



Ernst & Young LLP
One Tampa City Center
Suite 2400
201 North Franklin Street
Tampa, Florida 33602

Tel: +1 813 225 4800
Fax: +1 813 225 4711
ey.com

Report of Independent Accountants

To the Management of Web.com Group, Inc.

We have examined the accompanying [assertion](#) made by the management of Web.com Group, Inc (“Web.com” the parent company of “Network Solutions”), titled *Management’s Assertion Regarding the Effectiveness of Its Controls Over the SSL Certification Authority Operation Based on the Trust Services Principles and Criteria for Certification Authorities Version 2.1*, that provides Network Solutions’ Certification Authority (CA) services at Herndon, Virginia, United States and the data centers and back-end office support locations listed in Appendix A for the Root and Subordinate Keys listed in Appendix B during the period from April 1, 2019 through March 31, 2020. Web.com has:

- ▶ Disclosed Network Solutions’ business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in its [Certification Practice Statement Version 3.1](#)
- ▶ Maintained effective controls to provide reasonable assurance that that Network Solutions provided its services in accordance with its Certification Practice Statement
- ▶ Maintained effective controls to provide reasonable assurance that:
 - The integrity of keys and certificates it manages is established and protected throughout their lifecycles;
 - The integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
 - Subscriber information is properly authenticated (for the registration activities performed by Network Solutions); and
 - Subordinate CA certificate requests are accurate, authenticated, and approved
- ▶ Maintained effective controls to provide reasonable assurance that:
 - logical and physical access to CA systems and data is restricted to authorized individuals;
 - the continuity of key and certificate management operations is maintained; and
 - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

based on the American Institute of Certified Public Accountants (AICPA)’s [Trust Services Principles and Criteria for Certification Authorities 2.1](#).

Web.com’s management is responsible for its assertion and for specifying the aforementioned Criteria. Our responsibility is to express an opinion on management’s assertion based on our examination.

Web.com makes use of external registration authorities for specific subscriber registration activities as disclosed in Network Solutions' business practice disclosures. Our examination did not extend to the controls of external registration authorities.

Network Solutions does not escrow its CA keys, does not provide subscriber key generation services, and does not provide certificate suspension services. Accordingly, our examination did not extend to controls that would address those criteria.

Our examination was conducted in accordance with attestation standards established by the AICPA. Those standards require that we plan and perform our examination to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about management's assertion, which includes: (1) obtaining an understanding of Network Solutions' key and certificate life cycle management business practices, policies, processes and controls, and its suitability of the design and implementation of the controls intended to achieve the Criteria and examining evidence supporting management's assertion and performing such other procedures over key and certificate integrity, over the authenticity and confidentiality of subscriber and relying party information, over the continuity of key and certificate life cycle management operations, and over the development, maintenance and operation of systems integrity as we considered necessary in the circumstances; (2) selectively testing transactions executed in accordance with disclosed key and certificate life cycle management business practices; (3) testing and evaluating the operating effectiveness of the controls; and (4) performing such other procedures as we considered necessary in the circumstances. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

Web.com's management has disclosed to us the attached matters (Appendix C) that have been posted publicly in the online forums of the CA/Browser Forum, as well as the online forums of individual internet browsers that comprise the CA/Browser Forum. We have considered the nature of these matters in determining the nature, timing and extent of our procedures.

The relative effectiveness and significance of specific controls at Network Solutions and their effect on assessments of control risk for subscribers and relying parties are dependent on their interaction with the controls, and other factors present at individual subscriber and relying party locations. We have performed no procedures to evaluate the effectiveness of controls at individual subscriber and relying party locations.

Our examination was not conducted for the purpose of evaluating Network Solutions' cybersecurity risk management program. Accordingly, we do not express an opinion or any other form of assurance on its cybersecurity risk management program.

There are inherent limitations in the effectiveness of any system of internal control, including the possibility of human error and the circumvention of controls. Because of inherent limitations in its internal control Network Solutions may achieve reasonable, but not absolute assurance that all security events are prevented and, for those controls may provide reasonable, but not

absolute assurance that its commitments and system requirements are achieved. Controls may not prevent or detect and correct, error, fraud, unauthorized access to systems and information, or failure to comply with internal and external policies or requirements.

Examples of inherent limitations of internal controls related to security include (a) vulnerabilities in information technology components as a result of design by their manufacturer or developer; (b) breakdown of internal control at a vendor or business partner; and (c) persistent attackers with the resources to use advanced technical means and sophisticated social engineering techniques specifically targeting the entity. Furthermore, the projection of any evaluations of effectiveness to future periods is subject to the risk that controls may become inadequate because of changes in conditions, that the degree of compliance with such controls may deteriorate, or that changes made to the system or controls, or the failure to make needed changes to the system or controls, may alter the validity of such evaluations.

In our opinion, Web.com management's assertion referred to above, is fairly stated, in all material respects, based on the aforementioned criteria.

The WebTrust seal of assurance for Certification Authority on Network Solutions' website constitutes a symbolic representation of the contents of this report and it is not intended, nor should it be construed, to update this report or provide any additional assurance.

This report does not include any representation as to the quality of Network Solutions' CA services beyond those covered by the [Trust Services Principles and Criteria for Certification Authorities Version 2.1](#) criteria, or the suitability of any of Network Solutions' services for any customer's intended purpose.

Ernst + Young LLP

July 1, 2020



**Management's Assertion Regarding the Effectiveness of Its Controls
Over the SSL Certification Authority Operation
Based on the Trust Services Principles and Criteria for Certification Authorities Version 2.1**

July 1, 2020

We, as management of Web.com Group, Inc, the parent company of Network Solutions are responsible for operating the Network Solutions' Certification Authority (CA) at Herndon, Virginia for the Root CA(s) and Subordinate CA(s) listed in Appendix B.

Network Solutions' CA services provide the following certification authority services:

- ▶ Subscriber registration
- ▶ Certificate renewal
- ▶ Certificate rekey
- ▶ Certificate issuance
- ▶ Certificate distribution
- ▶ Certificate revocation
- ▶ Certificate suspension (not applicable – service not provided by Network Solutions)
- ▶ Certificate validation
- ▶ Subscriber key generation and management

Management of Web.com is responsible for establishing and maintaining effective controls over Network Solutions' CA operations, including its CA business practices disclosure on its website CA business practices management, CA environmental controls, CA key lifecycle management controls, subscriber key lifecycle management controls, certificate lifecycle management controls, and subordinate CA certificate lifecycle management controls. These controls contain monitoring mechanisms, and actions are taken to correct deficiencies identified.

Controls have inherent limitations, including the possibility of human error and the circumvention or overriding of controls. Accordingly, even effective controls can provide only reasonable assurance with respect to Network Solutions' CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

Management of Web.com has assessed the disclosure of its certificate practices and its controls over Network Solutions' CA operations. Based on that assessment, in Web.com Management's opinion, in providing Network Solutions' CA services for the Root CA(s) and Subordinate CA(s) listed in Appendix B at Herndon, Virginia, United States locations during the period from April 1, 2019 through March 31, 2020 Network Solutions has:

- ▶ Disclosed its Business, Key Life Cycle Management, and Certificate Life Cycle Management, and CA Environmental Control practices in its [Certification Practice Statement \(Version 3.1\)](#) for the Root and Subordinate Keys listed in Appendix B

- ▶ Maintained effective controls to provide reasonable assurance that Network Solutions provided its services in accordance with its Certification Practice Statement
- ▶ Maintained effective controls to provide reasonable assurance that:
 - The integrity of keys and certificates it manages was established and protected throughout their life cycles;
 - The integrity of subscriber keys and certificates it manages was established and protected throughout their life cycles;
 - The Subscriber information was properly authenticated (for the registration activities performed by Network Solutions and Subordinate CA certificate requests were accurate, authenticated and approved
- ▶ Maintained effective controls to provide reasonable assurance that:
 - Logical and physical access to CA systems and data was restricted to authorized individuals;
 - The continuity of key and certificate management operations was maintained; and
 - CA systems development, maintenance and operations were properly authorized and performed to maintain CA systems integrity

for the Root Keys listed in Appendix A, based on the [Trust services Principles and Criteria for Certification Authorities Version 2.1](#), including the following:

CA Business Practices Disclosure

- ▶ Certification Practice Statement (CPS)
- ▶ Certificate Policy (CP) (CP is not applicable per Network Solutions' requirements)

CA Business Practices Management

- ▶ Certificate Policy Management (CP is not applicable per Network Solutions' requirements)
- ▶ Certification Practice Statement Management
- ▶ CP and CPS Consistency (CP is not applicable per Network Solutions' requirements)

CA Environmental Controls

- ▶ Security Management
- ▶ Asset Classification and Management
- ▶ Personnel Security
- ▶ Physical & Environmental Security
- ▶ Operations Management
- ▶ System Access Management
- ▶ System Development and Maintenance
- ▶ Business Continuity Management
- ▶ Monitoring and Compliance
- ▶ Audit Logging

CA Key Lifecycle Management Controls

- ▶ CA Key Generation
- ▶ CA Key Storage, Backup, and Recovery
- ▶ CA Public Key Distribution
- ▶ CA Key Usage
- ▶ CA Key Archival and Destruction

- ▶ CA Key Compromise
- ▶ CA Cryptographic Hardware Lifecycle Management
- ▶ CA Key Escrow

Subscriber Key Lifecycle Management Controls (not applicable – Subscriber Key Life Cycle Management services not provided by Network Solutions)

- ▶ CA-Provided Subscriber Key Generation Services
- ▶ CA-Provided Subscriber Key Storage and Recovery Services
- ▶ Integrated Circuit Card (ICC) Lifecycle Management
- ▶ Requirements for Subscriber Key Management

Certificate Lifecycle Management Controls

- ▶ Subscriber Registration
- ▶ Certificate Renewal
- ▶ Certificate Rekey
- ▶ Certificate Issuance
- ▶ Certificate Distribution
- ▶ Certificate Revocation
- ▶ Certificate Suspension (not applicable – service not provided by Network Solutions)
- ▶ Certificate Validation

Subordinate CA Certificate Lifecycle Management Controls

- ▶ Subordinate CA Certificate Lifecycle Management

Anuj Saxena
Chief Technology Officer
Web.com Group, Inc.

Appendix A

Locations

Location	Function
Secaucus, NJ USA	Data Center
Manchester, UK	Data Center
Bradford, UK	Back End Office Support
Manchester, UK	Back End Office Support
Roseland, NJ USA	Back End Office Support
Murray, UT USA	Back End Office Support
Kanata, ON Canada	Back End Office Support
Chennai, IN	Back End Office Support
Odessa, Ukraine	Back End Office Support

Appendix B

Root and Subordinate Keys

#	Root/Subordinate Name	Subject Key Identifier	Certificate Serial Number	SHA-256 Fingerprint
1	CN=Network Solutions ECC DV Server CA O=Network Solutions L.L.C. L=Jacksonville ST=FL C=US	894A8964B520B7FA51E E85AC729AEA3BF654FE 1E	008521621AD08BC6BF 0F069D956C51BD33	6A7204D6F6E852A914CC0A E45AFAD91FA28D1AA4ECA 3844097A929A8E11F3A17
2	CN=Network Solutions ECC EV Server CA O=Network Solutions L.L.C. L=Jacksonville ST=FL C=US	2B0B089803B61DFD0C4 3ECD788CB7FDA1DDFE E71	1850470B6B8C610DDE 23FCC047FEA039	875FD03C6C1AA2E80C8E84 67E99192A3A55D51B1F9DA BAE1E6821F56C4E1E783
3	CN=Network Solutions ECC OV Server CA O=Network Solutions L.L.C. L=Jacksonville ST=FL C=US	09ED181B676853F44FC 00BD3DDDFB3790EBD 779	372175802BAB5311D1 362884C3AE7621	1C8CF4171AE81798EB7C85 DA604D8C21076D769119471 E5B476C91858A4850E9
4	CN=Network Solutions RSA DV Server CA O=Network Solutions L.L.C. L=Jacksonville ST=FL C=US	713060A80D017902590D 77E151DB51E2F46CD39 1	759D11B752DD4B9E24 1CC270F824114B	7752EE9D27528294579E449 BE6AB07D720BDEAE3A5E39 C05AF7F26C2D431BEFF
5	CN=Network Solutions RSA EV Server CA O=Network Solutions L.L.C. L=Jacksonville ST=FL C=US	3A4079DD980526A4F09 A2AF135DCAB8554723A EE	4B8427B828A7B1D89B D473C1373C6DBA	CB5535486404A82E5079AF0 F9CCB7EA3DFFDF9DA4FC9 25B711062249E6502851
6	CN=Network Solutions RSA OV Server CA O=Network Solutions L.L.C. L=Jacksonville ST=FL C=US	CE95DAA4FC31D3B615 0636184E96AC56EDFA4 4D5	202516B004AD5FC269 8D9549005A5876	CB0BADA3AD53A99B4B7A9 6020C2869A43E2DB2D01832 63F3303AC7E41877A665
7	CN=Network Solutions Certificate Authority O=Network Solutions L.L.C. C=US	2130C9FB00D74E98DA8 7AA2AD0A72EB14031A7 4C	57CB336FC25C16E647 1617E3903168E0	15F0BA00A3AC7AF3AC884C 072B1011A077BD77C097F40 164B2F8598ABD83860C
8	CN=Network Solutions Certificate Authority O=Network Solutions L.L.C. C=US	2130C9FB00D74E98DA8 7AA2AD0A72EB14031A7 4C	1CA02DC1523B6A6D8 B5C1F954AEDAC30	001686CD181F83A1B1217D3 05B365C41E3470A78A1D37B 134A98CD547B92DAB3
9	CN=Network Solutions EV Server CA O=Network Solutions L.L.C. C=US	8A35E4353ABC11A19EF BF54F3466D54BAC4C62 68	7AACA21D539D145411 3C045ED835F8EA	29F8C1CEB1ABB0D7164791 FF13B4FD268631A882F89FE 658A4B5EC5172774B8B
10	CN=Network Solutions EV SSL CA O=Network Solutions L.L.C. C=US	B64E859D841F1B1DD45 2894E07962DF9DEF18F CC	331F38D107F33B3B17 50C4CB09FED18D	A8FC6359078323A25417523 86694FA643F1434EA063BEB AC6EF0D189E3676915
11	CN=Network Solutions EV SSL CA O=Network Solutions L.L.C. C=US	B64E859D841F1B1DD45 2894E07962DF9DEF18F CC	2810921E00E65D2253 21CF627BFE30EE	4CC308DA28285A18542200E AB3C61DE7387B06667A6CB 6574794A70FE1DEF928
12	CN=Network Solutions EV Server CA 2 O=Network Solutions L.L.C. L=Herndon ST=VA C=US	8F374A849CF48EC7669 690B4AE8FBA5EA216AA C4	548E7BA0C030C65DB E531C9C362F2F6C	799E20564D45484DFA0F28E D726037FF070D66C51DE8E 2343284DECAB0FC9991
13	CN=Network Solutions ECC Certificate Authority O=Network Solutions L.L.C. L=Jacksonville ST=FL C=US	9B7BEB8C8FF83F252984 7300A56F838BEE3EB00 CE	79384BB4191A8D7422 CCFF8532F2E4BA	2193CFEA381211A1AEAA2D E984E630643A87160B12081 18145EAFB8E1BC69958

#	Root/Subordinate Name	Subject Key Identifier	Certificate Serial Number	SHA-256 Fingerprint
14	CN=Network Solutions RSA Certificate Authority O=Network Solutions L.L.C. L=Jacksonville ST=FL C=US	0FF14A4A757405110C1 DD85B99EBBFFFAA7D5 ED7	4C034BAC67184C7FA F44084D8296C7B2	DDBF149733BC2BF8A09D7F 012B01A6DEA11D7BAE2671 3783EF6407A2495BF189
15	CN=Network Solutions Certificate Authority O=Network Solutions L.L.C. C=US	2130C9FB00D74E98DA8 7AA2AD0A72EB14031A7 4C	00B98E43FE6389E86B 2F6435795982696F	5DCF76EC8C7A84D94C7C9 BFFDE0C9D45389AC618D11 D343BD6A5EBA5BFC6F438
16	CN=Network Solutions Certificate Authority O=Network Solutions L.L.C. C=US	2130C9FB00D74E98DA8 7AA2AD0A72EB14031A7 4C	5DC9729CEA8A795A1 7EEDBBFCC28214B	1F32401D449A0619F30800D 11A4F502DB49E0B332423F7 78BD522991FB6E0147
17	CN=Network Solutions Certificate Authority O=Network Solutions L.L.C. C=US	2130C9FB00D74E98DA8 7AA2AD0A72EB14031A7 4C	030E95294DAEC12C03 CF31AB5B0271D7	C445D7EAA6F236F4CFC23A D1C2F8403BF733AE87E0E6 FF5892C926044370FB48
18	CN=Network Solutions Certificate Authority O=Network Solutions L.L.C. C=US	2130C9FB00D74E98DA8 7AA2AD0A72EB14031A7 4C	3985F289EFE5B9FEFF DA7DDBDC9D0F41	462B93B27711E4A61B4EEF9 9A37C3392017436791402291 8E7749A069AFE56EE
19	CN=Network Solutions Certificate Authority O=Network Solutions L.L.C. C=US	2130C9FB00D74E98DA8 7AA2AD0A72EB14031A7 4C	54833A5DF96BD642EC C60CDDA03CE9E9	D5E71937C7383DE159BB8F 8DB8949AFC8DE08FF8BC7D 7E1D0CBEDB6BF8317F9A
20	CN=Network Solutions Certificate Authority O=Network Solutions L.L.C. C=US	2130C9FB00D74E98DA8 7AA2AD0A72EB14031A7 4C	5468B579749F60FFFE 9336D1C362AF2E	82A6C3EDE04772D1336B99 BE2DC2D8B6D49BBECE1AD 9D1E1FF8E4253A70BF1EA

Appendix C

Public Disclosures

No.	Disclosure	Relevant WebTrust criteria	Publicly Disclosed Link
1	Web.com added two additional root certificates, ECC and RSA to their existing roots for the purpose of upgrading towards SHA-2 certificates using ECC and RSA encryption, to be included in Mozilla's CA certificate list maintained in NSS	N/A – Web.com has shared the open request in the interest of transparency and knowledge sharing	Bugzilla Link
2	Web.com published self-signed certificates for one of the CA keys which were not included in Sectigo's disclosure list and as a result led to inconsistencies between self-signed and cross – signed versions of those CA keys	N/A – Web.com has shared the issue in the interest of transparency and knowledge sharing	Bugzilla Link