files or Information
- T1003 - OS Credential Dumping
- T1218 - Signed Binary Proxy Execution
- T1136 - Create Account
- T1003.003 - OS Credential Dumping: NTDS
- T1047 - Windows Management Instrumentation
- T1070.004 - Indicator Removal on Host: File Deletion
- T1087.002 - Account Discovery: Domain Account
- T1560.001 - Archive Collected Data: Archive via Utility
- T1573.001 - Encrypted Channel: Symmetric Cryptography

Vulnerability Details

CVE ID	Affected Products	Affected CPE	Vulnerability Name
CVE-2021-44077 (CWE-287)	Zoho ManageEngine ServiceDesk Plus version up to 11305 , ServiceDesk Plus MSP version up to 10529 , SupportCenter Plus version up to 11013	cpe:2.3:a:zohocorp:manageengine_servicedesk_plus:*.***.***.***, cpe:2.3:a:zohocorp:manageengine_servicedesk_plus_msp:*.***.***.***, cpe:2.3:a:zohocorp:manageengine_supportcenter_plus:*.***.***.***	Zoho ManageEngine unauthenticated remote code execution vulnerability
CVE-2021-44515	Zoho ManageEngine Desktop Central version 10.1.2127.17 and below and 10.1.2128.0 to 10.1.2137.2, AssetExplorer versions up to 6952	cpe:2.3:a:zohocorp:manageengine_desktop_central:-:*.***.***.***, cpe:2.3:a:zohocorp:manageengine_assetexplorer:-:*.***.***.***	An authentication bypass vulnerability in ManageEngine Desktop Central
CVE-2021-44526	Zoho ManageEngine ServiceDesk Plus versions 12002 and below, AssetExplorer versions up to 6952	cpe:2.3:a:zohocorp:manageengine_servicedesk_plus:*.***.***.***, cpe:2.3:a:zohocorp:manageengine_assetexplorer:-:*.***.***.***	An authentication bypass vulnerability in ServiceDesk Plus

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Indicators of Compromise(IoCs) *

Type	Value
Hashes	67ee552d7c1d46885b91628c603f24b66a9755858e098748f7e7862a71baa015068D1B3813489E41116867729504C40019FF2B1FE32AAB4716D429780E666324759bd8bd7a71a903a26ac8d5914e5b0093b96de61bf5085592be6cc96880e088262cf67af22d37b5af2dc71d07a00ef02dc74f71380c72875ae1b29a3a5aa23da44a5e8e65266611d5845d88b43c9e4a9d84fe074fd18f48b50fb837fa6e429dce310ab611895db1767877bd1f635ee3c4350d6e17ea28f8d100313f62b8738275574959bbdad4b4ac7b16906cd8f1fd855d2a7df8e63905ab18540e2d6f16005475aec3b9837b514367c89d8362a9d524bfa02e75b85b401025588839a40bcbEcd8c9967b0127a12d6db61964a82970ee5d38f82618d5db4d8eddbb3b5726b7009d23d85c1933715c3edccc46438690a66eebbcccb690a7b27c9483ad9d0ac083bdabbb87f01477f9cf61e78d19123b8099d04c93ef7ad4beb19f4a228589a342e85a97212bb833803e06621170c67f6620f08cc220cf2d8d44dff7f4b1fa3805b92787ca7833eef5e61e2df1310e4b6544955e812e60b5f834f904623fd9f3da8d1bfb8192f43cf5d9247035aa4445381d2d26bed981662e3db34824c71fd5b8c307c424e777972c0fa1322844d4d04e9eb200fe9532644888c4b6386d7553f868ac52916ebb6f6186ac20b20903f63bc8e9c460e2418f2b032a207d8f21d342a6d21984559accbc54077db2abf61fd9c3939a4b09705f736231cbc7836ae7e4038e18b5104683d2a33650d8c02a6a89badf30ca9174576bf0aff08c03e723c90df0e02cc9b1cf1a86f9d7e6f777366c5748bd3cf4070b49460b48b4d4090b4162f039172dcb85ca4b85c99dd77beb70743ffd2e6f9e0ba78531945577665E391c2d3e8e4860e061f69b894cf2b1ba578a3e91de610410e7e9fa87c07304cBec067a0601a978229d291c82c35a41cd48c6fca1a3c650056521b01d15a72daD0c3d7003b7f5b4a3bd74a41709cfecfabea1f94b47e1162142de76aa7a063c77d2780cd9acc516b6817e9a51b8e2889f2dec455295ac6e6d65a6191abadebfff
Filepaths	C:\ManageEngine\ServiceDesk\bin\msiexec.exe C:\ManageEngine\ServiceDesk\lib\tomcat\tomcat-postgres.jar C:\Windows\Temp\ScriptModule.dll C:\ManageEngine\ServiceDesk\bin\ScriptModule.dll C:\Windows\system32\ME_ADAudit.exe c:\Users\[username]\AppData\Roaming\ADManager\ME_ADManager.exe %ALLUSERPROFILE%\Microsoft\Windows\Caches\system.dat C:\ProgramData\Microsoft\Crypto\RSA\key.dat c:\windows\temp\ccc.exe
Domains	seed.nkn[.]org

Patch Links

<https://www.manageengine.com/desktop-management-msp/cve-2021-44515-security-advisory.html>
<https://www.manageengine.com/products/service-desk/security-response-plan.html>
<https://pitstop.manageengine.com/portal/en/community/topic/security-advisory-for-cve-2021-44526-and-cve-2021-44515-authentication-bypass-vulnerabilities-in-servicedesk-plus-and-desktop-central>
<https://pitstop.manageengine.com/portal/en/community/topic/security-advisory-for-cve-2021-44526-and-cve-2021-44515-authentication-bypass-vulnerabilities-in-assetexplorer-and-desktop-central>

References

<https://us-cert.cisa.gov/ncas/alerts/aa21-336a>
<https://www.bleepingcomputer.com/news/security/zoho-patch-new-manageengine-bug-exploited-in-attacks-asap/>
<https://unit42.paloaltonetworks.com/tiltedtemple-manageengine-servicedesk-plus/>