Visualnet Media Inc.

Security Assessment

External Vulnerability Scan Detail by Issue Report

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Scan Date: 10/25/2016

Prepared for:
Your Customer / Prospect
Prepared by:
Your Company Name

10/27/2016

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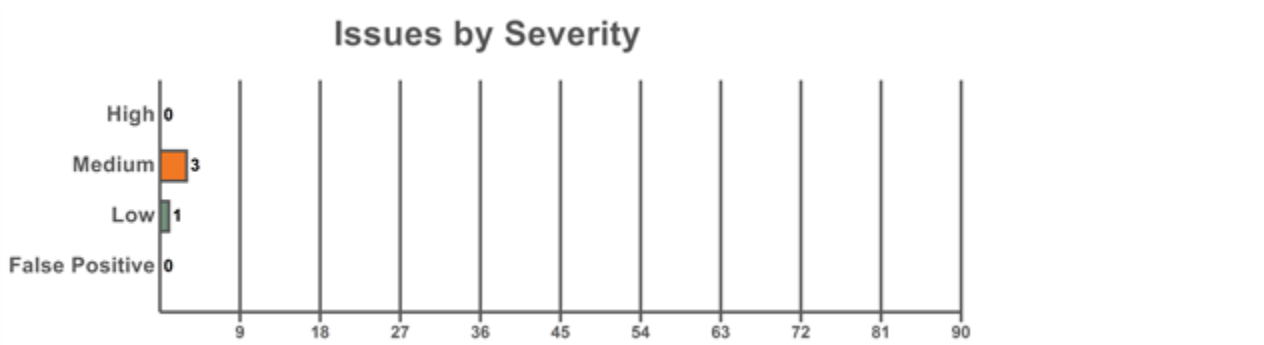
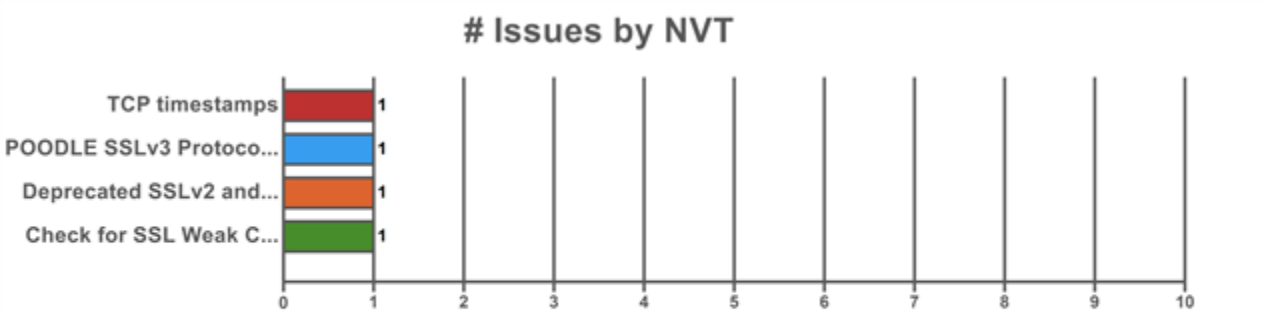
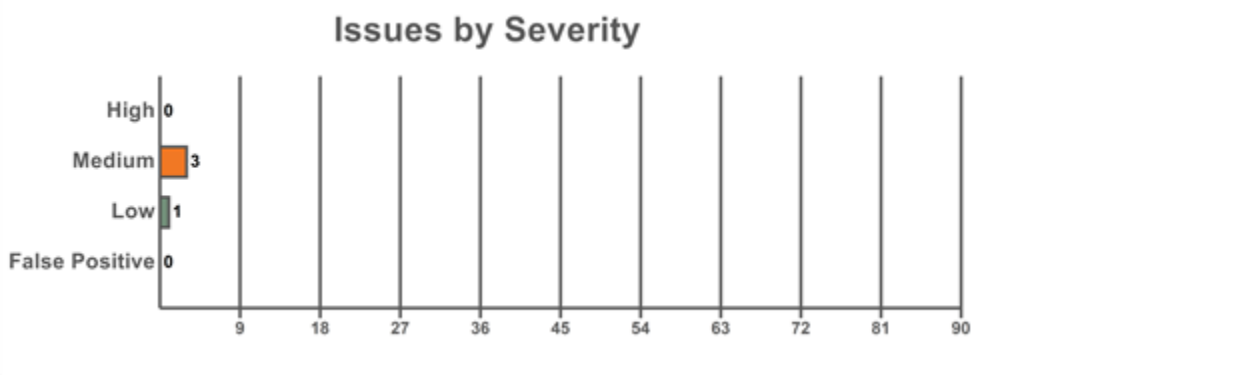
1 - Summary

This report gives details on hosts that were tested and issues that were found group by individual issues.





2 - Scan Details



2.1 - Deprecated SSLv2 and SSLv3 Protocol Detection

Medium: (CVSS: 4.3)
OID: 1.3.6.1.4.1.25623.1.0.111012
443/tcp (https)

Summary
It was possible to detect the usage of the deprecated SSLv2 and/or SSLv3 protocol on this system.

Affected Nodes
22.33.44.55(22-33-44-55-static.hfc.comcastbusiness.net)

Vulnerability Detection Result
In addition to TLSv1+ the service is also providing the deprecated SSLv3 protocol and supports one or more ciphers. Those supported ciphers can be found in the 'Check SSL Weak Ciphers and Supported Ciphers' NVT.

Impact
An attacker might be able to use the known cryptographic flaws to eavesdrop the connection between clients and the service to get access to sensitive data transferred within the secured connection.

Solution
It is recommended to disable the deprecated SSLv2 and/or SSLv3 protocols in favor of the TLSv1+ protocols. Please see the references for more information.

Vulnerability Insight
The SSLv2 and SSLv3 protocols containing known cryptographic flaws.

Vulnerability Detection Method
Check the used protocols of the services provided by this system. Details: Deprecated SSLv2 and SSLv3 Protocol Detection (OID: 1.3.6.1.4.1.25623.1.0.111012) Version used: $Revision: 2699 $

References
https://www.enisa.europa.eu/activities/identity-and-trust/library/deliverables/algorithms-key-sizes-and-parameters-report, https://bettercrypto.org/

2.2 - POODLE SSLv3 Protocol CBC ciphers Information Disclosure Vulnerability

Medium: (CVSS: 4.3)
OID: 1.3.6.1.4.1.25623.1.0.802087
443/tcp (https)

Summary
This host is installed with OpenSSL and is prone to information disclosure vulnerability.

Affected Nodes

22.33.44.55(22-33-44-55-static.hfc.comcastbusiness.net)

Vulnerability Detection Result
Vulnerability was detected according to the Vulnerability Detection Method.

Impact
Successful exploitation will allow a man-in-the-middle attackers gain access to the plain text data stream. Impact Level: Application

Solution
Vendor released a patch to address this vulnerabiliy, For updates contact vendor or refer to https://www.openssl.org NOTE: The only correct way to fix POODLE is to disable SSL v3.0

Vulnerability Insight
The flaw is due to the block cipher padding not being deterministic and not covered by the Message Authentication Code

Vulnerability Detection Method
Send a SSLv3 request and check the response. Details: POODLE SSLv3 Protocol CBC ciphers Information Disclosure Vulnerability (OID: 1.3.6.1.4.1.25623.1.0.802087) Version used: $Revision: 2752 $

References
http://osvdb.com/113251, https://www.openssl.org/~bodo/ssl-poodle.pdf, https://www.imperialviolet.org/2014/10/14/poodle.html, https://www.dfranke.us/posts/2014-10-14-how-poodle-happened.html, http://googleonlinesecurity.blogspot.in/2014/10/this-poodle-bites-exploiting-ssl-30.html

2.3 - Check for SSL Weak Ciphers

M **Medium**: (CVSS: 4.3) 443/tcp (https)
OID: 1.3.6.1.4.1.25623.1.0.103440

Summary
This routine search for weak SSL ciphers offered by a service.

Affected Nodes
22.33.44.55(22-33-44-55-static.hfc.comcastbusiness.net)

Vulnerability Detection Result
Weak ciphers offered by this service: SSL3_RSA_RC4_128_MD5 SSL3_RSA_RC4_128_SHA TLS1_RSA_RC4_128_MD5 TLS1_RSA_RC4_128_SHA TLS1_RSA_RC4_128_MD5 TLS1_RSA_RC4_128_SHA

Solution
The configuration of this services should be changed so that it does not support the listed weak ciphers anymore.

Vulnerability Insight
These rules are applied for the evaluation of the cryptographic strength: - Any SSL/TLS using no cipher is considered weak. - All SSLv2 ciphers are considered weak due to a design flaw within the SSLv2 protocol. - RC4 is considered to be weak. - Ciphers using 64 bit or less are considered to be vulnerable to brute force methods and therefore considered as weak. - 1024 bit RSA authentication is considered to be insecure and therefore as weak. - CBC ciphers in TLS < 1.2 are considered to be vulnerable to the BEAST or Lucky 13 attacks - Any cipher considered to be secure for only the next 10 years is considered as medium - Any other cipher is considered as strong

Vulnerability Detection Method
Details: Check for SSL Weak Ciphers (OID: 1.3.6.1.4.1.25623.1.0.103440) Version used: $Revision: 3061 $

2.4 - TCP timestamps

L **Low**: (CVSS: 2.6)
OID: 1.3.6.1.4.1.25623.1.0.80091

Summary
The remote host implements TCP timestamps and therefore allows to compute the uptime.

Affected Nodes
22.33.44.55(22-33-44-55-static.hfc.comcastbusiness.net)

Vulnerability Detection Result
It was detected that the host implements RFC1323. The following timestamps were retrieved with a delay of 1 seconds in-between: Paket 1: 227599908 Paket 2: 227600029

Impact
A side effect of this feature is that the uptime of the remote host can sometimes be computed.

Solution
To disable TCP timestamps on linux add the line 'net.ipv4.tcp_timestamps = 0' to /etc/sysctl.conf. Execute 'sysctl -p' to apply the settings at runtime. To disable TCP timestamps on Windows execute 'netsh int tcp set global timestamps=disabled' Starting with Windows Server 2008 and Vista, the timestamp can not be completely disabled. The default behavior of the TCP/IP stack on this Systems is, to not use the Timestamp options when initiating TCP connections, but use them if the TCP peer that is initiating communication includes them in their synchronize (SYN) segment. See also: http://www.microsoft.com/en-us/download/details.aspx?id=9152

Vulnerability Insight
The remote host implements TCP timestamps, as defined by RFC1323.

Vulnerability Detection Method
Special IP packets are forged and sent with a little delay in between to the target IP. The responses are searched for a timestamps. If found, the timestamps are reported. Details: TCP timestamps (OID: 1.3.6.1.4.1.25623.1.0.80091) Version used: $Revision: 3351 $

References
http://www.ietf.org/rfc/rfc1323.txt