

Ernst & Young LLP 1775 Tysons Blvd McLean, VA 22102 Tel: +1 703 747 1000 Fax: +1 703 747 0100 ev.com

## Report of Independent Accountants

To the Management of DigiCert Ireland Limited

We have examined the accompanying <u>assertion</u> made by the management of DigiCert Ireland Limited (for purposes of this report, also referred to as the "Company" or "DigiCert" or "QuoVadis") titled Management's Assertion Regarding the Effectiveness of Its Controls Over the SSL Certification Authority Services Based on the WebTrust Principles and Criteria for Certification Authorities - SSL Baseline with Network Security, v2.6 that provides its Certification Authority (CA) services at Bermuda, the Netherlands, Switzerland, the United Kingdom, the United States, Ireland, Belgium and Germany, throughout the period 1 January 2023 to 31 December 2023 for CAs as enumerated in Appendix A, DigiCert has:

- disclosed its SSL certificate lifecycle management business practices in its:
  - <u>DigiCert Europe / QuoVadis Certification Policy / Certification Practice</u>
     Statement, version 5.1 dated 15 December 2023

including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Requirements, and provided such services in accordance with its disclosed practices

- maintained effective controls to provide reasonable assurance that:
  - the integrity of keys and SSL certificates it manages is established and protected throughout their lifecycles; and
  - SSL subscriber information is properly collected and authenticated (for the registration activities performed by DigiCert)
- 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,
- maintained effective controls to provide reasonable assurance that it meets the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum,

in accordance with the <u>WebTrust Principles and Criteria for Certification Authorities - SSL</u> <u>Baseline with Network Security, v2.6</u>.

DigiCert management is responsible for its assertion, including the fairness of its presentation, and the provision of its described services in accordance with the WebTrust Principles and Criteria for Certification Authorities - SSL Baseline with Network Security, v2.6.



Our responsibility is to express an opinion on DigiCert management's assertion based on our examination. Our examination was conducted in accordance with attestation standards established by the AICPA. Those standards require that we plan and perform the 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. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of management's assertion, 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.

The relative effectiveness and significance of specific controls at DigiCert 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. Our examination did not extend to controls at individual subscriber and relying party locations and we have not evaluated the effectiveness of such controls.

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

We are required to be independent of DigiCert and to meet our other ethical responsibilities, as applicable for examination engagements set forth in the Preface: Applicable to All Members and Part 1 - Members in Public Practice of the Code of Professional Conduct established by the AICPA.

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, DigiCert 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, DigiCert management's assertion referred to above is fairly stated, in all material respects, based on the aforementioned criteria.



This report does not include any representation as to the quality of DigiCert's CA services beyond those covered by the WebTrust Principles and Criteria for Certification Authorities - SSL Baseline with Network Security, v2.6 criteria, or the suitability of any of DigiCert's services for any customer's intended purpose.

DigiCert's use of the WebTrust for Certification Authorities - SSL Baseline with Network Security Seal 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.

Ernst & Young LLP

Ernst + Young LLP

28 March 2024



Management's Assertion Regarding the Effectiveness of Its Controls
Over the SSL Certification Authority Services
Based on the WebTrust Principles and Criteria for Certification Authorities –
SSL Baseline with Network Security, v2.6

28 March 2024

We, as the management of DigiCert Ireland Limited (for purposes of this letter, also referred to as the "Company" or "DigiCert" or "QuoVadis"), are responsible for operating the SSL Certification Authority (CA) services at Bermuda, the Netherlands, Switzerland, the United Kingdom, the United States, Ireland, Belgium and Germany for the Root CAs and Subordinate CAs in scope for SSL Baseline Requirements and Network Security Requirements listed at Appendix A.

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 DigiCert's CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

Management of DigiCert has assessed the disclosures of its certificate practices and controls over its SSL CA services. Based on that assessment, in providing its SSL Certification Authority (CA) services at Bermuda, the Netherlands, Switzerland, the United Kingdom, the United States, Ireland, Belgium and Germany throughout the period from 1 January 2023 through 31 December 2023, DigiCert has:

- disclosed its SSL certificate lifecycle management business practices in its:
  - DigiCert Europe / QuoVadis Certification Policy / Certification Practice Statement, version 5.1 dated 15 December 2023

including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Requirements on the DigiCert website, and provided such services in accordance with its disclosed practices

- maintained effective controls to provide reasonable assurance that:
  - the integrity of keys and SSL certificates it manages was established and protected throughout their lifecycles; and
  - SSL subscriber information was properly authenticated (for the registration activities performed by DigiCert)
- maintained effective controls to provide reasonable assurance that:
  - logical and physical access to CA systems and data was restricted to authorized individuals
  - o the continuity of key and certificate management operations was maintained; and



- CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity,
- maintained effective controls to provide reasonable assurance that it meets the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum,

in accordance with the <u>WebTrust Principles and Criteria for Certification Authorities - SSL</u> Baseline with Network Security, v2.6.

Very truly yours,

Laoise O'Connor

Corporate Counsel

DigiCert Ireland Limited

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## Appendix A - List of In-scope CAs

Distinguished name	Certificate Serial Number	SHA-256 Fingerprint
CN = QuoVadis Root CA 1 G3 O = QuoVadis Limited C = BM	78585f2ead2c194 be337073534132 8b596d46593	8A866FD1B276B57E578E921C65828A2BED58E9F2F288054134B7F1F4BFC9CC74
CN = QuoVadis Root CA 2 O = QuoVadis Limited C = BM	509	85A0DD7DD720ADB7FF05F83D542B209DC7FF4528F7D677B18389FEA5E5C49E86
CN = QuoVadis Root CA 2 G3 O = QuoVadis Limited C = BM	445734245b8189 9b35f2ceb82b3b5 ba726f07528	8FE4FB0AF93A4D0D67DB0BEBB23E37C71BF325DCBCDD240EA04DAF58B47E1840
CN = QuoVadis Root CA 3 O = QuoVadis Limited C = BM	05c6	18F1FC7F205DF8ADDDEB7FE007DD57E3AF375A9C4D8D73546BF4F1FED1E18D35



Distinguished name	Certificate Serial Number	SHA-256 Fingerprint
CN = QuoVadis Root CA 3 G3 O = QuoVadis Limited C = BM	2ef59b0228a7db7 affd5a3a9eebd03a Ocf126a1d	88EF81DE202EB018452E43F864725CEA5FBD1FC2D9D205730709C5D8B8690F46
CN = QuoVadis Client RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	7B9B8E6F11C9E1 3DB7CB9BEB3920 B4CA3566F648	80AC91FA891C79723A61ABC77F86E19905A92DA27E51695CA0C0B66C1C039BF2
CN = QuoVadis Client ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	1561345225C6DE 0A833890C40560 CC7A0F9E02AA	D3C07AC44BD8FF1975BC62F1C7E9840EA8E188A4BA51133B8C4EFF05E34A2729
CN = QuoVadis Signing ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	35DCEAA8F16E77 A5DDFC16AD369 C34BD1545CE29	771535D43D4633BD307EB7B8A3966B5DF00707C088089920080C1AE6D3CB0F68
CN = QuoVadis Signing RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	0F1D1740690044 943BAD6B5EB487 045759B0808D	9F8E6DB31E740285E0C2C2DEB09E442BDD4E74BDEEAE2962BC82D1ECB9F39855



Distinguished name	Certificate Serial Number	SHA-256 Fingerprint
CN = QuoVadis SMIME ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	2B2DDF3DBDF6F6 9CF09144F78312 E20088142B59	83FDDB2FD9DAE3B21EEBD33CF46251D746F0D6102B683150DD7B98AD8E4BB9F8
CN = QuoVadis SMIME RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	00F366A0ACE5F4 28CFF0F61EC3B6 369AD268AE9E	5232A304AA4A10CFE6C47842EA3381CB31D619E24F58126D534CD50C5CE7845D
CN = QuoVadis TLS ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	691B041F159F6E 1C24D241C3E6E4 42FFC122899D	6E1FD3AE0D2D477C8F5EE5F335CC5B6356872654E5356A73D8C0A30A17C252A2
CN = QuoVadis TLS RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	025FE5839FB3AA BDC3721EED699E 7649FF6634FE	C8A2D38A24F5AC302D8A08EBD38923D9A750B49220F092E82D1C53249E1533D0



Distinguished name	Certificate Serial Number	SHA-256 Fingerprint
CN = HydrantID EV SSL CA G2 O = HydrantID (Avalanche Cloud Corporation) C = US	3c1e96137ee420 57973ce498cb50 daae4c1e3c48	60388B773D33E9141648613F36B9149F015A114378BACF3E3694864FFDA426EC
CN = HydrantID SSL CA G3 O = HydrantID (Avalanche Cloud Corporation) C = US	723b6fe5c252754 d2189b09155521 a3187916db8	AA57F482CBC516B4D10CA4097DD90D99F5AA727D207090D07DA9C36998ABB9AD
CN = QuoVadis Grid ICA G2 O = QuoVadis Limited C = BM	2bafc5f0a8d2134 09da42e761f619a c91984bcd4	278ECF211E2518E9DD9913AFC583EEB3127C8184BCBEEDAAD7BD64E89E8C4310
CN = QuoVadis Qualified Web ICA G2 O = QuoVadis Trustlink B.V. C = NL	53bd8dc20d4a46b d962f5d685ada0f 0659207ffd	7FEB9374EAB08D392717C647436DAE06176A24C010607FDA1CCE5E5F0106B472
CN = QuoVadis Global SSL ICA G2 O = QuoVadis Limited C = BM	1a6ee893c37497 38e12accc77a8c0 acb167eaf14	F67C23EF7BF7412809DB6B1DD3D44A08D3754D99CABA6A13F7A05C7249089C89



Distinguished name	Certificate Serial Number	SHA-256 Fingerprint
CN = VR IDENT EV SSL CA 2020 O = Fiducia & GAD IT AG C = DE	754151cc11ec89b 64649b230ad809 020bb1e66a5	D33A847F640377BE0AE1A429153A07E87C8827FA4840B5158BCDCB85E10A453A
CN = QuoVadis RCA1G3 TLS CA O = QuoVadis Limited C = BM	72348f4fb5967e8 409e6b0cced6fa2 99b1ccd491	18BB70EFDA3F91438115C9EB4F333EB4EC68354571E6949195A0A91C9E6FBCD8
CN = DigiCert QV EV TLS ICA G1 O = DigiCert, Inc. C = US	65e9bcd53e791df 22dffeb5ecc2bc7a 5588d0883	6A7B2AA3414039A663D5D8BBAB8256A3979A84C332BF5E1EE8F6D0E0ADA84668
CN = QuoVadis RCA3G3 TLS CA O = QuoVadis Limited C = BM	18dae051a89771 5eb0899ddcfb33b 1cf0810eec0	ECCOD17AC3263AC6A164DCDB08F82D07E93FCEA723F66B88B06EEBA9678DF2BB
CN = QuoVadis Europe SSL CA G2 O = QuoVadis Trustlink B.V. C = NL	71aaaa62848411 4c591fd74b9fe9ff de5b29fa7e	B1AAE1BCD555E8A3D1E3DDA8EC84E757C552655344CE3FEEBBAF98E895DBEDAC



Distinguished name	Certificate Serial Number	SHA-256 Fingerprint
CN = QuoVadis RCA3G1 TLS CA O = QuoVadis Limited C = BM	2b07c16415396d 53cd05f7a542cca 4867e05c68d	3A66E648212E6321F94D9EABCC92C052E679D992C99AD4596A4E7B85ADCEE5DE
CN = QuoVadis Qualified Web ICA G3 O = QuoVadis Trustlink B.V. C = NL	2ca8cdc5b8ed750 780c72e3392c99 41c0ffb8826	3F225BDBCD788CE924870CAF92F814B7C6FF4EDABABAD93F1D3A9177252CF1D1
CN = DigiCert QV TLS ICA G1 O = DigiCert, Inc. C = US	71520e460e54aef 322e39fac16c0e9 7a51bd9572	93E33AF7DA3030530D090C9C55762CADE7EAE943F834349D1057A90EB67F306B
CN = QuoVadis Enterprise Trust CA 3 G3 O = QuoVadis Limited C = BM	0c2163a44924ffb 7fcdb675acdcaee7 208cca95a	DA5462526A0C2E9852A86186B025390158759CDCA6AE21F09F713CA6ACCDD1F1
CN = QuoVadis Enterprise Trust CA 1 G3 O = QuoVadis Limited C = BM	0ad86fa335b93ef 48c8e3bf77d4c63 143643adb9	0531C86F785958939FDC539924D395D1EFA409364E6827D3AB9876311FFB27B0



Distinguished name	Certificate Serial Number	SHA-256 Fingerprint
CN = QuoVadis Europe EV SSL CA G1 O = QuoVadis Trustlink B.V. C = NL	3a020322b6816c 18b72acbb592bef 74dd786a8b8	CB6666B32BFF2EFEDCC4187DF149A6D34A5D10B7165B9CFF2A67C0E311AEEED7
CN = VR IDENT SSL CA 2020 O = Fiducia & GAD IT AG C = DE	035fe137cd0551e 4c1f1b00beba5ae e53f952734	347D18DCCC2EFC51A920E7A7FBB07BFBDA35613681F82DCA5C4C72BB0C83C035
CN = QuoVadis Enterprise Trust CA 2 G4 O = QuoVadis Trustlink B.V. C = NL	41d2651bf57daee c594226cf55639c 4c3285c24c	1E356823FE40C0EAAC29F9ED5463B7B2DB1C088B63EBB05876A2E631C1087798
CN = HydrantID SSL ICA G2 O = HydrantID (Avalanche Cloud Corporation) C = US	7517167783d043 7eb556c357946e 4563b8ebd3ac	9C6D08933201407FBF2B12540B67CC0E4C9666F132E1504762A717CBAE8F3FD6
CN = QuoVadis Enterprise Trust CA 2 G3 O = QuoVadis Limited C = BM	31a84f278bbe4a6 96e4cb2f415a2e4 473bdcca38	B6F6559BBCE0A2CC91E507B5D7319E32487EDAE28A063BC73B6405E6C44665B6



Distinguished name	Certificate Serial Number	SHA-256 Fingerprint
CN = HydrantID SSL ICA G2 O = QuoVadis Limited C = BM	04E6881CFF6CD6 5D5D554D183920 9CCEFAD7C78D	01453F645CD91E233B7484827F23F8A573FD641029EA8A6BFE549EF4ED8B323D
CN = QuoVadis Global SSL ICA G3 O = QuoVadis Limited C = BM	653247814F5FA6 6BB854DAF053F3 29265D726538	161EE5386329B28A27FF405736552A621D5A844A43811E3623E52EEFA0BA840A
CN=QuoVadis Global SSL ICA G2 O=QuoVadis Limited C=BM	510E47EC6C66D3 3CFFDEC552FD88 40978C9C273E	E5CD0DD44E1120C79415C84F5369D79AE04F047E80DC0856351AABC232056CA5
CN = DigiCert QuoVadis G4 TLS ECC P384 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	28FFC96C6E6F85 56A5801177DE3A 6726159E3428	OCAB7DBD736B1BFBE8E63ABE2DD55D64A0805140386DA05FC6E28D4FCF81B9B6
CN = DigiCert QuoVadis G3 Qualified TLS RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRNL-30237459 O = QuoVadis Trustlink B.V. C = NL	43B3D54808E820 8F6E58CB1143F3 F802E372E83F	FE3CBED838D30BAB900184C1F21A4B27D3211CB5C9257D7E985C2AE43AC6A89F



Distinguished name	Certificate Serial Number	SHA-256 Fingerprint
CN = DigiCert QuoVadis G4 TLS RSA4096 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	5AE901EF548634 E2E0BB77578818 D805EE65A237	3E8FC16AADA8FCB6F51CA4848BB15F8ABE8DD807F9CEAA4C6CCBE9864F6CE9DE
CN = DigiCert QuoVadis G4 TLS ECC P384 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	19f5eeae6109c54 f5f957cac8fb787c 7809335c2	35A5B2730439D225E04080412EC01031F22F3902B84670E7B44F699F9701F050
CN = QuoVadis Private TLS ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	1f1acc18f4b3f230 3af4053a88af89f 413c598df	B421FEE95C6D9F034E89CF51E92F4A54EB9ECC15757008179F9EF0A417B76317
CN = QuoVadis Private TLS RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	1ca30d76a478fe3 d12e2024e11cf06 fa83b64775	A20FE0B76EED3D700661E24EE8619C08BF989716A50CE911C2CEA354A9CFBF8B