



## **Certificate Authority lista de confianza**

### **Teléfono de escritorio Cisco serie 9800 y teléfono de video Cisco 8875**

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Las entidades emisoras de certificados del teléfono dependen del sistema de llamadas en el que está registrado el teléfono y de la versión de firmware del teléfono.

Este archivo es para PhoneOS Release 3.3.1 e incluye dos listas:

- Lista de confianza para teléfonos locales en Cisco Unified Communications Manager (consulte la página 2-14)
- Lista de confianza para teléfonos multiplataforma en Cisco BroadWorks o en una plataforma Open SIP de terceros (consulte las páginas 14-27)

## Lista de confianza de CA para Cisco Unified Communications Manager

| Huellas   | Asunto   |
|---|--|
| 554153b13d2cf9ddb753bfbe1a4e0ae08d0aa4187058fe60a2b862b2e4b87bcb  | CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS, 2.5.4.97=VATES-Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES  |
| 136335439334a7698016a0d324de72284e079d7b5220bb8fbd747816eebebac   | CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,2.5.4.5=A82743287,L=Madrid (ver dirección actual en <a href="http://www.camerfirma.com/address">www.camerfirma.com/address</a> ),C=EU |
| 6e0bff069a26994c15de2c4888cc54af84882e5495b7fbf66be9ccffec7489f6  | CN=Autoridade Certificadora Raiz Brasileira v10,OU=Instituto Nacional de Tecnologia da Informacao - ITI, O=ICP-Brasil,C=BR   |
| edf7ebbc27a2a384d387b7d4010c666e2edb4843e4c29b4ae1d5b9332e6b24d   | CN=Buypass Class 3 Root CA, O=Buypass AS-983163327,C=NO  |
| 5a2fc03f0c83b090bbfa40604b0988446c7636183df9846e17101a447fb8efd6  | CN=Hongkong Post Root CA 3,O=Hongkong Post, L=Hong Kong, ST=Hong Kong, C=HK  |
| e793c9b02fd8aa13e21c31228accb08119643b749c898964b1746d46c3d4cbd2  | CN=USERTrust RSA Certification Authority, O=The USERTRUST Network, L=Jersey City, ST=New Jersey, C=US  |
| 416b1f9e84e74c1d19b23d8d7191c6ad81246e641601f599132729f507beb3cc  | CN=GLOBALTRUST 2015,OU=GLOBALTRUST Certification Service, O=e-commerce monitoring GmbH, L=Wien,ST=Wien,C=AT  |
| A040929A02Ce53B4ACF4F2FFC6981CE4496F755E6D45FE0B2A692BCD52523F36  | CN = Instituciones académicas y de investigación helénicas RootCA 2015, O = Autoridad certificada de instituciones académicas y de investigación helénicas, L = Atenas, C = GR               |
| 8d25cd97229dbf70356bda4eb3cc734031e24cf00fafcd32dc76eb5841c7ea8   | CN=GTS Root R2,O=Google Trust Services LLC, C=US   |
| f4336bc2ac75950becf1c1f2f9da6dddafd1f41161ca71f59c76889bd474033   | CN=ANCERT Certificados CGN V2,O=Agencia Notarial de Certificacion S.L.U. - CIF B83395988,C=ES  |
| 4ff460d54b9c86dabfbcfc5712e0400d2bed3fbc4d4fbd4aa86e06adcd2a9ad7a | CN=USERTrust ECC Certification Authority, O=The USERTRUST Network, L=Jersey City, ST=New Jersey, C=US  |
| 647987d98d52645da4d3de3b80771a0ce02b9b9285e6e86999882170744ec9aa  | CN=Entrust 4K EV TLS Root CA - 2022,O=Entrust, Inc.,C=US   |
| 8faf7d2e2cb4709bb8e0b33666bf75a5dd45b5de480f8ea8d4bfe6bebc17f2ed  | CN=SSL.com TLS RSA Root CA 2022,O=SSL Corporation, C=US  |
| 5c58468d55f58e497e743982d2b50010b6d165374acf83a7d4a32db768c4408e  | CN=Certum Trusted Network CA, OU=Certum Certification Authority, O=Unizeto Technologies S.A.,C=PL  |

| Huellas  | Asunto  |
|--|---|
| f356bea244b7a91eb35d53ca9ad7864ace018e2d35d5f8f96ddf68a6f41aa474 | C=DE,O=Atos,CN=Atos TrustedRoot 2011  |
| d3ed3fc40ad26b52e001e1e18f4b9449529deb75a81d5eb680d7b62db23ba96d | CN=DVV Gov. Root CA - G3 RSA, OU=Varmennepalvelut,OU=Servicios de la Autoridad de Certificación, O=Digi- ja vaestotietovirasto CA, C=FI   |
| 34bb34e14faed0d3392f2fc441c0ecd5fd88ad88118df2d1ba76cdec1eea10b8 | OU = CA raíz nacional saudita, O = Centro Nacional de Certificación Digital, C = SA   |
| bfd88fe1101c41ae3e801bf8be56350ee9bad1a6b9bd515edc5c6d5b8711ac44 | CN=TWCA Root Certification Authority, OU=Root CA, O=TAIWAN-CA,C=TW  |
| 15d5b8774619ea7d54ce1ca6d0b0c403e037a917f131e8a04e1e6b7a71babce5 | CN=GTS Root R3,O=Google Trust Services LLC, C=US  |
| 44b545aa8a25e65a73ca15dc27fc36d24c1cb9953a066539b11582dc487b4833 | CN = Instituciones académicas y de investigación helénicas ECC RootCA 2015, O = Autoridad certificada de instituciones académicas y de investigación helénicas, L = Atenas, C = GR  |
| db3517d1f6732a2d5ab97c533ec70779ee3270a62fb4ac4238372460e6f01e88 | CN=Entrust Root Certification Authority - G4,OU=(c) 2015 Entrust\, Inc. - solo para uso autorizado, OU=See www.entrust.net/legal-terms,O=Entrust\, Inc.,C=US  |
| c0a6f4dc63a24bfdcf54ef2a6a082a0a72de35803e2ff5ff527ae5d87206dfd5 | OU=ePKI Root Certification Authority, O=Chunghwa Telecom Co., Ltd.,C=TW   |
| efc65cadbb59adb6efe84da22311b35624b71b3b1ea0da8b6655174ec8978646 | CN=Telekom Security TLS RSA Root 2023,O=Deutsche Telekom Security GmbH, C=DE  |
| 88497f01602f3154246ae28c4d5aef10f1d87eb76626f4ae0b7f95ba7968799  | CN=EC-ACC,OU=Jerarquia Entitats de Certificacio Catalanes, OU=Vegeu <a href="https://www.catcert.net/verarrel">https://www.catcert.net/verarrel</a> (c)03,OU=Serveis Publics de Certificacio, O=Agencia Catalana de Certificacio (NIF Q-0801176-I),C=ES |
| 568d6905a2c88708a4b3025190edcfedb1974a606a13c6e5290fcb2ae63edab5 | CN=Starfield Services Root Certificate Authority - G2,O=Starfield Technologies\, Inc.,L=Scottsdale,ST=Arizona,C=US  |
| 85666a562ee0be5ce925c1d8890a6f76a87ec16d4d7d5f29ea7419cf20123b69 | CN=SSL.com Root Certification Authority RSA, O=SSL Corporation, L=Houston,ST=Texas,C=US   |
| cbb522d7b7f127ad6a0113865bdf1cd4102e7d0759af635a7cf4720dc963c53b | CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3   |
| 2e7bf16cc22485a7bbe2aa8696750761b0ae39be3b2fe9d0cc6d4ef73491425c | CN=SSL.com EV Root Certification Authority RSA R2,O=SSL Corporation, L=Houston,ST=Texas,C=US  |
| 179fbc148a3dd00fd24ea13458cc43bfa7f59c8182d783a513f6ebec100c8924 | CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5   |
| 24a55c2ab051442d0617766541239a4ad032d7c55175aa34ffde2fbc4f5c5294 | CN=Comunicación de seguridad RootCA3,O=SECOM Trust Systems CO.,LTD.,C=JP  |
| 1a0d20445de5ba1862d19ef880858cbce50102b36e8f0a040c3c69e74522fe6e | CN=COMODO Certification Authority, O=COMODO CA Limited, L=Salford,ST=Greater Manchester, C=GB   |

| Huellas  | Asunto  |
|--|---|
| 22a2c1f7bde704cc1e701b5f408c310880fe956b5de2a4a44f99c873a25a7c8  | CN=SSL.com EV Root Certification Authority ECC, O=SSL Corporation, L=Houston,ST=Texas,C=US  |
| 96BCEC06264976f37460779acf28c5a7cfe8a3c0aae11a8ffcee05c0bddf08c6 | CN=ISRG Root X1,O=Internet Security Research Group, C=US  |
| 45140b3247eb9cc8c5b4f0d7b53091f73292089e6e5a63e2749dd3aca9198eda | CN=Go Daddy Root Certificate Authority - G2,O=GoDaddy.com\, Inc.,L=Scottsdale,ST=Arizona,C=US   |
| fad540811afae0dc767cdf6572a088fa3ce8493dd82b3b869a67d10aab4e8124 | CN=SI-TRUST Root, 2.5.4.97=VATSI-17659957,O=Republika Slovenija, C=SI   |
| 08170d1aa36453901a2f959245e347db0c8d37abaabc56b81aa100dc958970db | CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH, C=DE   |
| 0c2cd63df7806fa399ede809116b575bf87989f06518f9808c860503178baf66 | CN=COMODO Certification Authority, O=COMODO CA Limited, L=Salford,ST=Greater Manchester, C=GB   |
| bd71fdf6da97e4cf62d1647add2581b07d79adf8397eb4ecba9c5e8488821423 | CN=AffirmTrust Premium ECC, O=AffirmTrust,C=US  |
| beb00b30839b9bc32c32e4447905950641f26421b15ed089198b518ae2ea1b99 | CN=e-Szigno Root CA 2017,2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU  |
| ebd41040e4bb3ec742c9e381d31ef2a41a48b6685c96e7cef3c1df6cd4331c99 | CN=GlobalSign Root CA, OU=Root CA, O=GlobalSign nv-sa,C=BE  |
| 5546a52504fba74f61ffd4890067529ade3b9c9d07e502592831ccda9b369fd3 | CN=DVV Gov. Root CA - G3 ECC, OU=Varmennepalvelut,OU=Servicios de la Autoridad de Certificación, O=Digi- ja vaestotietovirasto CA, C=FI   |
| d649c40830aab9869f2536ff933c4050746659b31dfa735405e4f7ad447c20d5 | CN=Raíz de Cisco Basic Assurance CA 2099,O=Cisco  |
| 2a8da2f8d23e0cd3b5871ecfb0f42276ca73230667f474eede71c5ee32cc3ec6 | CN=Autoridad Nacional de Certificación Raíz de Tailandia - G1,OU=Autoridad Nacional de Certificación Raíz de Tailandia, O=Agencia de Desarrollo de Transacciones Electrónicas (Organización Pública),C=TH |
| 358df39d764af9e1b766e9c972df352ee15cfac227af6ad1d70e8e4a6edcba02 | CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation, C=US  |
| 65353833cf234c79562164f90849c0d104dbabf8ee41064d83e8cbe03ba1c5a5 | CN=Netrust Root CA 2,OU=Netrust Certificate Authority, O=Netrust Pte Ltd, C=SG  |
| 31ad6648f8104138c738f39ea4320133393e3a18cc02296ef97c2ac9ef6731d0 | CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc, C=US   |
| 3e9099b5015e8f486c00bcea9d111ee721faba355a89bcf1df69561e3dc6325c | CN=DigiCert Assured ID Root CA, OU=www.digicert.com,O=DigiCert Inc, C=US  |
| 0da80cc491638f8c756396e0afac16079829fa06697bfe6d7ee93a6a0c9e212d | CN=IT Private Root CA, O=Cisco,OU=Phoenix   |
| 2530cc8e98321502bad96f9b1fba1b099e2d299e0f4548bb914f363bc0d4531f | CN=Izenpe.com,O=IZENPE S.A.,C=ES  |
| 3a6308acd77a5a33d8da04d669fa00f8e5ae153f259087678b76bf1654b30a06 | CN=CA raíz de Cisco ECC, O=Cisco  |
| 2ffb7f813bbb3c89ab4e8162d0f16d71509a830cc9d73c262e5140875d1ad4a  | CN=CommScope Public Trust ECC Root-02,O=CommScope,C=US  |
| f1b52392c4a4ec2a8709b1308304a911ffcec2ce0b63a94fbe969164567c4925 | CN=CA raíz de licencias de Cisco, O=Cisco   |

| Huellas   | Asunto   |
|---|--|
| 71cca5391f9e794b04802530b363e121da8a3043bb26662fea4dca7fc951a4bd  | CN=GTS Root R4,O=Google Trust Services LLC, C=US   |
| f3896f88fe7c0a882766a7fa6ad2749fb57a7f3e98fb769c1fa7b09c2c44d5ae  | CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY, C=CN  |
| 4200f5043ac8590ebb527d209ed1503029fbcdb41ca1b506ec27f15ade7dac69  | CN=Secure Global CA, O=SecureTrust Corporation, C=US   |
| 3f63bb2814be174ec8b6439cf08d6d56f0b7c405883a5648a334424d6b3ec558  | CN=TWCA CYBER Root CA, OU=Root CA, O=TAIWAN-CA,C=TW  |
| bef256daf26e9c69bdec1602359798f3caf71821a03e018257c53c65617f3d4a  | CN=FIRMAPROFESIONAL CA ROOT-A WEB, 2.5.4.97=VATES-A62634068,O=Firmaprofesional SA, C=ES  |
| e74fbda55bd564c473a36b441aa799c8a68e077440e8288b9fa1e50e4bbaca11  | CN=Comunicación de seguridad ECC RootCA1,O=SECOM Trust Systems CO.,LTD.,C=JP   |
| d7a7a0fb5d7e2731d771e9484ebcdef71d5f0c3e0a2948782bc83ee0ea699ef4  | CN=AAA Certificate Services, O=Comodo CA Limited, L=Salford,ST=Greater Manchester, C=GB  |
| 242b69742fcb1e5b2abf98898b94572187544e5b4d9911786573621f6a74b82c  | CN=Telia Root CA v2,O=Telia Finland Oyj, C=FI  |
| AD016F958050E0E7E46FAE7DCC50197ED8E3FF0A4B262E5DDCDB3EDDDC7D6578  | CN=PostSignum Root QCA 2,O=Česká pošta\, s.p. [IČ 47114983],C=CZ   |
| be4b56cb5056c0136a526df444508daa36a0b54f42e4ac38f72af470e479654c  | CN=TrustAsia Global Root CA G4,O=TrustAsia Technologies\, Inc.,C=CN  |
| 6b328085625318aa50d173c98d8bda09d57e27413d114cf787a0f5d06c030cf6  | CN=Certum EC-384 CA, OU=Certum Certification Authority, O=Asseco Data Systems S.A.,C=PL  |
| 7d05ebb682339f8c9451ee094eebfefa7953a114edb2f44949452fab7d2fc185  | CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc, C=US  |
| 07cd9aa9064a9b94c6aef8fb784c1bbc1beda08acbe86878d781a39167626cf8  | CN=Visa Public RSA Root CA, OU=Visa International Service Association, O=VISA,C=US   |
| 30fbba2c32238e2a98547af97931e550428b9b3f1c8eeb6633dcfa86c5b27dd3  | CN=vTrus ECC Root CA, O=iTrusChina Co.,Ltd.,C=CN   |
| bc104f15a48be709dca542a7e1d4b9df6f054527e802eaa92d595444258afe71  | CN=Hellenic Academic and Research Institutions RootCA 2011,O=Hellenic Academic and Research Institutions Cert. Authority, C=GR                               |
| ef66b0b10a3cdeb9f2e3648c76bd2af18ead2bfe6f117655e28c4060da1a3f4c2 | CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center, O=E-Tugra EBG A.S.,L=Ankara,C=TR   |
| 2a575471e31340bc21581cbd2cf13e158463203e94bcf9d3cc196bf09a5472    | CN=GTS Root R1,O=Google Trust Services LLC, C=US   |
| 018e13f0772532cf809bd1b17281867283fc48c6e13be9c69812854a490c1b05  | CN=DigiCert TLS ECC P384 raíz G5,O=DigiCert\, Inc.,C=US  |
| 6dc47172e01cbcb0bf62580d895fe2b8ac9ad4f873801e0c10b9c837d21eb177  | CN=Entrust.net Autoridad de Certificación (2048),OU=(c) 1999 Entrust.net Limited, OU=www.entrust.net/CPS_2048 incorp. por ref. (límites liab.),O=Entrust.net |

| Huellas  | Asunto   |
|--|--|
| 2ce1cb0bf9d2f9e102993fbe215152c3b2dd0cabde1c68e5319b839154dbb7f5 | CN=Starfield Root Certificate Authority - G2,O=Starfield Technologies\, Inc.,L=Scottsdale,ST=Arizona,C=US                      |
| 407c276bead2e4af0661ef6697341dec0a1f9434e4eafb2d3d32a90549d9de4a | CN=GPKIRootCA1,OU=GPKI,O=Gobierno de Corea, C=KR   |
| cd85167b3935e27bcc3b0f5fa24c8457882d0bb994f88269a7f72829d957eae9 | CN=CA raíz de Cisco M2,O=Cisco   |
| d48d3d23eedb50a459e55197601c27774b9d7b18c94d5a059511a10250b93168 | CN=Certigna Root CA, OU=0002 48146308100036,O=Dhimyotis,C=FR   |
| 8f9adb6d895dab5adf5c3d3fab83927be0fb64ef82485c62280d584e8bd55d22 | CN=Autoridad Raíz del Gobierno Sueco v3,O=Agencia Sueca de Seguridad Social, C=SE  |
| bfff8fd04433487d6a8aa60c1a29767a9fc2bbb05e420f713a13b992891d3893 | CN=GDCA TrustAUTH R5 RAÍZ, O=GUANG DONG CERTIFICATE AUTHORITY CO.\,LTD.,C=CN   |
| c32ffd9f46f936d16c3673990959434b9ad60aafbb9e7cf33654f144cc1ba143 | CN=SSL.com TLS ECC Root CA 2022,O=SSL Corporation, C=US  |
| 88ef81de202eb018452e43f864725cea5fbd1fc2d9d205730709c5d8b8690f46 | CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited, C=BM  |
| b085d70b964f191a73e4af0d54ae7a0e07aafdaf9b71dd0862138ab7325a24a2 | CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4  |
| 7a38f708a35a31e42e1cf3220f9a2d273e7666354618b2464657d43d8e77adc2 | CN=A-Trust-Root-09,OU=A-Trust-Root-09,O=A-Trust GmbH, C=AT   |
| 8560f91c3624daba9570b5fea0dbe36ff11a8323be9486854fb3f34a5571198d | CN=OISTE WISEKey Global Root GC CA, OU=OISTE Foundation Endorsed, O=WISEKey,C=CH   |
| 9a6ec012e1a7da9dbe34194d478ad7c0db1822fb071df12981496ed104384113 | C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1  |
| b4585f22e4ac756a4e8612a1361c5d9d031a93fd84febb778fa3068b0fc42dc2 | CN=Ciertamente raíz E1,O=Ciertamente,C=US  |
| C2157309d9aee17bf34f4d5e88dbaeba57e0361eb814cbc239f4d54d329a38d  | CN=Főtanúsítványkiadó - Kormányzati Hitelesítés Szolgáltató, O=NISZ Nemzeti Infokommunikációs Szolgáltató Zrt.,L=Budapest,C=HU |
| 86a1ecba089c4a8d3bbe2734c612ba341d813e043cf9e8a862cd5c57a36bbe6b | CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited, OU=emSign PKI, C=IN   |
| 1793927a0614549789adce2f8f34f7f0b66d0f3ae3a3b84d21ec15dbba4fadc7 | CN=COMODO ECC Certification Authority, O=COMODO CA Limited, L=Salford,ST=Greater Manchester, C=GB                              |
| c34c5df53080078ffe45b21a7f600469917204f4f0293f1d7209393e5265c04f | CN=CCA India 2015 SPL, O=India PKI, C=IN   |
| a3cc68595dfe7e86d8ad1772a8b5284add54ace3b8a798df47bccafb1fdb84df | CN=Hotspot 2.0 Trust Root CA - 03,O=WFA Hotspot 2.0,C=US   |
| 1465fa205397b876faa6f0a9958e5590e40fcc7faa4fb7c2c8677521fb5fb658 | OU=Starfield Class 2 Certification Authority, O=Starfield Technologies\, Inc.,C=US   |
| 85a0dd7dd720adb7ff05f83d542b209dc7ff4528f7d677b18389fea5e5c49e86 | CN=QuoVadis Root CA 2,O=QuoVadis Limited, C=BM   |

| Huellas  | Asunto  |
|--|---|
| 847df6a78497943f27fc72eb93f9a637320a02b561d0a91b09e87a7807ed7c61 | CN=Microsoft Root Certificate Authority 2011,O=Microsoft Corporation,L=Redmond,ST=Washington,C=US   |
| 5e3571f33f45a7df1537a68b5ffb9e036af9d2f5bc4c9717130dc43d7175aac7 | 1.2.840.113549.1.9.1=info@globaltrust.info,CN=GLOBALTRUST,OU=GLOBALTRUST Certification Service, O=ARGE DATEN - Sociedad Austriaca de Protección de Datos, ST=Austria,L=Viena,C=AT   |
| ebc5570c29018c4d67b1aa127baf12f703b4611ebc17b7dab5573894179b93fa | OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES   |
| f015ce3cc239bfef064be9f1d2c417e1a0264a0a94be1f0c8d121864eb6949cc | CN=HiPKI Root CA - G1,O=Chunghwa Telecom Co., Ltd.,C=TW   |
| 57de0583efd2b26e0361da99da9df4648def7ee8441c3b728afa9bcde0f9b26a | CN=Autoridad de Certificación Firmaprofesional CIF A62634068,C=ES   |
| 9a114025197c5bb95d94e63d55cd43790847b646b23cdf11ada4a00eff15fb48 | CN=Buypass Class 2 Root CA, O=Buypass AS-983163327,C=NO   |
| 657cfe2fa73faa38462571f332a2363a46fce7020951710702cdfbb6eeda3305 | OU=certSIGN ROOT CA G2,O=CERTSIGN SA, C=RO  |
| 513b2cecb810d4cde5dd85391adfc6c2dd60d87bb736d2b521484aa47a0ebef6 | OU=Comunicación de seguridad RootCA2,O=SECOM Trust Systems CO.,LTD.,C=JP  |
| 9bea11c976fe014764c1be56a6f914b5a560317abd9988393382e5161aa0493c | CN=UCA Global G2 Root, O=UniTrust,C=CN  |
| e0d3226aeb1163c2e48ff9be3b50b4c6431be7bb1eacc5c36b5d5ec509039a08 | CN=TrustAsia Global Root CA G3,O=TrustAsia Technologies\, Inc.,C=CN   |
| f1c1b50ae5a20dd8030ec9f6bc24823dd367b5255759b4e71b61fce9f7375d73 | CN=SecureTrust CA, O=SecureTrust Corporation, C=US  |
| eb7e05aa58e7bd328a282bf8867033f3c035342b516ee85c01673dffffbbfe58 | CN=NetLock Platina (Clase Platino) Főtanúsítvány,OU=Tanúsítványkiadók (Servicios de Certificación),O=NetLock Kft.,L=Budapest,C=HU   |
| 34d8a73ee208d9bcdb0d956520934b4e40e69482596e8b6f73c8426b010a6f48 | CN=GTS Root R3,O=Google Trust Services LLC, C=US  |
| cbb9c44d84b8043e1050ea31a69f514955d7bfd2e2c6b49301019ad61d9f5058 | CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE  |
| 8ecde6884f3d87b1125ba31ac3fcb13d7016de7f57cc904fe1cb97c6ae98196e | CN=Amazon Root CA 1,O=Amazon,C=US   |
| 3c4fb0b95ab8b30032f432b86f535fe172c185d0fd39865837cf36187fa6f428 | CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden, C=NL   |
| aaa962c4fa4a6bafbe415196d351ccd888d4f53f3fa8ae6d7c466a94e6042bb  | OU=certSIGN ROOT CA, O=certSIGN,C=RO  |
| 349dfa058c5e263123b398ae795573c4e1313c83fe68f93556cd5e8031b3c7d  | CN=GTS Root R4,O=Google Trust Services LLC, C=US  |
| 04f1bec36951bc1454a904ce32890c5da3cde1356b7900f6e62dfa2041ebad51 | CN=RAÍZ DE CÁMARAS DE COMERCIO - 2016,O=AC CAMERFIRMA S.A.,2.5.4.97=VATES-A82743287,2.5.4.5=A82743287,OU=RAÍZ DE CÁMARAS DE COMERCIO - 2016,OU=ver dirección actual en www.camerfirma.com/address,L=MADRID,ST=MADRID,C=ES |
| 7bb647a62aeac88bf257aa522d01ffea395e0ab45c73f93f65654ec38f25a06  | CN=Sectigo Public Server Authentication Root R46,O=Sectigo Limited, C=GB  |
| 77b82cd8644c4305f7acc5cb156b45675004033d51c60c6202a8e0c33467d3a0 | CN=Ciertamente raíz R1,O=Ciertamente,C=US   |

| Huellas  | Asunto  |
|--|---|
| d95d0e8eda79525bf9beb11b14d2100d3294985f0c62d9fabd9cd999eccb7b1d | CN=HARICA TLS RSA Raíz CA 2021,O=Instituciones Académicas y de Investigación Helénicas CA, C=GR   |
| 371a00dc0533b3721a7eeb40e8419e70799d2b0a0f2c1d80693165f7cec4ad75 | CN=DigiCert TLS RSA4096 Root G5,O=DigiCert\, Inc.,C=US  |
| 41dfd9c52d71f6a2c7f1083aa8f80153ff6ec23349d2599de347adbe423504f3 | CN=CA raíz interna del cliente, O=Cisco,OU=Arcturus   |
| ffe943d793424b4f7c440c1c3d648d5363f34b82dc87aa7a9f118fc5dee101f1 | CN=CommScope Public Trust RSA Root-02,O=CommScope,C=US  |
| 3f034bb5704d44b2d08545a02057de93ebf3905fce721acbc730c06ddaee904e | CN=SecureSign Root CA12,O=Cybertrust Japan Co.\, Ltd.,C=JP  |
| 9a296a5182d1d451a2e37f439b74daafa267523329f90f9a0d2007c334e23c9a | CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH, C=AT  |
| 11437cda7bb45e41365f45b39a38986b0de00def348e0c7bb0873633800bc38b | CN=CommScope Public Trust ECC Root-01,O=CommScope,C=US  |
| 125609aa301da0a249b97a8239cb6a34216f44dcac9f3954b14292f2e8c8608f | CN=emSign Root CA - C1,O=eMudhra Inc, OU=emSign PKI, C=US   |
| e6be68ce06fe0da0c140f1aeb00b67b636c5eea9422088929362375ce086db39 | CN=Visa Public ECC Root CA, OU=Visa International Service Association, O=VISA,C=US  |
| 68ad50909b04363c605ef13581a939ff2c96372e3f12325b0a6861e1d59f6603 | CN=Verizon Global Root CA, OU=OmniRoot,O=Verizon Business, C=US   |
| c1d80ce474a51128b77e794a98aa2d62a0225da3f419e5c7ed73dfbf660e7109 | CN=RAÍZ GLOBAL CHAMBERSIGN - 2016,O=AC CAMERFIRMA S.A..2.5.4.97=VATES-A82743287,2.5.4.5=A82743287,OU=GLOBAL CHAMBERSIGN ROOT - 2016,OU=ver dirección actual en www.camerfirma.com/address,L=MADRID,ST=MADRID,C=ES |
| 3f99cc474acfce4dfed58794665e478d1547739f2e780f1bb4ca9b133097d401 | CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA, C=GR   |
| 8fe4fb0af93a4d0d67db0bebb23e37c71bf325dcbcd240ea04daf58b47e1840  | CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited, C=BM   |
| 8a866fd1b276b57e578e921c65828a2bed58e9f2f288054134b7f1f4bfc9cc74 | CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited, C=BM   |
| 7e37cb8b4c47090cab36551ba6f45db840680fba166a952db100717f43053fc2 | CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc, C=US   |
| fe7696573855773e37a95e7ad4d9cc96c30157c15d31765ba9b15704e1ae78fd | CN=Certum Trusted Root CA, OU=Certum Certification Authority, O=Asseco Data Systems S.A.,C=PL   |
| 3417bb06cc6007da1b961c920b8ab4ce3fad820e4aa30b9acbc4a74ebdcebc65 | CN=SSL.com Root Certification Authority ECC, O=SSL Corporation, L=Houston,ST=Texas,C=US   |
| c45d7bb08e6d67e62e4235110b564e5f78fd92ef058c840aea4e6455d7585c60 | CN=GTS Root R2,O=Google Trust Services LLC, C=US  |
| f9a17a00e5c294ba9614a715819af57f3fd48cc413453fbb8a5fc7e97964e2bc | C=CZ,2.5.4.97=NTRCZ-26439395,O=První certifikační autorita\, a.s.,CN=I.CA TLS Root CA/RSA 05/2022   |
| 2a99f5bc1174b73cbb1d620884e01c34e51ccb3978da125f0e33268883bf4158 | CN=Certinomis - Raíz CA, OU=0002 433998903,O=Certinomis,C=FR  |



| Huellas  | Asunto   |
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| e46a392204a8dca342a71c1ca9a60c9185b9a930370120c3b9c7e3856f0d8f3b | CN=DigiCert RSA4096 Root G5,O=DigiCert\, Inc.,C=US   |
| d947432abde7b7fa90fc2e6b59101b1280e0e1c7e4e40fa3c6887fff57a7f4cf | CN=GTS Root R1,O=Google Trust Services LLC, C=US   |
| 40f6af0346a99aa1cd1d555a4e9cce62c7f9634603ee406615833dc8c8d00367 | CN=emSign Root CA - G1,O=eMudhra Technologies Limited, OU=emSign PKI, C=IN                                   |
| cb3ccbb76031e5e0138f8dd39a23f9de47ffc35e43c1144cea27d46a5ab1cb5f | CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc, C=US  |
| 209e956af04df3996507c887d356230d6eb49fdbdd2d8a058ff50b8f80f690aa | CN=Australian Defence Public Root CA, OU=CAs,OU=PKI,OU=DoD,O=GOV,C=AU  |
| c57a3acbe8c06ba1988a83485bf326f2448775379849de01ca43571af357e74b | CN=Visa Information Delivery Root CA, OU=Visa International Service Association, O=VISA,C=US                 |
| 945bbc825ea554f489d1fd51a73ddf2ea624ac7019a05205225c22a78ccfa8b4 | CN=Trustwave Global ECC P256 Certification Authority, O=Trustwave Holdings\, Inc.,L=Chicago,ST=Illinois,C=US |
| 7a77c6c61eeeb9aa65c4ea410d65d895b26a81123283009db104b48de80b2479 | CN=OATI WebCARES Root CA, O=Open Access Technology International Inc, L=Minneapolis,ST=MN,C=US               |
| 3fd4be8baad2f26e1bde06c7584bb720dd1a972d111f5a4999bc44b08fb4960d | CN=Microsoft ECC TS Root Certificate Authority 2018,O=Microsoft Corporation, L=Redmond,ST=Washington,C=US    |
| 91e2f5788d5810eba7ba58737de1548a8ecacd014598bc0b143e041b17052552 | CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center, O=T-Systems Enterprise Services GmbH, C=DE        |
| 9ee289cc39971c15e94beb65142d360b5873feb970de1f9fda53ac26d10b25c6 | CN=IT Application Root CA, O=Cisco,OU=Pollux   |
| bec94911c2955676db6c0a550986d76e3ba005667c442c9762b4fbb773de228c | CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4  |
| 70a73f7f376b60074248904534b11482d5bf0e698ecc498df52577ebf2e93b9a | CN=AffirmTrust Premium, O=AffirmTrust,C=US   |
| fd73dad31c644ff1b43bef0ccdda96710b9cd9875eca7e31707af3e96d522bbd | CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center, O=T-Systems Enterprise Services GmbH, C=DE        |
| 97552015f5ddfc3c8788c006944555408894450084f100867086bc1a2bb58dc8 | CN=Trustwave Global Certification Authority, O=Trustwave Holdings\, Inc.,L=Chicago,ST=Illinois,C=US          |
| 552f7bdcf1a7af9e6ce672017f4f12abf77240c78e761ac203d1d9d20ac89988 | CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc, C=US   |
| 41c923866ab4cad6b7ad578081582e020797a6cbdf4fff78ce8396b38937d7f5 | CN=OISTE WISEKey Global Root GA CA, OU=OISTE Foundation Endorsed, OU=Copyright (c) 2005,O=WISEKey,C=CH       |
| cecddc905099d8dadfc5b1d209b737cbe2c18cfb2c10c0ff0bcf0d3286fc1aa2 | CN=XRamp Global Certification Authority, O=XRamp Security Services Inc, OU=www.xrampsecurity.com,C=US        |
| e35d28419ed02025cfa69038cd623962458da5c695fbdea3c22b0fbf25897092 | CN=Amazon Root CA 4,O=Amazon,C=US  |

| Huellas  | Asunto  |
|--|---|
| 4be8b5a1c76c6aead0611918fccf9dbd398b67fb12294758bdf994d0f9682f60 | CN=ANCERT Certificados Notariales V2,O=Agencia Notarial de Certificacion S.L.U. - CIF B83395988,C=ES        |
| e7e12793643f18bee5b8e53ab5803bb3d59d8e63d14ce6346c004b0dfa34fecc | CN=Raíz de Cisco CA 2099,O=Cisco  |
| d3d607a9ff24a19523b6da9d2c649446f8788cb96d9fd130972e120c13677730 | 2.5.4.5=NTRCZ-26439395,CN=I.CA Root CA/RSA,O=První certifikační autorita, a.s.,C=CZ                         |
| 2cabeafe37d06ca22aba7391c0033d25982952c453647349763a3ab5ad6ccf69 | CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6   |
| dd6936fe21f8f077c123a1a521c12224f72255b73e03a7260693e8a24b0fa389 | CN=TeliaSonera Root CA v1,O=TeliaSonera   |
| 4b009c1034494f9ab56bba3ba1d62731fc4d20d8955adcec10a925607261e338 | CN=SecureSign Root CA14,O=Cybertrust Japan Co., Ltd.,C=JP   |
| bc4d809b15189d78db3e1d8cf4f9726a795da1643ca5f1358e1ddb0edc0d7eb3 | CN=emSign ECC Root CA - C3,O=eMudhra Inc, OU=emSign PKI, C=US   |
| e59aaa816009c22bff5b25bad37df306f049797c1f81d85ab089e657bd8f0044 | CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH, C=DE   |
| 0a81ec5a929777f145904af38d5d509f66b5e2c58fcd531058b0e17f3f0b41b  | CN=AffirmTrust Networking, O=AffirmTrust,C=US   |
| 5cc3d78e4e1d5e45547a04e6873e64f90cf9536d1ccc2ef800f355c4c5fd70fd | CN=CFCA EV ROOT, O=China Financial Certification Authority, C=CN  |
| 69729b8e15a86efc177a57afb7171dfc64add28c2fca8cf1507e34453ccb1470 | CN=ISRG Root X2,O=Internet Security Research Group, C=US  |
| dd6c44b39401b053dbe61120748bbb0f6056007665c168e5c286750edc8df129 | CN=Entrust 4K TLS CA raíz - 2022,O=Entrust, Inc.,C=US   |
| b676f2eddae8775cd36cb0f63cd1d4603961f49e6265ba013a2f0307b6d0b804 | CN=Certum Trusted Network CA 2,OU=Certum Certification Authority, O=Unizeto Technologies S.A.,C=PL          |
| 8a71de6559336f426c26e53880d00d88a18da4c6a91f0dcb6194e206c5c96387 | CN=vTrus Root CA, O=iTrusChina Co.,Ltd.,C=CN  |
| e23d4a036d7b70e9f595b1422079d2b91edfbb1fb651a0633eaa8a9dc5f80703 | CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK  |
| 88f438dcf8ffd1fa8f429115ffe5f82ae1e06e0c70c375faad717b34a49e7265 | CN=NAVER Global Root Certification Authority, O=NAVER BUSINESS PLATFORM Corp.,C=KR                          |
| 420332ef876ebe78f2af5d28aaacde24aad0c10f8ffaac469efd7bd941929568 | CN=Entrust P384 TLS CA raíz - 2022,O=Entrust, Inc.,C=US   |
| d8e0fcb1db2e38d00940f37d27d41344d993e734b99d5656d9778d4d8143624  | CN=Certum CA, O=Unizeto Sp. z o.o.,C=PL   |
| c90f26f0fb1b4018b2227519b5ca2b53e2ca5b3be5cf18efe1bef47380c5383  | CN=Sectigo Public Server Authentication Root E46,O=Sectigo Limited, C=GB                                    |
| 97f654859cbde586fd90311e82ec7902c238cba0d6e529564c9c88f44895ec50 | CN=ACA ROOT, O=CONSEJO GENERAL DE LA ABOGACIA, 2.5.4.5=Q2863006I,C=ES                                       |
| 55903859c8c0c3ebb8759ece4e2557225ff5758bbd38ebd48276601e1bd58097 | CN=Trustwave Global ECC P384 Certification Authority, O=Trustwave Holdings, Inc.,L=Chicago,ST=Illinois,C=US |
| FB8FEC759169B9106B1E511644C618C51304373f6c0643088d8beffd1b997599 | CN=ANF Secure Server Root CA, OU=ANF CA Raiz, O=ANF Autoridad de Certificacion, C=ES,2.5.4.5=G63287510      |

| Huellas   | Asunto  |
|---|---|
| 3c5f81fea5fab82c64bfa2eaecafcd8e077fc8620a7cae537163df36edbf378   | 1.2.840.113549.1.9.1=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU   |
| 2e44102ab58cb85419451c8e19d9acf3662cafbc614b6a53960a30f7d0e2eb41  | CN=TunTrust Root CA, O=Agence Nationale de Certification Electronique, C=TN   |
| 73c176434f1bc6d5adf45b0e76e727287c8de57616c1e6e6141a2b2cbc7d8e4c  | CN=Entrust Root Certification Authority, OU=(c) 2006 Entrust\, Inc.,OU=www.entrust.net/CPS se incorpora por referencia, O=Entrust\, Inc.,C=US                 |
| 574df6931e278039667b720afdc1600fc27eb66dd3092979fb73856487212882  | CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY, C=CN   |
| 02ed0eb28c14da45165c566791700d6451d7fb56f0b2ab1d3b8eb070e56edff5  | CN=Entrust Root Certification Authority - EC1,OU=(c) 2012 Entrust\, Inc. - solo para uso autorizado, OU=See www.entrust.net/legal-terms,O=Entrust\, Inc.,C=US |
| 6b9c08e86eb0f767cfad65cd98b62149e5494a67f5845e7bd1ed019f27b86bd6  | CN=OISTE WISEKey Global Root GB CA, OU=OISTE Foundation Endorsed, O=WISEKey,C=CH  |
| 2399561127a57125de8cefea610ddf2fa078b5c8067f4e828290bfb860e84b3c  | CN=VeriSign Universal Root Certification Authority, OU=(c) 2008 VeriSign\, Inc. - Solo para uso autorizado, OU=VeriSign Trust Network, O=VeriSign\, Inc.,C=US |
| 1501f89c5c4dcf36cf588a17c9fd7cfceb9ee01e8729be355e25de80eb6284b4  | C=ES,O=EDICOM,CN=Raíz CAEDICOM  |
| 81a9088ea59fb364c548a6f85559099b6f0405efbf18e5324ec9f457ba00112f  | C=DE,O=Atos,CN=Atos TrustedRoot CA RSA TLS 2021   |
| c741f70f4b2a8d88bf2e71c14122ef53ef10eba0cfa5e64cfa20f418853073e0  | CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation, C=US  |
| 063e4afac491dfd332f3089b8542e94617d893d7fe944e10a7937ee29d9693c0  | CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,2.5.4.5=A82743287,L=Madrid (ver dirección actual en www.camerfirma.com/address),C=EU                 |
| 50df022dfa77185b4032a19196cb9840e29a87298830c5962d23f9b0a07dd5e   | CN=Raíz privada interna, O=Cisco,OU=Corvus  |
| 1e51942b84fd467bf77d1c89da241c04254dc8f3ef4c22451fe7a89978bdcd4f  | CN=ePKI Root Certification Authority - G2,O=Chunghwa Telecom Co.\, Ltd.,C=TW  |
| 4fa3126d8d3a11d1c4855a4f807cbad6cf919d3a5a88b03bea2c6372d93c40c9  | CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE  |
| 2605875afcc176b2d66dd66a995d7f8d5ebb86ce120d0e7e9e7c6ef294a27d4c  | C=IL,O=ComSign Ltd.,CN=ComSign CA raíz global   |
| 4348a0e9444c78cb265e058d5e8944b4d84f9662bd26db257f8934a443c70161  | CN=DigiCert Global Root CA, OU=www.digicert.com,O=DigiCert Inc, C=US  |
| 5d56499be4d2e08bcfcad08a3e38723d50503bde706948e42f55603019e528ae  | CN=IdenTrust Raíz comercial CA 1,O=IdenTrust,C=US   |
| d7ba3f4ff8ad05633451470dda3378a3491b90005e5c687d2b68d53647cfdd66  | CN=Halcom Root Certificate Authority, 2.5.4.97=VATSI-43353126,O=Halcom d.d.,C=SI  |
| e778f0f095fe843729cd1a0082179e5314a9c291442805e1fb1d8fb6b8886c3a  | CN=SecureSign Root CA15,O=Cybertrust Japan Co.\, Ltd.,C=JP  |
| 5ab4fcd8b180b5b6af0d262a2375a2c77d25602015d96648756611e2e78c53ad3 | CN=Fina Root CA, O=Financijska agencija, C=HR   |

| Huellas  | Asunto   |
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| 229CCC196D32C98421CC119E78486EEBEF603AEC525C6B88B47ABB740692B96  | CN=Cisco RXC-R2,O=Cisco Systems, C=US  |
| 604d32d036895aed3bfefae727c009ec0f2b3cdfa42a1c71730e6a72c3be9d4  | CN=MULTICERT Root Certification Authority 01,O=MULTICERT - Serviços de Certificação Electrónica S.A.,C=PT  |
| 52f0e1c4e58ec629291b60317f074671b85d7ea80d5b07273463534b32b40234 | CN=COMODO RSA Certification Authority, O=COMODO CA Limited, L=Salford,ST=Greater Manchester, C=GB  |
| 43df5774b03e7fef5fe40d931a7bedf1bb2e6b42738c4e6d3841103d3aa7f339 | CN=Entrust Root Certification Authority - G2,OU=(c) 2009 Entrust\, Inc. - solo para uso autorizado, OU=See www.entrust.net/legal-terms,O=Entrust\, Inc.,C=US |
| 705eaafc3ff488030017d59832603eefad514171b583808675f45c190e6378f8 | CN=CA raíz de Cisco M1,O=Cisco   |
| 62dd0be9b9f50a163ea0f8e75c053b1eca57ea55c8688f647c6881f2c8357b95 | CN=SwissSign Gold CA - G2,O=SwissSign AG, C=CH   |
| 0376ab1d54c5f9803ce4b2e201a0ee7eef7b57b636e8a93c9b8d4860c96f5fa7 | CN=AffirmTrust Commercial, O=AffirmTrust,C=US  |
| 02bdf96e2a45dd9bf18fc7e1dbdf21a0379ba3c9c2610344cfd8d606fec1ed81 | CN=CommScope Public Trust RSA Root-01,O=CommScope,C=US   |
| caca93b9d23d2b6fa76e8b8471931e0df3ec6f63af3cddb936c41954a1872326 | CN=Microsoft ECC Product Root Certificate Authority 2018,O=Microsoft Corporation, L=Redmond,ST=Washington,C=US   |
| dec669e322e07cd7c60a56904bf50c29fa1e75071723fc103577e27b226968d5 | CN=TRS Bundle Root CA, O=Cisco   |
| 1ba5b2aa8c65401a82960118f80bec4f62304d83cec4713a19c39c011ea46db4 | CN=Amazon Root CA 2,O=Amazon,C=US  |
| c1468cf2254e6004b24696aba209d1a30ba6e2dff68a9a4e32c6ab414f90c8d9 | CN=DigiCert ECC P384 Raíz G5,O=DigiCert\, Inc.,C=US  |
| 937ef8f12276b3c7a3f58e345d09a6eff01f862f8d2794441cd84d511825fa0c | CN=Entrust P384 EV TLS Root CA - 2022,O=Entrust\, Inc.,C=US  |
| 578af4ded0853f4e5998db4aeaf9cbea8d945f60b620a38d1a3c13b2bc7ba8e1 | CN=Telekom Security TLS ECC Root 2020,O=Deutsche Telekom Security GmbH, C=DE   |
| a1339d33281a0b56e557d3d32b1ce7f9367eb094bd5fa72a7e5004c8ded7cafe | CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL  |
| 34ff2a4409dc1383e9f8966e8adfe5719eba373fd0ad5e2f49f90ee07cf5d4c1 | CN=VRK Gov. Root CA - G2,OU=Varmennepalvelut,OU=Servicios de la Autoridad de Certificación, O=Vaestorekisterikeskus CA, C=FI                                 |
| d43af9b35473755c9684fc06d7d8cb70ee5c28e773fb294eb41ee71722924d24 | CN=UCA Extended Validation Root, O=UniTrust,C=CN   |
| 8ac552ad577e37ad2c6808d72aa331d6a96b4b3febff34ce9bc0578e08055ec3 | CN=A-Trust-Root-07,OU=A-Trust-Root-07,O=A-Trust Ges. f. Sicherheitssysteme im elektr. Datenverkehr GmbH, C=AT  |
| 6ec6614e9a8efd47d6318ffdf0bf65b493a141f77c38d0b319be1bbbc053dd2  | CN=Raíz del gobierno suizo CA I, OU=Autoridades de certificación, OU=Servicios,O=Las autoridades federales de la Confederación Suiza, C=CH                   |
| 18ce6cfe7bf14e60b2e347b8dfe868cb31d02ebb3ada271569f50343b46db3a4 | CN=Amazon Root CA 3,O=Amazon,C=US  |
| 8327bc8c9d69947b3de3c27511537267f59c21b9fa7b613fafbccd53b7024000 | CN=Cisco Root CA 2048,O=Cisco Systems  |

| Huellas  | Asunto   |
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| 59769007f7685d0fcd50872f9f95d5755a5b2b457d81f3692b610a98672f0e1b | CN=TWCA Global Root CA, OU=Root CA, O=TAIWAN-CA,C=TW   |
| 1cf341ae35341ac3ae1dc68d5b10dc0c9dc1307656f75fd92ca2c68489d52e9a | CN=MOIS SSL Raíz CA, O=Ministerio del Interior y Seguridad, C=KR   |
| bf0feefb9e3a581ad5f9e9db7589985743d261085c4d314f6f5d7259aa421612 | CN=SecureSign RootCA11,O=Japan Certification Services\, Inc.,C=JP  |
| 04048028bf1f2864d48f9ad4d83294366a828856553f3b14303f90147f5d40ef | CN=Autoridad de Certificación Firmaprofesional CIF A62634068,C=ES  |
| 873f4685fa7f563625252e6d36bcd7f16fc24951f264e47e1b954f4908cdca13 | CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center, O=E-Tugra EBG A.S.,L=Ankara,C=TR   |
| e3b6a2db2ed7ce48842f7ac53241c7b71d54144bfb40c11f3f1d0b42f5eea12d | CN=Certigna,O=Dhimyotis,C=FR   |
| 18f1fc7f205df8adddeb7fe007dd57e3af375a9c4d8d73546bf4f1fed1e18d35 | CN=QuoVadis Root CA 3,O=QuoVadis Limited, C=BM   |
| 46edc3689046d53a453fb3104ab80dcaec658b2660ea1629dd7e867990648716 | CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu SM, O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK, L=Gebze - Kocaeli, C=TR |
| be6c4da2b9ba59b6f393768374246c3c005993fa98f020d1dedbed48a81d5    | CN=SwissSign Silver CA - G2,O=SwissSign AG, C=CH   |
| 30d0895a9a448a262091635522d1f52010b5867acae12c78ef958fd4f4389f2f | CN=IdenTrust Sector Root CA 1,O=IdenTrust,C=US   |
| 16af57a9f676b0ab126095aa5ebadef22ab31119d644ac95cd4b93dbf3f26aeb | CN=Baltimore CyberTrust Root, OU=CyberTrust,O=Baltimore,C=IE   |
| a7dedf5a842167dd12fdaa0f2080e73295b8b8bea71b2094ea0950945a482fc1 | CN=AffirmTrust 4K TLS CA raíz - 2022,O=AffirmTrust,C=CA  |
| EEC5496B988CE98625B934092EEC2908bed0B0F316C2D4730C84EAF1F3D34881 | CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH, C=DE  |
| df545bf919a2439c36983b54cdfc903dfa4f37d3996d8d84b4c31eec6f3c163e | CN=Microsoft Root Certificate Authority 2010,O=Microsoft Corporation, L=Redmond,ST=Washington,C=US   |
| 193144f431e0fddb740717d4de926a571133884b4360d30e272913cbe660ce41 | CN=SwissSign RSA TLS Raíz CA 2022 - 1,O=SwissSign AG, C=CH   |
| 55926084ec963a64b96e2abe01ce0ba86a64fbfbcc7aab5afc155b37fd76066  | CN=Actalis Authentication Root CA, O=Actalis S.p.A./03358520967,L=Milan,C=IT   |
| 6c61dac3a2def031506be036d2a6fe401994fbd13df9c8d466599274c446ec98 | CN=NetLock Arany (Clase Oro) Főtanúsítvány,OU=Tanúsítványkiadók (Servicios de Certificación),O=NetLock Kft.,L=Budapest,C=HU  |
| 7431e5f4c3c1ce4690774f0b61e05440883ba9a01ed00ba6abd7806ed3b118cf | CN=DigiCert High Assurance EV Root CA, OU=www.digicert.com,O=DigiCert Inc, C=US  |
| b2fae53e14ccd7ab9212064701ae279c1d8988facb775fa8a008914e663988a8 | C=DE,O=Atos,CN=Atos TrustedRoot Root CA ECC TLS 2021   |
| c3846bf24b9e93ca64274c0ec67c1ecc5e024ffcacd2d74019350e81fe546ae4 | OU=Go Daddy Class 2 Certification Authority, O=The Go Daddy Group\, Inc.,C=US  |
| ac7f7862e685c7a7d9826a58ea32d183d4893fcc8f8fd6d900c9769a987e77f0 | CN=PostSignum Root QCA 4,O=Česká pošta\, s.p.,2.5.4.97=NTRCZ-47114983,C=CZ   |

| Huellas  | Asunto  |
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| 49e7a442acf0ea6287050054b52564b650e4f49e42e348d6aa38e039e957b1c1 | CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH, C=DE  |
| d2358cf65519d8e74cb71ed5a4b3f60db4fad1baf09d5c4ae5e8c7edb4448aa2 | 1.2.840.113549.1.9.1=ciscosb-certadmin@cisco.com,CN=Autoridad raíz de Cisco Small Business Provisioning 1,OU=Cisco Small Business Certificate Authority, O=Cisco Small Business, L=San José, ST=California,C=US |
| a736e303e6413c44e725704bf957933f1dd669f9c7e84ce701d72abb208471c8 | 1.2.840.113549.1.9.1=ciscosb-certadmin@cisco.com,CN=Cisco Small Business Provisioning Root Authority 2,OU=Cisco Small Business Certificate Authority, O=Cisco Small Business, L=San Jose, ST=California,C=US    |

## Lista de confianza de CA para teléfonos multiplataforma

| Huellas  | Asunto   |
|--|--|
| 554153b13d2cf9ddb753bfbe1a4e0ae08d0aa4187058fe60a2b862b2e4b87bcb | CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS, 2.5.4.97=VATES-Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES  |
| 136335439334a7698016a0d324de72284e079d7b5220bb8fbd747816eebebac  | CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,2.5.4.5=A82743287,L=Madrid (ver dirección actual en <a href="http://www.camerfirma.com/address">www.camerfirma.com/address</a> ),C=EU |
| 6e0bff069a26994c15de2c4888cc54af84882e5495b7fbf66be9ccffec7489f6 | CN=Autoridade Certificadora Raiz Brasileira v10,OU=Instituto Nacional de Tecnologia da Informacao - ITI, O=ICP-Brasil,C=BR   |
| edf7ebbca27a2a384d387b7d4010c666e2edb4843e4c29b4ae1d5b9332e6b24d | CN=Buypass Class 3 Root CA, O=Buypass AS-983163327,C=NO  |
| 5a2fc03f0c83b090bbfa40604b0988446c7636183df9846e17101a447fb8efd6 | CN=Hongkong Post Root CA 3,O=Hongkong Post, L=Hong Kong, ST=Hong Kong, C=HK  |
| e793c9b02fd8aa13e21c31228accb08119643b749c898964b1746d46c3d4cbd2 | CN=USERTrust RSA Certification Authority, O=The USERTRUST Network, L=Jersey City, ST=New Jersey, C=US  |
| 416b1f9e84e74c1d19b23d8d7191c6ad81246e641601f599132729f507beb3cc | CN=GLOBALTRUST 2015,OU=GLOBALTRUST Certification Service, O=e-commerce monitoring GmbH, L=Wien,ST=Wien,C=AT  |

| Huellas  | Asunto  |
|--|---|
| A040929A02Ce53B4ACF4F2FFC6981CE4496F755E6D45FE0B2A692BCD52523F36 | CN = Instituciones académicas y de investigación helénicas RootCA 2015, O = Autoridad certificada de instituciones académicas y de investigación helénicas, L = Atenas, C = GR  |
| 8d25cd97229dbf70356bda4eb3cc734031e24cf00fafcd32dc76eb5841c7ea8  | CN=GTS Root R2,O=Google Trust Services LLC, C=US  |
| f4336bc2ac75950beccf1c1f2f9da6dddafd1f41161ca71f59c76889bd474033 | CN=ANCERT Certificados CGN V2,O=Agencia Notarial de Certificacion S.L.U. - CIF B83395988,C=ES   |
| 4ff460d54b9c86dabfbcfc5712e0400d2bed3fbc4d4fbdad86e06adcd2a9ad7a | CN=USERTrust ECC Certification Authority, O=The USERTRUST Network, L=Jersey City, ST=New Jersey, C=US   |
| 647987d98d52645da4d3de3b80771a0ce02b9b9285e6e86999882170744ec9aa | CN=Entrust 4K EV TLS Root CA - 2022,O=Entrust\, Inc.,C=US   |
| 8faf7d2e2cb4709bb8e0b33666bf75a5dd45b5de480f8ea8d4bfe6bebc17f2ed | CN=SSL.com TLS RSA Root CA 2022,O=SSL Corporation, C=US   |
| 5c58468d55f58e497e743982d2b50010b6d165374acf83a7d4a32db768c4408e | CN=Certum Trusted Network CA, OU=Certum Certification Authority, O=Unizeto Technologies S.A.,C=PL   |
| f356bea244b7a91eb35d53ca9ad7864ace018e2d35d5f8f96ddf68a6f41aa474 | C=DE,O=Atos,CN=Atos TrustedRoot 2011  |
| d3ed3fc40ad26b52e001e1e18f4b9449529deb75a81d5eb680d7b62db23ba96d | CN=DVV Gov. Root CA - G3 RSA, OU=Varmennepalvelut,OU=Servicios de la Autoridad de Certificación, O=Digi- ja vaestotietovirasto CA, C=FI   |
| 34bb34e14faed0d3392f2fc441c0ecd5fd88ad88118df2d1ba76cdec1eea10b8 | OU = CA raíz nacional saudita, O = Centro Nacional de Certificación Digital, C = SA   |
| bfd88fe1101c41ae3e801bf8be56350ee9bad1a6b9bd515edc5c6d5b8711ac44 | CN=TWCA Root Certification Authority, OU=Root CA, O=TAIWAN-CA,C=TW  |
| 15d5b8774619ea7d54ce1ca6d0b0c403e037a917f131e8a04e1e6b7a71babce5 | CN=GTS Root R3,O=Google Trust Services LLC, C=US  |
| 44b545aa8a25e65a73ca15dc27fc36d24c1cb9953a066539b11582dc487b4833 | CN = Instituciones académicas y de investigación helénicas ECC RootCA 2015, O = Autoridad certificada de instituciones académicas y de investigación helénicas, L = Atenas, C = GR  |
| db3517d1f6732a2d5ab97c533ec70779ee3270a62fb4ac4238372460e6f01e88 | CN=Entrust Root Certification Authority - G4,OU=(c) 2015 Entrust\, Inc. - solo para uso autorizado, OU=See www.entrust.net/legal-terms,O=Entrust\, Inc.,C=US  |
| c0a6f4dc63a24bfdcf54ef2a6a082a0a72de35803e2ff5f527ae5d87206dfd5  | OU=ePKI Root Certification Authority, O=Chunghwa Telecom Co.\, Ltd.,C=TW  |
| efc65cadbb59adb6efe84da22311b35624b71b3b1ea0da8b6655174ec8978646 | CN=Telekom Security TLS RSA Root 2023,O=Deutsche Telekom Security GmbH, C=DE  |
| 88497f01602f3154246ae28c4d5aef10f1d87ebb76626f4ae0b7f95ba7968799 | CN=EC-ACC,OU=Jerarquia Entitats de Certificacio Catalanes, OU=Vegeu <a href="https://www.catcert.net/verarrel">https://www.catcert.net/verarrel</a> (c)03,OU=Serveis Publics de Certificacio, O=Agencia Catalana de Certificacio (NIF Q-0801176-I),C=ES |

| Huellas  | Asunto  |
|--|---|
| 568d6905a2c88708a4b3025190edcfedb1974a606a13c6e5290fcb2ae63edab5 | CN=Starfield Services Root Certificate Authority - G2,O=Starfield Technologies\, Inc.,L=Scottsdale,ST=Arizona,C=US                      |
| 85666a562ee0be5ce925c1d8890a6f76a87ec16d4d7d5f29ea7419cf20123b69 | CN=SSL.com Root Certification Authority RSA, O=SSL Corporation, L=Houston,ST=Texas,C=US   |
| cbb522d7b7f127ad6a0113865bdf1cd4102e7d0759af635a7cf4720dc963c53b | CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3   |
| 2e7bf16cc22485a7bbe2aa8696750761b0ae39be3b2fe9d0cc6d4ef73491425c | CN=SSL.com EV Root Certification Authority RSA R2,O=SSL Corporation, L=Houston,ST=Texas,C=US  |
| 179fbc148a3dd00fd24ea13458cc43bfa7f59c8182d783a513f6ebec100c8924 | CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5   |
| 24a55c2ab051442d0617766541239a4ad032d7c55175aa34ffde2fbc4f5c5294 | CN=Comunicación de seguridad RootCA3,O=SECOM Trust Systems CO.\,LTD.,C=JP   |
| 1a0d20445de5ba1862d19ef880858cbce50102b36e8f0a040c3c69e74522fe6e | CN=COMODO Certification Authority, O=COMODO CA Limited, L=Salford,ST=Greater Manchester, C=GB   |
| 22a2c1f7bded704cc1e701b5f408c310880fe956b5de2a4a44f99c873a25a7c8 | CN=SSL.com EV Root Certification Authority ECC, O=SSL Corporation, L=Houston,ST=Texas,C=US  |
| 96BCEC06264976f37460779acf28c5a7cfe8a3c0aae11a8ffcee05c0bddf08c6 | CN=ISRG Root X1,O=Internet Security Research Group, C=US  |
| 45140b3247eb9cc8c5b4f0d7b53091f73292089e6e5a63e2749dd3aca9198eda | CN=Go Daddy Root Certificate Authority - G2,O=GoDaddy.com\, Inc.,L=Scottsdale,ST=Arizona,C=US   |
| fad540811afae0dc767cdf6572a088fa3ce8493dd82b3b869a67d10aab4e8124 | CN=SI-TRUST Root, 2.5.4.97=VATSI-17659957,O=Republika Slovenija, C=SI   |
| 08170d1aa36453901a2f959245e347db0c8d37abaabc56b81aa100dc958970db | CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH, C=DE   |
| 0c2cd63df7806fa399ede809116b575bf87989f06518f9808c860503178baf66 | CN=COMODO Certification Authority, O=COMODO CA Limited, L=Salford,ST=Greater Manchester, C=GB   |
| bd71fdf6da97e4cf62d1647add2581b07d79adf8397eb4ecba9c5e8488821423 | CN=AffirmTrust Premium ECC, O=AffirmTrust,C=US  |
| beb00b30839b9bc32c32e4447905950641f26421b15ed089198b518ae2ea1b99 | CN=e-Szigno Root CA 2017,2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU  |
| ebd41040e4bb3ec742c9e381d31ef2a41a48b6685c96e7cef3c1df6cd4331c99 | CN=GlobalSign Root CA, OU=Root CA, O=GlobalSign nv-sa,C=BE  |
| 5546a52504fba74f61ffd4890067529ade3b9c9d07e502592831ccda9b369fd3 | CN=DVV Gov. Root CA - G3 ECC, OU=Varmennepalvelut,OU=Servicios de la Autoridad de Certificación, O=Digi- ja vaestotietovirasto CA, C=FI |
| d649c40830aab9869f2536ff933c4050746659b31dfa735405e4f7ad447c20d5 | CN=Ráiz de Cisco Basic Assurance CA 2099,O=Cisco  |



| Huellas  | Asunto  |
|--|---|
| 2a8da2f8d23e0cd3b5871ecfb0f42276ca73230667f474eede71c5ee32cc3ec6 | CN=Autoridad Nacional de Certificación Raíz de Tailandia - G1,OU=Autoridad Nacional de Certificación Raíz de Tailandia, O=Agencia de Desarrollo de Transacciones Electrónicas (Organización Pública),C=TH |
| 358df39d764af9e1b766e9c972df352ee15cfac227af6ad1d70e8e4a6edcba02 | CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation, C=US  |
| 65353833cf234c79562164f90849c0d104dbabf8ee41064d83e8cbe03ba1c5a5 | CN=Netrust Root CA 2,OU=Netrust Certificate Authority, O=Netrust Pte Ltd, C=SG  |
| 31ad6648f8104138c738f39ea4320133393e3a18cc02296ef97c2ac9ef6731d0 | CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc, C=US   |
| 3e9099b5015e8f486c00bcea9d111ee721faba355a89bcf1df69561e3dc6325c | CN=DigiCert Assured ID Root CA, OU=www.digicert.com,O=DigiCert Inc, C=US  |
| 0da80cc491638f8c756396e0afac16079829fa06697bfe6d7ee93a6a0c9e212d | CN=IT Private Root CA, O=Cisco,OU=Phoenix   |
| 2530cc8e98321502bad96f9b1fba1b099e2d299e0f4548bb914f363bc0d4531f | CN=Izenpe.com,O=IZENPE S.A.,C=ES  |
| 3a6308acd77a5a33d8da04d669fa00f8e5ae153f259087678b76bf1654b30a06 | CN=CA raíz de Cisco ECC, O=Cisco  |
| 2ffb7f813b3bb3c89ab4e8162d0f16d71509a830cc9d73c262e5140875d1ad4a | CN=CommScope Public Trust ECC Root-02,O=CommScope,C=US  |
| f1b52392c4a4ec2a8709b1308304a911ffcec2ce0b63a94f9e969164567c4925 | CN=CA raíz de licencias de Cisco, O=Cisco   |
| 71cca5391f9e794b04802530b363e121da8a3043bb26662fea4dca7fc951a4bd | CN=GTS Root R4,O=Google Trust Services LLC, C=US  |
| f3896f88fe7c0a882766a7fa6ad2749fb57a7f3e98fb769c1fa7b09c2c44d5ae | CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY, C=CN   |
| 4200f5043ac8590ebb527d209ed1503029fbcdb41ca1b506ec27f15ade7dac69 | CN=Secure Global CA, O=SecureTrust Corporation, C=US  |
| 3f63bb2814be174ec8b6439cf08d6d56f0b7c405883a5648a334424d6b3ec558 | CN=TWCA CYBER Root CA, OU=Root CA, O=TAIWAN-CA,C=TW   |
| bef256daf26e9c69bdec1602359798f3caf71821a03e018257c53c65617f3d4a | CN=FIRMAPROFESIONAL CA ROOT-A WEB, 2.5.4.97=VATES-A62634068,O=Firmaprofesional SA, C=ES   |
| e74fbda55bd564c473a36b441aa799c8a68e077440e8288b9fa1e50e4bbaca11 | CN=Comunicación de seguridad ECC RootCA1,O=SECOM Trust Systems CO.,LTD.,C=JP  |
| d7a7a0fb5d7e2731d771e9484ebcdef71d5f0c3e0a2948782bc83ee0ea699ef4 | CN=AAA Certificate Services, O=Comodo CA Limited, L=Salford,ST=Greater Manchester, C=GB   |
| 242b69742fcb1e5b2abf98898b94572187544e5b4d9911786573621f6a74b82c | CN=Telia Root CA v2,O=Telia Finland Oyj, C=FI   |
| AD016F958050E0E7E46FAE7DCC50197ED8E3FF0A4B262E5DDCDB3EDDDC7D6578 | CN=PostSignum Root QCA 2,O=Česká pošta\, s.p. [IČ 47114983],C=CZ  |
| be4b56cb5056c0136a526df444508daa36a0b54f42e4ac38f72af470e479654c | CN=TrustAsia Global Root CA G4,O=TrustAsia Technologies\, Inc.,C=CN   |
| 6b328085625318aa50d173c98d8bda09d57e27413d114cf787a0f5d06c030cf6 | CN=Certum EC-384 CA, OU=Certum Certification Authority, O=Asseco Data Systems S.A.,C=PL   |

| Huellas  | Asunto   |
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| 7d05ebb682339f8c9451ee094eebfefa7953a114edb2f44949452fab7d2fc185 | CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc, C=US  |
| 07cd9aa9064a9b94c6aef8fb784c1bbc1beda08acbe86878d781a39167626cf8 | CN=Visa Public RSA Root CA, OU=Visa International Service Association, O=VISA,C=US   |
| 30fbba2c32238e2a98547af97931e550428b9b3f1c8eeb6633dcfa86c5b27dd3 | CN=vTrus ECC Root CA, O=iTrusChina Co.,Ltd.,C=CN   |
| bc104f15a48be709dca542a7e1d4b9df6f054527e802eaa92d595444258afe71 | CN=Hellenic Academic and Research Institutions RootCA 2011,O=Hellenic Academic and Research Institutions Cert. Authority, C=GR                               |
| ef66b0b10a3cdb9f2e3648c76bd2af18ead2bfe6f117655e28c4060da1a3f4c2 | CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center, O=E-Tugra EBG A.S.,L=Ankara,C=TR   |
| 2a575471e31340bc21581cbd2cf13e158463203ece94bcf9d3cc196bf09a5472 | CN=GTS Root R1,O=Google Trust Services LLC, C=US   |
| 018e13f0772532cf809bd1b17281867283fc48c6e13be9c69812854a490c1b05 | CN=DigiCert TLS ECC P384 raíz G5,O=DigiCert\, Inc.,C=US  |
| 6dc47172e01cbcb0bf62580d895fe2b8ac9ad4f873801e0c10b9c837d21eb177 | CN=Entrust.net Autoridad de Certificación (2048),OU=(c) 1999 Entrust.net Limited, OU=www.entrust.net/CPS_2048 incorp. por ref. (límites liab.),O=Entrust.net |
| 2ce1cb0bf9d2f9e102993fbe215152c3b2dd0cabde1c68e5319b839154dbb7f5 | CN=Starfield Root Certificate Authority - G2,O=Starfield Technologies\, Inc.,L=Scottsdale,ST=Arizona,C=US  |
| 407c276bead2e4af0661ef6697341dec0a1f9434e4eafb2d3d32a90549d9de4a | CN=GPKIRootCA1,OU=GPKI,O=Gobierno de Corea, C=KR   |
| cd85167b3935e27bcc3b0f5fa24c8457882d0bb994f88269a7f72829d957eae9 | CN=CA raíz de Cisco M2,O=Cisco   |
| d48d3d23eedb50a459e55197601c27774b9d7b18c94d5a059511a10250b93168 | CN=Certigna Root CA, OU=0002 48146308100036,O=Dhimyotis,C=FR   |
| 8f9adb6d895dab5adf5c3d3fab83927be0fb64ef82485c62280d584e8bd55d22 | CN=Autoridad Raíz del Gobierno Sueco v3,O=Agencia Sueca de Seguridad Social, C=SE  |
| bfff8fd04433487d6a8aa60c1a29767a9fc2bbb05e420f713a13b992891d3893 | CN=GDCA TrustAUTH R5 RAÍZ, O=GUANG DONG CERTIFICATE AUTHORITY CO.,LTD.,C=CN  |
| c32ffd9f46f936d16c3673990959434b9ad60aafbb9e7cf33654f144cc1ba143 | CN=SSL.com TLS ECC Root CA 2022,O=SSL Corporation, C=US  |
| 88ef81de202eb018452e43f864725cea5fbd1fc2d9d205730709c5d8b8690f46 | CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited, C=BM  |
| b085d70b964f191a73e4af0d54ae7a0e07aafdaf9b71dd0862138ab7325a24a2 | CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4  |
| 7a38f708a35a31e42e1cf3220f9a2d273e7666354618b2464657d43d8e77adc2 | CN=A-Trust-Root-09,OU=A-Trust-Root-09,O=A-Trust GmbH, C=AT   |
| 8560f91c3624daba9570b5fea0dbe36ff11a8323be9486854fb3f34a5571198d | CN=OISTE WISEKey Global Root GC CA, OU=OISTE Foundation Endorsed, O=WISEKey,C=CH   |
| 9a6ec012e1a7da9dbe34194d478ad7c0db1822fb071df12981496ed104384113 | C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1  |

| Huellas  | Asunto  |
|--|---|
| b4585f22e4ac756a4e8612a1361c5d9d031a93fd84febb778fa3068b0fc42dc2 | CN=Ciertamente raíz E1,O=Ciertamente,C=US   |
| C2157309d9aee17bf34f4df5e88dbaeba57e0361eb814cbc239f4d54d329a38d | CN=Főtanúsítványkiadó - Kormányzati Hitelesítés Szolgáltató, O=NISZ Nemzeti Infokommunikációs Szolgáltató Zrt.,L=Budapest,C=HU  |
| 86a1ecba089c4a8d3bbe2734c612ba341d813e043cf9e8a862cd5c57a36bbe6b | CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited, OU=emSign PKI, C=IN  |
| 1793927a0614549789adce2f8f34f7f0b66d0f3ae3a3b84d21ec15dbba4fadc7 | CN=COMODO ECC Certification Authority, O=COMODO CA Limited, L=Salford,ST=Greater Manchester, C=GB   |
| c34c5df53080078ffe45b21a7f600469917204f4f0293f1d7209393e5265c04f | CN=CCA India 2015 SPL, O=India PKI, C=IN  |
| a3cc68595dfe7e86d8ad1772a8b5284add54ace3b8a798df47bccafb1fdb84df | CN=Hotspot 2.0 Trust Root CA - 03,O=WFA Hotspot 2.0,C=US  |
| 1465fa205397b876faa6f0a9958e5590e40fcc7faa4fb7c2c8677521fb5fb658 | OU=Starfield Class 2 Certification Authority, O=Starfield Technologies\, Inc.,C=US  |
| 85a0dd7dd720adb7ff05f83d542b209dc7ff4528f7d677b18389fea5e5c49e86 | CN=QuoVadis Root CA 2,O=QuoVadis Limited, C=BM  |
| 847df6a78497943f27fc72eb93f9a637320a02b561d0a91b09e87a7807ed7c61 | CN=Microsoft Root Certificate Authority 2011,O=Microsoft Corporation, L=Redmond,ST=Washington,C=US  |
| 5e3571f33f45a7df1537a68b5ffb9e036af9d2f5bc4c9717130dc43d7175aac7 | 1.2.840.113549.1.9.1=info@globaltrust.info,CN=GLOBALTRUST,OU=GLOBALTRUST Certification Service, O=ARGE DATEN - Sociedad Austriaca de Protección de Datos, ST=Austria,L=Viena,C=AT |
| EBC5570C29018C4D67B1AA127BAF12F703B4611EBC17B7DAB5573894179b93fa | OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES   |
| f015ce3cc239bfef064be9f1d2c417e1a0264a0a94be1f0c8d121864eb6949cc | CN=HiPKI Root CA - G1,O=Chunghwa Telecom Co.\, Ltd.,C=TW  |
| 57de0583efd2b26e0361da99da9df4648def7ee8441c3b728afa9bcde0f9b26a | CN=Autoridad de Certificación Firmaprofesional CIF A62634068,C=ES   |
| 9a114025197c5bb95d94e63d55cd43790847b646b23cdf11ada4a00eff15fb48 | CN=Buypass Class 2 Root CA, O=Buypass AS-983163327,C=NO   |
| 657cfe2fa73faa38462571f332a2363a46fce7020951710702cdfbb6eeda3305 | OU=certSIGN ROOT CA G2,O=CERTSIGN SA, C=RO  |
| 513b2cecb810d4cde5dd85391adfc6c2dd60d87bb736d2b521484aa47a0ebef6 | OU=Comunicación de seguridad RootCA2,O=SECOM Trust Systems CO.\,LTD.,C=JP   |
| 9bea11c976fe014764c1be56a6f914b5a560317abd9988393382e5161aa0493c | CN=UCA Global G2 Root, O=UniTrust,C=CN  |
| e0d3226aeb1163c2e48ff9be3b50b4c6431be7bb1eacc5c36b5d5ec509039a08 | CN=TrustAsia Global Root CA G3,O=TrustAsia Technologies\, Inc.,C=CN   |
| f1c1b50ae5a20dd8030ec9f6bc24823dd367b5255759b4e71b61fce9f7375d73 | CN=SecureTrust CA, O=SecureTrust Corporation, C=US  |
| eb7e05aa58e7bd328a282bf8867033f3c035342b516ee85c01673dffffbbfe58 | CN=NetLock Platina (Clase Platino) Főtanúsítvány,OU=Tanúsítványkiadók (Servicios de Certificación),O=NetLock Kft.,L=Budapest,C=HU   |
| 34d8a73ee208d9bcdb0d956520934b4e40e69482596e8b6f73c8426b010a6f48 | CN=GTS Root R3,O=Google Trust Services LLC, C=US  |

| Huellas  | Asunto  |
|--|---|
| cbb9c44d84b8043e1050ea31a69f514955d7bfd2e2c6b49301019ad61d9f5058 | CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE  |
| 8ecde6884f3d87b1125ba31ac3fcb13d7016de7f57cc904fe1cb97c6ae98196e | CN=Amazon Root CA 1,O=Amazon,C=US   |
| 3c4fb0b95ab8b30032f432b86f535fe172c185d0fd39865837cf36187fa6f428 | CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden, C=NL   |
| aaa962c4fa4a6bafefe415196d351ccd888d4f53f3fa8ae6d7c466a94e6042bb | OU=certSIGN ROOT CA, O=certSIGN,C=RO  |
| 349dfa4058c5e263123b398ae795573c4e1313c83fe68f93556cd5e8031b3c7d | CN=GTS Root R4,O=Google Trust Services LLC, C=US  |
| 04f1bec36951bc1454a904ce32890c5da3cde1356b7900f6e62dfa2041ebad51 | CN=RAÍZ DE CÁMARAS DE COMERCIO - 2016,O=AC CAMERFIRMA S.A.,2.5.4.97=VATES-A82743287,2.5.4.5=A82743287,OU=CHAMBERS OF COMMERCE ROOT - 2016,OU=ver dirección actual en www.camerfirma.com/address,L=MADRID,ST=MADRID,C=ES |
| 7bb647a62aeac88bf257aa522d01ffea395e0ab45c73f93f65654ec38f25a06  | CN=Sectigo Public Server Authentication Root R46,O=Sectigo Limited, C=GB  |
| 77b82cd8644c4305f7acc5cb156b45675004033d51c60c6202a8e0c33467d3a0 | CN=Ciertamente raíz R1,O=Ciertamente,C=US   |
| d95d0e8eda79525bf9beb11b14d2100d3294985f0c62d9fabd9cd999eccb7b1d | CN=HARICA TLS RSA Raíz CA 2021,O=Instituciones Académicas y de Investigación Helénicas CA, C=GR   |
| 371a00dc0533b3721a7eeb40e8419e70799d2b0a0f2c1d80693165f7cec4ad75 | CN=DigiCert TLS RSA4096 Root G5,O=DigiCert\, Inc.,C=US  |
| 41dfd9c52d71f6a2c7f1083aa8f80153ff6ec23349d2599de347adbe423504f3 | CN=CA raíz interna del cliente, O=Cisco,OU=Arcturus   |
| ffe943d793424b4f7c440c1c3d648d5363f34b82dc87aa7a9f118fc5dee101f1 | CN=CommScope Public Trust RSA Root-02,O=CommScope,C=US  |
| 3f034bb5704d44b2d08545a02057de93ebf3905fce721acbc730c06ddaee904e | CN=SecureSign Root CA12,O=Cybertrust Japan Co.\, Ltd.,C=JP  |
| 9a296a5182d1d451a2e37f439b74daafa267523329f90f9a0d2007c334e23c9a | CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH, C=AT  |
| 11437cda7bb45e41365f45b39a38986b0de00def348e0c7bb0873633800bc38b | CN=CommScope Public Trust ECC Root-01,O=CommScope,C=US  |
| 125609aa301da0a249b97a8239cb6a34216f44dcac9f3954b14292f2e8c8608f | CN=emSign Root CA - C1,O=eMudhra Inc, OU=emSign PKI, C=US   |
| e6be68ce06fe0da0c140f1aeb00b67b636c5eea9422088929362375ce086db39 | CN=Visa Public ECC Root CA, OU=Visa International Service Association, O=VISA,C=US  |
| 68ad50909b04363c605ef13581a939ff2c96372e3f12325b0a6861e1d59f6603 | CN=Verizon Global Root CA, OU=OmniRoot,O=Verizon Business, C=US   |
| c1d80ce474a51128b77e794a98aa2d62a0225da3f419e5c7ed73dfbf660e7109 | CN=RAÍZ GLOBAL CHAMBERSIGN - 2016,O=AC CAMERFIRMA S.A.,2.5.4.97=VATES-A82743287,2.5.4.5=A82743287,OU=GLOBAL CHAMBERSIGN ROOT - 2016,OU=ver dirección actual en www.camerfirma.com/address,L=MADRID,ST=MADRID,C=ES       |
| 3f99cc474acfce4dfed58794665e478d1547739f2e780f1bb4ca9b133097d401 | CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA, C=GR   |
| 8fe4fb0af93a4d0d67db0bebb23e37c71bf325dcbcd240ea04daf58b47e1840  | CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited, C=BM   |

| Huellas  | Asunto  |
|--|---|
| 8a866fd1b276b57e578e921c65828a2bed58e9f2f288054134b7f1f4bfc9cc74 | CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited, C=BM   |
| 7e37cb8b4c47090cab36551ba6f45db840680fba166a952db100717f43053fc2 | CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc, C=US                                     |
| fe7696573855773e37a95e7ad4d9cc96c30157c15d31765ba9b15704e1ae78fd | CN=Certum Trusted Root CA, OU=Certum Certification Authority, O=Asseco Data Systems S.A.,C=PL               |
| 3417bb06cc6007da1b961c920b8ab4ce3fad820e4aa30b9acbc4a74ebdcebc65 | CN=SSL.com Root Certification Authority ECC, O=SSL Corporation, L=Houston,ST=Texas,C=US                     |
| c45d7bb08e6d7e62e4235110b564e5f78fd92ef058c840aea4e6455d7585c60  | CN=GTS Root R2,O=Google Trust Services LLC, C=US  |
| f9a17a00e5c294ba9614a715819af57f3fd48cc413453fbb8a5fc7e97964e2bc | C=CZ,2.5.4.97=NTRCZ-26439395,O=První certifikační autorita, a.s.,CN=I.CA TLS Root CA/RSA 05/2022            |
| 2a99f5bc1174b73cbb1d620884e01c34e51ccb3978da125f0e33268883bf4158 | CN=Certinomis - Raíz CA, OU=0002 433998903,O=Certinomis,C=FR  |
| e46a392204a8dca342a71c1ca9a60c9185b9a930370120c3b9c7e3856f0d8f3b | CN=DigiCert RSA4096 Root G5,O=DigiCert, Inc.,C=US   |
| d947432abde7b7fa90fc2e6b59101b1280e0e1c7e4e40fa3c6887fff57a7f4cf | CN=GTS Root R1,O=Google Trust Services LLC, C=US  |
| 40f6af0346a99aa1cd1d555a4e9cce62c7f9634603ee406615833dc8c8d00367 | CN=emSign Root CA - G1,O=eMudhra Technologies Limited, OU=emSign PKI, C=IN                                  |
| cb3ccbb76031e5e0138f8dd39a23f9de47ffc35e43c1144cea27d46a5ab1cb5f | CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc, C=US   |
| 209e956af04df3996507c887d356230d6eb49fdbdd2d8a058ff50b8f80f690aa | CN=Australian Defence Public Root CA, OU=CAs,OU=PKI,OU=DoD,O=GOV,C=AU                                       |
| c57a3acbe8c06ba1988a83485bf326f2448775379849de01ca43571af357e74b | CN=Visa Information Delivery Root CA, OU=Visa International Service Association, O=VISA,C=US                |
| 945bbc825ea554f489d1fd51a73ddf2ea624ac7019a05205225c22a78ccfa8b4 | CN=Trustwave Global ECC P256 Certification Authority, O=Trustwave Holdings, Inc.,L=Chicago,ST=Illinois,C=US |
| 7a77c6c61eeeb9aa65c4ea410d65d895b26a81123283009db104b48de80b2479 | CN=OATI WebCARES Root CA, O=Open Access Technology International Inc, L=Minneapolis,ST=MN,C=US              |
| 3fd4be8baad2f26e1bde06c7584bb720dd1a972d111f5a4999bc44b08fb4960d | CN=Microsoft ECC TS Root Certificate Authority 2018,O=Microsoft Corporation, L=Redmond,ST=Washington,C=US   |
| 91e2f5788d5810eba7ba58737de1548a8ecacd014598bc0b143e041b17052552 | CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center, O=T-Systems Enterprise Services GmbH, C=DE       |
| 9ee289cc39971c15e94beb65142d360b5873feb970de1f9fda53ac26d10b25c6 | CN=IT Application Root CA, O=Cisco,OU=Pollux  |
| bec94911c2955676db6c0a550986d76e3ba005667c442c9762b4fbb773de228c | CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4   |
| 70a73f7f376b60074248904534b11482d5bf0e698ecc498df52577ebf2e93b9a | CN=AffirmTrust Premium, O=AffirmTrust,C=US  |

| Huellas  | Asunto   |
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| fd73dad31c644ff1b43bef0ccdda96710b9cd9875eca7e31707af3e96d522bbd | CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center, O=T-Systems Enterprise Services GmbH, C=DE  |
| 97552015f5ddfc3c8788c006944555408894450084f100867086bc1a2bb58dc8 | CN=Trustwave Global Certification Authority, O=Trustwave Holdings\, Inc.,L=Chicago,ST=Illinois,C=US    |
| 552f7bdcf1a7af9e6ce672017f4f12abf77240c78e761ac203d1d9d20ac89988 | CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc, C=US                                   |
| 41c923866ab4cad6b7ad578081582e020797a6cbdf4fff78ce8396b38937d7f5 | CN=OISTE WISEKey Global Root GA CA, OU=OISTE Foundation Endorsed, OU=Copyright (c) 2005,O=WISEKey,C=CH |
| cecddc905099d8dadfc5b1d209b737cbe2c18cfb2c10c0ff0bcf0d3286fc1aa2 | CN=XRamp Global Certification Authority, O=XRamp Security Services Inc, OU=www.xrampsecurity.com,C=US  |
| e35d28419ed02025cfa69038cd623962458da5c695fbdea3c22b0bfb25897092 | CN=Amazon Root CA 4,O=Amazon,C=US  |
| 4be8b5a1c76c6aead0611918fccf9dbd398b67fb12294758bdf994d0f9682f60 | CN=ANCERT Certificados Notariales V2,O=Agencia Notarial de Certificacion S.L.U. - CIF B83395988,C=ES   |
| e7e12793643f18bee5b8e53ab5803bb3d59d8e63d14ce6346c004b0dfa34fecc | CN=Raíz de Cisco CA 2099,O=Cisco   |
| d3d607a9ff24a19523b6da9d2c649446f8788cb96d9fd130972e120c13677730 | 2.5.4.5=NTRCZ-26439395,CN=.CA Root CA/RSA,O=První certifikační autorita, a.s.,C=CZ                     |
| 2cabeafe37d06ca22aba7391c0033d25982952c453647349763a3ab5ad6ccf69 | CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6  |
| dd6936fe21f8f077c123a1a521c12224f72255b73e03a7260693e8a24b0fa389 | CN=TeliaSonera Root CA v1,O=TeliaSonera  |
| 4b009c1034494f9ab56bba3ba1d62731fc4d20d8955adcec10a925607261e338 | CN=SecureSign Root CA14,O=Cybertrust Japan Co.\, Ltd.,C=JP   |
| bc4d809b15189d78db3e1d8cf4f9726a795da1643ca5f1358e1ddb0edc0d7eb3 | CN=emSign ECC Root CA - C3,O=eMudhra Inc, OU=emSign PKI, C=US  |
| e59aaa816009c22bff5b25bad37df306f049797c1f81d85ab089e657bd8f0044 | CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH, C=DE  |
| 0a81ec5a929777f145904af38d5d509f66b5e2c58fcd531058b0e17f3f0b41b  | CN=AffirmTrust Networking, O=AffirmTrust,C=US  |
| 5cc3d78e4e1d5e45547a04e6873e64f90cf9536d1ccc2ef800f355c4c5fd70fd | CN=CFCA EV ROOT, O=China Financial Certification Authority, C=CN                                       |
| 69729b8e15a86efc177a57afb7171dfc64add28c2fca8cf1507e34453ccb1470 | CN=ISRG Root X2,O=Internet Security Research Group, C=US   |
| dd6c44b39401b053dbe61120748bbb0f6056007665c168e5c286750edc8df129 | CN=Entrust 4K TLS CA raíz - 2022,O=Entrust\, Inc.,C=US   |
| b676f2eddae8775cd36cb0f63cd1d4603961f49e6265ba013a2f0307b6d0b804 | CN=Certum Trusted Network CA 2,OU=Certum Certification Authority, O=Unizeto Technologies S.A.,C=PL     |
| 8a71de6559336f426c26e53880d00d88a18da4c6a91f0dcb6194e206c5c96387 | CN=vTrus Root CA, O=iTrusChina Co.\,Ltd.,C=CN  |
| e23d4a036d7b70e9f595b1422079d2b91edfbb1fb651a0633eaa8a9dc5f80703 | CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK   |

| Huellas  | Asunto  |
|--|---|
| 88f438dcf8ffd1fa8f429115ffe5f82ae1e06e0c70c375faad717b34a49e7265 | CN=NAVER Global Root Certification Authority, O=NAVER BUSINESS PLATFORM Corp.,C=KR  |
| 420332ef876ebe78f2af5d28aaacde24aad0c10f8ffaac469efd7bd941929568 | CN=Entrust P384 TLS CA raíz - 2022,O=Entrust\, Inc.,C=US  |
| d8e0febc1db2e38d00940f37d27d41344d993e734b99d5656d9778d4d8143624 | CN=Certum CA, O=Unizeto Sp. z o.o.,C=PL   |
| c90f26f0fb1b4018b22227519b5ca2b53e2ca5b3be5cf18efe1bef47380c5383 | CN=Sectigo Public Server Authentication Root E46,O=Sectigo Limited, C=GB  |
| 97f654859cbde586fd90311e82ec7902c238cba0d6e529564c9c88f44895ec50 | CN=ACA ROOT, O=CONSEJO GENERAL DE LA ABOGACIA, 2.5.4.5=Q2863006I,C=ES   |
| 55903859c8c0c3ebb8759ece4e2557225ff5758bbd38ebd48276601e1bd58097 | CN=Trustwave Global ECC P384 Certification Authority, O=Trustwave Holdings\, Inc.,L=Chicago,ST=Illinois,C=US  |
| FB8FEC759169B9106B1E511644C618C51304373f6c0643088d8beffd1b997599 | CN=ANF Secure Server Root CA, OU=ANF CA Raiz, O=ANF Autoridad de Certificacion, C=ES,2.5.4.5=G63287510  |
| 3c5f81fea5fab82c64bfa2eaecafcd8e077fc8620a7cae537163df36edbf378  | 1.2.840.113549.1.9.1=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU   |
| 2e44102ab58cb85419451c8e19d9acf3662cafbc614b6a53960a30f7d0e2eb41 | CN=TunTrust Root CA, O=Agence Nationale de Certification Electronique, C=TN   |
| 73c176434f1bc6d5adf45b0e76e727287c8de57616c1e6e6141a2b2cbc7d8e4c | CN=Entrust Root Certification Authority, OU=(c) 2006 Entrust\, Inc.,OU=www.entrust.net/CPS se incorpora por referencia, O=Entrust\, Inc.,C=US                 |
| 574df6931e278039667b720afdc1600fc27eb66dd3092979fb73856487212882 | CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY, C=CN   |
| 02ed0eb28c14da45165c566791700d6451d7fb56f0b2ab1d3b8eb070e56edff5 | CN=Entrust Root Certification Authority - EC1,OU=(c) 2012 Entrust\, Inc. - solo para uso autorizado, OU=See www.entrust.net/legal-terms,O=Entrust\, Inc.,C=US |
| 6b9c08e86eb0f767cfad65cd98b62149e5494a67f5845e7bd1ed019f27b86bd6 | CN=OISTE WISEKey Global Root GB CA, OU=OISTE Foundation Endorsed, O=WISEKey,C=CH  |
| 2399561127a57125de8cefea610ddf2fa078b5c8067f4e828290bfb860e84b3c | CN=VeriSign Universal Root Certification Authority, OU=(c) 2008 VeriSign\, Inc. - Solo para uso autorizado, OU=VeriSign Trust Network, O=VeriSign\, Inc.,C=US |
| 1501f89c5c4dcf36cf588a17c9fd7cfceb9ee01e8729be355e25de80eb6284b4 | C=ES,O=EDICOM,CN=Raíz CAEDICOM  |
| 81a9088ea59fb364c548a6f85559099b6f0405efbf18e5324ec9f457ba00112f | C=DE,O=Atos,CN=Atos TrustedRoot CA RSA TLS 2021   |
| c741f70f4b2a8d88bf2e71c14122ef53ef10eba0cfa5e64cfa20f418853073e0 | CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation, C=US  |
| 063e4afac491dfd332f3089b8542e94617d893d7fe944e10a7937ee29d9693c0 | CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,2.5.4.5=A82743287,L=Madrid (ver dirección actual en www.camerfirma.com/address),C=EU                 |

| Huellas   | Asunto   |
|---|--|
| 50df022dfa77185b4032a19196cb9840e29a87298830c5962d23f9b0a07dd5e   | CN=Raíz privada interna, O=Cisco,OU=Corvus   |
| 1e51942b84fd467bf77d1c89da241c04254dc8f3ef4c22451fe7a89978bdcd4f  | CN=ePKI Root Certification Authority - G2,O=Chunghwa Telecom Co., Ltd.,C=TW  |
| 4fa3126d8d3a11d1c4855a4f807cbad6cf919d3a5a88b03bea2c6372d93c40c9  | CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE   |
| 2605875afcc176b2d66dd66a995d7f8d5ebb86ce120d0e7e9e7c6ef294a27d4c  | C=IL,O=ComSign Ltd.,CN=ComSign CA raíz global  |
| 4348a0e9444c78cb265e058d5e8944b4d84f9662bd26db257f8934a443c70161  | CN=DigiCert Global Root CA, OU=www.digicert.com,O=DigiCert Inc, C=US   |
| 5d56499be4d2e08bcfcad08a3e38723d50503bde706948e42f55603019e528ae  | CN=IdenTrust Raíz comercial CA 1,O=IdenTrust,C=US  |
| d7ba3f4ff8ad05633451470dda3378a3491b90005e5c687d2b68d53647cfd66   | CN=Halcom Root Certificate Authority, 2.5.4.97=VATSI-43353126,O=Halcom d.d.,C=SI   |
| e778f0f095fe843729cd1a0082179e5314a9c291442805e1fb1d8fb6b8886c3a  | CN=SecureSign Root CA15,O=Cybertrust Japan Co., Ltd.,C=JP  |
| 5ab4fcd8b180b5b6af0d262a2375a2c77d25602015d96648756611e2e78c53ad3 | CN=Fina Root CA, O=Financijska agencija, C=HR  |
| 229CCC196D32C98421CC119E78486EEBEF603AECDD525C6B88B47ABB740692B96 | CN=Cisco RXC-R2,O=Cisco Systems, C=US  |
| 604d32d036895aed3bfefaeb727c009ec0f2b3cdfa42a1c71730e6a72c3be9d4  | CN=MULTICERT Root Certification Authority 01,O=MULTICERT - Serviços de Certificação Electrónica S.A.,C=PT  |
| 52f0e1c4e58ec629291b60317f074671b85d7ea80d5b07273463534b32b40234  | CN=COMODO RSA Certification Authority, O=COMODO CA Limited, L=Salford,ST=Greater Manchester, C=GB  |
| 43df5774b03e7fef5fe40d931a7bedf1bb2e6b42738c4e6d3841103d3aa7f339  | CN=Entrust Root Certification Authority - G2,OU=(c) 2009 Entrust\, Inc. - solo para uso autorizado, OU=See www.entrust.net/legal-terms,O=Entrust\, Inc.,C=US |
| 705eaafc3ff488030017d59832603eefad514171b583808675f45c190e6378f8  | CN=CA raíz de Cisco M1,O=Cisco   |
| 62dd0be9b9f50a163ea0f8e75c053b1eca57ea55c8688f647c6881f2c8357b95  | CN=SwissSign Gold CA - G2,O=SwissSign AG, C=CH   |
| 0376ab1d54c5f9803ce4b2e201a0ee7eef7b57b636e8a93c9b8d4860c96f5fa7  | CN=AffirmTrust Commercial, O=AffirmTrust,C=US  |
| 02bdf96e2a45dd9bf18fc7e1dbdf21a0379ba3c9c2610344cfd8d606fec1ed81  | CN=CommScope Public Trust RSA Root-01,O=CommScope,C=US   |
| caca93b9d23d2b6fa76e8b8471931e0df3ec6f63af3cddb936c41954a1872326  | CN=Microsoft ECC Product Root Certificate Authority 2018,O=Microsoft Corporation, L=Redmond,ST=Washington,C=US   |
| dec669e322e07cd7c60a56904bf50c29fa1e75071723fc103577e27b226968d5  | CN=TRS Bundle Root CA, O=Cisco   |
| 1ba5b2aa8c65401a82960118f80bec4f62304d83cec4713a19c39c011ea46db4  | CN=Amazon Root CA 2,O=Amazon,C=US  |
| c1468cf2254e6004b24696aba209d1a30ba6e2dff68a9a4e32c6ab414f90c8d9  | CN=DigiCert ECC P384 Raíz G5,O=DigiCert\, Inc.,C=US  |
| 937ef8f12276b3c7a3f58e345d09a6eff01f862f8d2794441cd84d511825fa0c  | CN=Entrust P384 EV TLS Root CA - 2022,O=Entrust\, Inc.,C=US  |



| Huellas  | Asunto   |
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| 578af4ded0853f4e5998db4aeaf9cbea8d945f60b620a38d1a3c13b2bc7ba8e1 | CN=Telekom Security TLS ECC Root 2020,O=Deutsche Telekom Security GmbH, C=DE   |
| a1339d33281a0b56e557d3d32b1ce7f9367eb094bd5fa72a7e5004c8ded7cafe | CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL  |
| 34ff2a4409dc1383e9f8966e8adfe5719eba373fd0ad5e2f49f90ee07cf5d4c1 | CN=VRK Gov. Root CA - G2,OU=Varmennepalvelut,OU=Servicios de la Autoridad de Certificación, O=Vaestorekisterikeskus CA, C=FI   |
| d43af9b35473755c9684fc06d7d8cb70ee5c28e773fb294eb41ee71722924d24 | CN=UCA Extended Validation Root, O=UniTrust,C=CN   |
| 8ac552ad577e37ad2c6808d72aa331d6a96b4b3febff34ce9bc0578e08055ec3 | CN=A-Trust-Root-07,OU=A-Trust-Root-07,O=A-Trust Ges. f. Sicherheitssysteme im elektr. Datenverkehr GmbH, C=AT  |
| 6ec6614e9a8efd47d6318ffdf0bf65b493a141f77c38d0b319be1bbbc053dd2  | CN=Raíz del gobierno suizo CA I, OU=Autoridades de certificación, OU=Servicios,O=Las autoridades federales de la Confederación Suiza, C=CH                                     |
| 18ce6cfe7bf14e60b2e347b8dfe868cb31d02ebb3ada271569f50343b46db3a4 | CN=Amazon Root CA 3,O=Amazon,C=US  |
| 8327bc8c9d69947b3de3c27511537267f59c21b9fa7b613fafbccd53b7024000 | CN=Cisco Root CA 2048,O=Cisco Systems  |
| 59769007f7685d0fcd50872f9f95d5755a5b2b457d81f3692b610a98672f0e1b | CN=TWCA Global Root CA, OU=Root CA, O=TAIWAN-CA,C=TW   |
| 1cf341ae35341ac3ae1dc68d5b10dc0c9dc1307656f75fd92ca2c68489d52e9a | CN=MOIS SSL Raíz CA, O=Ministerio del Interior y Seguridad, C=KR   |
| bf0feefb9e3a581ad5f9e9db7589985743d261085c4d314f6f5d7259aa421612 | CN=SecureSign RootCA11,O=Japan Certification Services\, Inc.,C=JP  |
| 04048028bf1f2864d48f9ad4d83294366a828856553f3b14303f90147f5d40ef | CN=Autoridad de Certificación Firmaprofesional CIF A62634068,C=ES  |
| 873f4685fa7f56362525e6d36bcd7f16fc24951f264e47e1b954f4908cdca13  | CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center, O=E-Tugra EBG A.S.,L=Ankara,C=TR   |
| e3b6a2db2ed7ce48842f7ac53241c7b71d54144bfb40c11f3f1d0b42f5eea12d | CN=Certigna,O=Dhimyotis,C=FR   |
| 18f1fc7f205df8adddeb7fe007dd57e3af375a9c4d8d73546bf4f1fed1e18d35 | CN=QuoVadis Root CA 3,O=QuoVadis Limited, C=BM   |
| 46edc3689046d53a453fb3104ab80dcaec658b2660ea1629dd7e867990648716 | CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu SM, O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK, L=Gebze - Kocaeli, C=TR |
| be6c4da2bbb9ba59b6f3939768374246c3c005993fa98f020d1dedbed48a81d5 | CN=SwissSign Silver CA - G2,O=SwissSign AG, C=CH   |
| 30d0895a9a448a262091635522d1f52010b5867acae12c78ef958fd4f4389f2f | CN=IdenTrust Sector Root CA 1,O=IdenTrust,C=US   |
| 16af57a9f676b0ab126095aa5ebadef22ab31119d644ac95cd4b93dbf3f26aeb | CN=Baltimore CyberTrust Root, OU=CyberTrust,O=Baltimore,C=IE   |
| a7dedf5a842167dd12fdaa0f2080e73295b8b8bea71b2094ea0950945a482fc1 | CN=AffirmTrust 4K TLS CA raíz - 2022,O=AffirmTrust,C=CA  |
| EEC5496B988CE98625B934092EEC2908bed0B0F316C2D4730C84EAF1F3D34881 | CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH, C=DE  |

| Huellas   | Asunto  |
|---|---|
| df545bf919a2439c36983b54cdcf903dfa4f37d3996d8d84b4c31eec6f3c163e  | CN=Microsoft Root Certificate Authority 2010,O=Microsoft Corporation, L=Redmond,ST=Washington,C=US  |
| 193144f431e0fddb740717d4de926a571133884b4360d30e272913cbe660ce41  | CN=SwissSign RSA TLS Raíz CA 2022 - 1,O=SwissSign AG, C=CH  |
| 55926084ec963a64b96e2abe01ce0ba86a64fbfbcc7aab5afc155b37fd76066   | CN=Actalis Authentication Root CA, O=Actalis S.p.A./03358520967,L=Milan,C=IT  |
| 6c61dac3a2def031506be036d2a6fe401994fbd13df9c8d466599274c446ec98  | CN=NetLock Arany (Clase Oro) Főtanúsítvány,OU=Tanúsítványkiadók (Servicios de Certificación),O=NetLock Kft.,L=Budapest,C=HU   |
| 7431e5f4c3c1ce4690774f0b61e05440883ba9a01ed00ba6abd7806ed3b118cf  | CN=DigiCert High Assurance EV Root CA, OU=www.digicert.com,O=DigiCert Inc, C=US   |
| b2fae53e14ccd7ab9212064701ae279c1d8988facb775fa8a008914e663988a8  | C=DE,O=Atos,CN=Atos TrustedRoot Root CA ECC TLS 2021  |
| c3846bf24b9e93ca64274c0ec67c1ecc5e024ffcacd2d74019350e81fe546ae4  | OU=Go Daddy Class 2 Certification Authority, O=The Go Daddy Group\, Inc.,C=US   |
| ac7f7862e685c7a7d9826a58ea32d183d4893fcc8f8fd6d900c9769a987e77f0  | CN=PostSignum Root QCA 4,O=Česká pošta\, s.p.,2.5.4.97=NTRCZ-47114983,C=CZ  |
| 49e7a442acf0ea6287050054b52564b650e4f49e42e348d6aa38e039e957b1c1  | CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH, C=DE  |
| d2358cf65519d8e74cb71ed5a4b3f60db4fad1baf09d5c4ae5e8c7edb4448aa2  | 1.2.840.113549.1.9.1=ciscosb-certadmin@cisco.com,CN=Autoridad raíz de Cisco Small Business Provisioning 1,OU=Cisco Small Business Certificate Authority, O=Cisco Small Business, L=San José, ST=California,C=US |
| a736e303e6413c44e725704bf957933f1dd669f9c7e84ce701d72abb208471c8  | 1.2.840.113549.1.9.1=ciscosb-certadmin@cisco.com,CN=Cisco Small Business Provisioning Root Authority 2,OU=Cisco Small Business Certificate Authority, O=Cisco Small Business, L=San Jose, ST=California,C=US    |
| e793c9b02fd8aa13e21c31228accb08119643b749c898964b1746d46c3d4cbd2  | CN=USERTrust RSA Certification Authority, O=The USERTRUST Network, L=Jersey City, ST=New Jersey, C=US   |
| 8d25cd97229dbf70356bda4eb3cc734031e24cf00fafcfd32dc76eb5841c7ea8  | CN=GTS Root R2,O=Google Trust Services LLC, C=US  |
| 4ff460d54b9c86dabfbcfc5712e0400d2bed3fbc4d4fbd4aa86e06adcd2a9ad7a | CN=USERTrust ECC Certification Authority, O=The USERTRUST Network, L=Jersey City, ST=New Jersey, C=US   |
| 568d6905a2c88708a4b3025190edcfedb1974a606a13c6e5290fcb2ae63edab5  | CN=Starfield Services Root Certificate Authority - G2,O=Starfield Technologies\, Inc.,L=Scottsdale,ST=Arizona,C=US  |
| 96BCEC06264976f37460779acf28c5a7cfe8a3c0aae11a8ffcee05c0bddf08c6  | CN=ISRG Root X1,O=Internet Security Research Group, C=US  |
| d649c40830aab9869f2536f933c4050746659b31dfa735405e4f7ad447c20d5   | CN=Raíz de Cisco Basic Assurance CA 2099,O=Cisco  |
| 31ad6648f8104138c738f39ea4320133393e3a18cc02296ef97c2ac9ef6731d0  | CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc, C=US   |

| Huellas   | Asunto   |
|---|--|
| 0da80cc491638f8c756396e0afac16079829fa06697bfe6d7ee93a6a0c9e212d  | CN=IT Private Root CA, O=Cisco,OU=Phoenix                            |
| 3a6308acd77a5a33d8da04d669fa00f8e5ae153f259087678b76bf1654b30a06  | CN=CA raíz de Cisco ECC, O=Cisco                                     |
| f1b52392c4a4ec2a8709b1308304a911ffcec2ce0b63a94f9e969164567c4925  | CN=CA raíz de licencias de Cisco, O=Cisco                            |
| cd85167b3935e27bcc3b0f5fa24c8457882d0bb994f88269a7f72829d957eae9  | CN=CA raíz de Cisco M2,O=Cisco                                       |
| b085d70b964f191a73e4af0d54ae7a0e07aafdaf9b71dd0862138ab7325a24a2  | CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4            |
| 85a0dd7dd720adb7ff05f83d542b209dc7ff4528f7d677b18389fea5e5c49e86  | CN=QuoVadis Root CA 2,O=QuoVadis Limited, C=BM                       |
| 9a114025197c5bb95d94e63d55cd43790847b646b23cdf11ada4a00eff15fb48  | CN=Buypass Class 2 Root CA, O=Buypass AS-983163327,C=NO              |
| 34d8a73ee208d9bcdb0d956520934b4e40e69482596e8b6f73c8426b010a6f48  | CN=GTS Root R3,O=Google Trust Services LLC, C=US                     |
| 8ecde6884f3d87b1125ba31ac3fcb13d7016de7f57cc904fe1cb97c6ae98196e  | CN=Amazon Root CA 1,O=Amazon,C=US                                    |
| 349dfa4058c5e263123b398ae795573c4e1313c83fe68f93556cd5e8031b3c7d  | CN=GTS Root R4,O=Google Trust Services LLC, C=US                     |
| 41dfd9c52d71f6a2c7f1083aa8f80153ff6ec23349d2599de347adbe423504f3  | CN=CA raíz interna del cliente, O=Cisco,OU=Arcturus                  |
| d947432abde7b7fa90fc2e6b59101b1280e0e1c7e4e40fa3c6887fff57a7f4cf  | CN=GTS Root R1,O=Google Trust Services LLC, C=US                     |
| cb3ccbb76031e5e0138f8dd39a23f9de47ffc35e43c1144cea27d46a5ab1cb5f  | CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc, C=US  |
| 9ee289cc39971c15e94beb65142d360b5873feb970de1f9fda53ac26d10b25c6  | CN=IT Application Root CA, O=Cisco,OU=Pollux                         |
| e35d28419ed02025cfa69038cd623962458da5c695fbdea3c22b0bfb25897092  | CN=Amazon Root CA 4,O=Amazon,C=US                                    |
| e7e12793643f18bee5b8e53ab5803bb3d59d8e63d14ce6346c004b0dfa34fecc  | CN=Raíz de Cisco CA 2099,O=Cisco                                     |
| 69729b8e15a86efc177a57afb7171dfc64add28c2fca8cf1507e34453ccb1470  | CN=ISRG Root X2,O=Internet Security Research Group, C=US             |
| 50df022dfa477185b4032a19196cb9840e29a87298830c5962d23f9b0a07dd5e  | CN=Raíz privada interna, O=Cisco,OU=Corvus                           |
| 4348a0e9444c78cb265e058d5e8944b4d84f9662bd26db257f8934a443c70161  | CN=DigiCert Global Root CA, OU=www.digicert.com,O=DigiCert Inc, C=US |
| 5d56499be4d2e08bcfcad08a3e38723d50503bde706948e42f55603019e528ae  | CN=IdenTrust Raíz comercial CA 1,O=IdenTrust,C=US                    |
| 229CCC196D32C98421CC119E78486EEBEF603AECDD525C6B88B47ABB740692B96 | CN=Cisco RXC-R2,O=Cisco Systems, C=US                                |
| 705eaafc3ff488030017d59832603eefad514171b583808675f45c190e6378f8  | CN=CA raíz de Cisco M1,O=Cisco                                       |
| dec669e322e07cd7c60a56904bf50c29fa1e75071723fc103577e27b226968d5  | CN=TRS Bundle Root CA, O=Cisco                                       |
| 1ba5b2aa8c65401a82960118f80bec4f62304d83cec4713a19c39c011ea46db4  | CN=Amazon Root CA 2,O=Amazon,C=US                                    |
| 18ce6cfe7bf14e60b2e347b8dfe868cb31d02ebb3ada271569f50343b46db3a4  | CN=Amazon Root CA 3,O=Amazon,C=US                                    |
| 8327bc8c9d69947b3de3c27511537267f59c21b9fa7b613fafbccd53b7024000  | CN=Cisco Root CA 2048,O=Cisco Systems                                |
| 16af57a9f676b0ab126095aa5ebadef22ab31119d644ac95cd4b93dbf3f26aeb  | CN=Baltimore CyberTrust Root, OU=CyberTrust,O=Baltimore,C=IE         |

| Huellas  | Asunto  |
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| d2358cf65519d8e74cb71ed5a4b3f60db4fad1baf09d5c4ae5e8c7edb4448aa2 | 1.2.840.113549.1.9.1=ciscosb-certadmin@cisco.com,CN=Autoridad raíz de Cisco Small Business Provisioning 1,OU=Cisco Small Business Certificate Authority, O=Cisco Small Business, L=San José, ST=California,C=US |
| a736e303e6413c44e725704bf957933f1dd669f9c7e84ce701d72abb208471c8 | 1.2.840.113549.1.9.1=ciscosb-certadmin@cisco.com,CN=Cisco Small Business Provisioning Root Authority 2,OU=Cisco Small Business Certificate Authority, O=Cisco Small Business, L=San Jose, ST=California,C=US    |