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eCatcher Desktop, Version 6.6.4 Advisory

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eCatcher Advisory Summary

An insecure filesystem permissions vulnerability was identified in eCatcher version 6.6.4 and earlier. To exploit this vulnerability, an attacker must have a user account on the same machine as the victim and have access to the machine during an active VPN connection.

Medium Risk Level Impact

Weak filesystem permissions could allow malicious users to access files that could lead to sensitive information disclosure, modification of configuration files, or disruption of normal system operation.

Affected Vendor

Product Vendor	Product Name	Affected Version
Ewon by HMS Networks	eCatcher	Version 6.6.4 and earlier

Product Description:

According to the official product description, eCatcher is a “remote access software that allows remote management of devices within a highly secure environment”. The project’s official website is **https://www.ewon.biz/technical-support/pages/talk2m/talk2m-tools/talk2m-ecatcher**. The latest version of the application is 6.7.3, released on July 7, 2021.

Solution
Update to version 6.7.3

VULNERABILITIES

INSECURE FILESYSTEM PERMISSIONS

CVE ID	Security Risk	Impact	Access Vector
CVE-2021-33214	Medium	Escalation of privileges	Local

Files and directories for the eCatcher Talk2MVpnService service have permissions that do not properly enforce access controls. For example, sensitive configuration files are marked as world-writable. Since this service runs under the NT Authority\SYSTEM user, these excessive permissions could lead to privilege escalation on the server.

The directory permissions for the temp directory used by the Talk2MVpnService service were enumerated as follows:

```
PS C:\Users\pn> icacls "C:\Program Files (x86)\eCatcher-Talk2M\Talk2mVpnService\t
C:\Program Files (x86)\eCatcher-Talk2M\Talk2mVpnService\temp
       BUILTIN\Users:(F)
       BUILTIN\Users:(OI)(CI)(IO)(F)
       NT SERVICE\TrustedInstaller:(I)(F)
       NT SERVICE\TrustedInstaller:(I)(CI)(IO)(F)
       NT AUTHORITY\SYSTEM:(I)(F)
       NT AUTHORITY\SYSTEM:(I)(OI)(CI)(IO)(F)
       BUILTIN\Administrators:(I)(F)
       BUILTIN\Administrators:(I)(OI)(CI)(IO)(F)
       BUILTIN\Users:(I)(RX)
       BUILTIN\Users:(I)(OI)(CI)(IO)(GR,GE)
       CREATOR OWNER:(I)(OI)(CI)(IO)(F)
       APPLICATION PACKAGE AUTHORITY\ALL APPLICATION PACKAGES:(I)(RX)          APF
```

FIGURE 1 - Full directory access to all users of the system

As highlighted above, all users have full read/write rights over the directory. Since this directory is used to temporarily write OpenVPN configuration files, a user or malware on the system that replaces it successfully could perform privilege escalation when the privileged openvpn process reads it. The **`Talk2MVpnService`** service recreates this configuration file each time the VPN connection is initiated and prepends the filename with a random UUID, making it unpredictable. Hence, the attack window for exploitation was approximately 15 ms, which made the working exploit unreliable.

Credits

Priyank Nigam, Senior Security Consultant, Bishop Fox

Timeline

04/19/2021: Initial discovery

04/30/2021: Contact with vendor

05/12/2021: Vendor acknowledged vulnerabilities

07/07/2021: Vendor released patched version 6.7.3

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SULTANT

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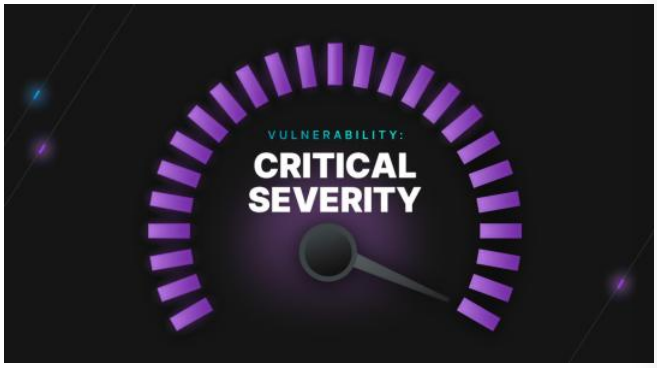

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