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OpenPGP Example Keys and Certificates

Abstract

The OpenPGP development community benefits from sharing samples of signed or encrypted data. This document facilitates such collaboration by defining a small set of OpenPGP certificates and keys for use when generating such samples.

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1. Introduction

The OpenPGP development community, in particular the e-mail development community, benefits from sharing samples of signed and/or encrypted data. Often the exact key material used does not matter because the properties being tested pertain to implementation correctness, completeness or interoperability of the overall system. However, without access to the relevant secret key material, a sample is useless.

This document defines a small set of OpenPGP certificates and secret keys for use when generating or operating on such samples.

Samples are provided for two "personas", Alice and Bob. Alice uses keys based on the Ed25519 elliptic curve algorithm, but Bob is a bit behind the times and has a 3072-bit RSA key.

1.1. Requirements Language

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in BCP 14 [[RFC2119](#)] [[RFC8174](#)] when, and only when, they appear in all capitals, as shown here.

1.2. Terminology

This document makes use of the terminology section from [[I-D.draft-dkg-openpgp-abuse-resistant-keystore-04](#)].

2. Alice's Ed25519 Samples

Properties:

- *OpenPGP Version: 4
- *Fingerprint: EB85 BB5F A33A 75E1 5E94 4E63 F231 550C 4F47 E38E
- *Primary key algorithm: Ed25519 [[I-D.ietf-openpgp-rfc4880bis](#)]
- *Primary key creation date: Tue Jan 22 11:56:25 GMT 2019
- *Primary key capabilities: certify, sign
- *User ID: Alice Lovelace <alice@openpgp.example>
- *Symmetric algorithm preferences: AES-256, AES-192, AES-128, 3DES
- *Hash algorithm preferences: SHA512, SHA384, SHA256, SHA224, SHA1
- *Compression algorithm preferences: ZLIB, BZip2, ZIP
- *Subkey algorithm: Curve25519
- *Subkey capabilities: encrypt
- *Subkey creation date: Tue Jan 22 11:56:25 GMT 2019
- *There are no expiration dates in the entire certificate
- *The secret key material is in the clear (no password)

*All OpenPGP signature packets contain a hashed Issuer Fingerprint subpacket (see [[I-D.ietf-openpgp-rfc4880bis](https://www.ietf.org/rfc/rfc4880bis)])

2.1. Alice's OpenPGP Certificate

```
-----BEGIN PGP PUBLIC KEY BLOCK-----  
Comment: Alice's OpenPGP certificate  
Comment: https://www.ietf.org/id/draft-bre-openpgp-samples-01.html  
  
mDMEXEcE6RYJKwYBBAHaRw8BAQdArjWwk3FAqyiFbFBKT4TzXcVBqPTB3gmz1C/U  
b701u120JkFsaWNlIExvdmVsYWNlIDxhbGljZUBvcGVucGdwLmV4YW1wbGU+iJAE  
ExYIADgCGwMFCwkIBwIGFQoJCAAsCBBYCAwECHgECF4AWIQRhbtfozp14V6UTmPy  
MVUMT0fjjgUCXawfOgAKCRDyMVUMT0fjjukrAPoDnHBSog0msH0sd9qGsiZpgRn0  
dypvbm+QtXZqth9rvwD9HcDC0tC+PHAs070Th1S1TC9RiJsvawAfCPaQZoed8gK4  
OARcRwTpEgorBgEEAZdVAQUBAQdAQv8GIa2rSTzggqXCpDDYMiKRvitCsY203x3s  
E9+eviIDAQGHihgEGBYIACAWIQRhbtfozp14V6UTmPyMVUMT0fjjgUCXEcE6QIb  
DAAKCRDyMVUMT0fjjlnQAQDFHUs6TIcxrNTtEZFjUFm1M0PJ1Dng/cDW4xN80fsn  
0QEA22Kr7VkcjeAEC08VSTeV+QFsmz55/lntWkwYWhmvOgE=  
=iIGO  
-----END PGP PUBLIC KEY BLOCK-----
```

2.2. Alice's OpenPGP Secret Key Material

```
-----BEGIN PGP PRIVATE KEY BLOCK-----  
Comment: Alice's OpenPGP Transferable Secret Key  
Comment: https://www.ietf.org/id/draft-bre-openpgp-samples-01.html  
  
lFgEXEcE6RYJKwYBBAHaRw8BAQdArjWwk3FAqyiFbFBKT4TzXcVBqPTB3gmz1C/U  
b701u10AAP9XBew6lzGOLx7zHH9AsUDUTb2pggYGMzd0P3u1J2AfvQ4RtCZBbGlj  
ZSBMb3ZlbGFjZSA8YXpY2VAb3B1bnBncC5leGFtcGxlPoiQBBMWCAA4AhsDBQsJ  
CAccBhUKCQgLAQWAgMBAh4BAheAFiEE64W7X6M6deFe1E5j8jFVDE9H444FA121  
nzoACgkQ8jFVDE9H447pKwD6A5xwUqIDprBzrHfahImaYEZzncqb25vkLV2arYf  
a78A/R3AwtLQvjxwLDuzk4dUtUwvUYibL2sAHwj2kGaHnfICnF0EXEcE6RIKkwYB  
BAGXVQEFAQEHL/BiGtq0k84Km1wqQw2DIikVYrQrMttN8d7BPfnr4iAwEIBwAA  
/3/xFPG6U17rhTuq+07gmEvaFYKfxRB6sgAYiW6TMTpQEK6IeAQYFggAIBYhBOuF  
u1+jOnXhXpROY/IxVQxPR+00BQJcRwTpAhsMAAoJEPixVQxPR+00WdABAMudSzpM  
hzGs100RkWNQWbUzQ8nU0eD9wNbjE3zR+yfRAQDbYqvtWQKN4AQLTxVJN5X5Awyb  
Pnn+We1aTBhaGa86AQ==  
=n80M  
-----END PGP PRIVATE KEY BLOCK-----
```

2.3. Alice's Revocation Certificate

```
-----BEGIN PGP PUBLIC KEY BLOCK-----  
Comment: Alice's revocation certificate  
Comment: https://www.ietf.org/id/draft-bre-openpgp-samples-01.html  
  
iHgEIBYIACAWIQTrhbtfozp14V6UTmPyMVUMT0fjjgUCXawkOwIdAAAKCRDyMVUM  
T0fjjoB1AQDA9ukZFKRFGCooVcVoDVmxTaHLUXlIig9TPh2f7zzI9KgD/SLNXU0aH  
O6TozOS7C9lwIHwwdHdAxgf5BzuhLT9iuAM=  
=Tm8h  
-----END PGP PUBLIC KEY BLOCK-----
```

3. Bob's RSA-3072 Samples

Properties:

```
*OpenPGP Version: 4  
  
*Fingerprint: D1A6 6E1A 23B1 82C9 980F 788C FBFC C82A 015E 7330  
  
*Primary key algorithm: RSA 3072 [RFC4880]  
  
*Primary key creation date: Tue Oct 15 10:18:26 GMT 2019  
  
*Primary key capabilities: certify, sign  
  
*User ID: Bob Babbage <bob@openpgp.example>  
  
*Symmetric algorithm preferences: AES-256, AES-192, AES-128, 3DES  
  
*Hash algorithm preferences: SHA512, SHA384, SHA256, SHA224, SHA1  
  
*Compression algorithm preferences: ZLIB, BZip2, ZIP  
  
*Subkey algorithm: RSA 3072  
  
*Subkey capabilities: encrypt  
  
*Subkey creation date: Tue Oct 15 10:18:26 GMT 2019  
  
*There are no expiration dates in the entire certificate  
  
*The secret key material is in the clear (no password)  
  
*All OpenPGP signature packets contain a hashed Issuer Fingerprint  
subpacket (see [I-D.ietf-openpgp-rfc4880bis])
```

3.1. Bob's OpenPGP Certificate

-----BEGIN PGP PUBLIC KEY BLOCK-----

Comment: Bob's OpenPGP certificate

Comment: <https://www.ietf.org/id/draft-bre-openpgp-samples-01.html>

mQGNBF2lnPIBDAC5cL9PQoQLTMuhjbYvb4Ncuuo0bfmgPRFywX53jPhoFf4Zg6mv
/se0XpgecTd0cVttfzC8ycIKrt3aQTiw0G/ctaR4Bk/t6ayNFfdUNxHWk4WCKzdz
/56fW200F23qIRd8UUJp5IiIN4RDdRctdhVQIAuzvp2oVy/LaS2kxQoKvph/5pQ/
5whqsyroEWDJoSV0yOb25B/iwk/pLUFoyhDG9bj0kIzDxrEqw+7Ba8nocQlecMF3
X5KMN5kp2zraLv9dlBBpWw43XktjcCZgMy20SouraVma8Je/ECwUWYUiaZxLIIMv
9CurE0txUw6N3Rd0tLmYZS9uEnn5y1UkF88o8Nku890uk6BrewFzJyLax5wRZ4F0
qV/yq36UWQ0JB/AUGhHVPdFf6p16eaxBwT5GXvbBUibt8YI2og5RsgTwtXfU7eb
SGXr15ZMpbA6mbfhd0R8aPxfmDwiI0hBufhMCvUhh1sApMKVZnvIff9/0Dca3wb
vLIwa3T4CyshfT0AEQEAAbQhQm9iIEJhYmJhZ2UgPGJvYkVvcGVucGdwLmV4YW1w
bGU+iQH0BBMBCgA4AhsDBQsJCACCBhUKCQgLAGQWAgMBAh4BAheAFiEE0aZuGiOx
gsmYD3iM+/zIKgFeczAFA12lnvoACgkQ+/zIKgFeczBvbAv/VNk90a6hG80d9xTz
XxH5YRFUSGFIA1yJPIVOnKqhMwps2U+sWE3urL+MvjyQR1yRV8oY9IOhQ5Esm6D0
ZYrTnE7qVETm1ajIAP20FChEc55uH88x/anpP0X0JY7S8jbn3naC9qad75BrZ+3g
9EBUWiy5p8TykP05WsnSxNRt7vFKLfEB4nGkehpwHXOVF0CRNwYle42bg8lpmdXF
DcZCzi+qEbfmTQzkaqyzS3nCh3IAqq6Y0kBuakLm2tSNU01ZbD+OHYQNZ5Jix7c
ZUzs6Xh4+I55NRWl5smrLq66y0QoFPy9jot/Qxikx/wp3MsAzeGaZSEPC0fHp5G1
6r1GbxQ3v18/usUV7w+TMEMljgwd5x8P0R6HC8EaCdFvNUBCPi/Gv+egLjsIbPJZ
ZEroiE40e6/UoCiQtlpQB5exPJYSd1Q1txCwueih99PHepsDhmUQKiACszNU+RRo
zAYau2VdHqnRJ7QYdxHDiH49jPK4NTMyb/tJh2TiIwcmSipGuQGNBF2lnPIBDADW
ML9cbGMrp12CtF9b2P6z9TTT74S8iyB0zaSvdGDQY/sUtZXRg21HwamXnn9sSXvI
DEIN0Q6A9QxdxqWdCHR0uW3ofneYXoG+zeKc4dC86wa1TR2q9vW+RMXS04uImA+
Uzula/6k1DogDf28qhCxmWg/i/m9g1c/0aApuDyKdQ1PXsHHNlgd/Dn6rrd5y2A0
baifV7wIhEJnvqgFXDN2RXGjLeCOHV4Q2WTYPg/S4k1nMXVDwZXrvIsA0YwIMgIT
86Rafp1qKlgnPnbiiLc1g9RY/iFaGN2b4Ir6GDohBQSFZW2+LXoPZuVE/wGlQ01rh
827KVZw41Xvqsge+wtnWlszscselGATyzq0K9LdHPdZGzR0ZYI2e8c+paLNDdVPL6
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qVC7KidNepdHbZjjXct8/Zo+Tec9JNbnYnQB/e9ExmDntm1HEsSEQzFwzj8sxH48A
EQEAAYkbtgQYAQoAIBYhBNGmbhojsYLJmA94jPv8yCoBXnMwBQJdpZzyAhsMAAoJ
EPv8yCoBXnMw6f8L/26C34dkjBfftZmJ5Bdzm8MtF670YneJ4TQMw7+41IL4rVcS
KhIhk/3Ud5knaRtP2ef1+5F66h9/RPQ0J5+tvBwhBAcUwSupKnUrVaZQanYmtSx
cVv2PL9+QEiNN3tzluhaW0//rACxJ+K/ZXQlIzwQVtpNhfGzAaMvV9zpf3u0k14i
tcv6alKY8+rLZv01wIIeRZLmU0tZDD5HtWDvUV7rIFI1WuoLb+KZgbYn30WjCPHV
dTrdZ2CqnZbG3SXw6awH9bzRLV9EXkbiMez0deCVdeo+wFFklh8/5VK2b0vk/+w
qMJxfpa1lHvJLobzOP9fvrswsr92MA2+k901WeISR7qEzcI0Fdg8AyFAEaxEK6Vy
jP7SXGLwvfisw340xuZr3qmx1Sufu4toH3XrB7QJN8XyqqbsGxUCBqWif9RSK4xj
zRTE56iPeiSJJ0IciMP9i2ldI+KgLylyeDvGoBj0HCL03gVaBe4ubVrj5Kjhx2PV
NEJd3XZRzaXZE2aAMQ==

=NXei

-----END PGP PUBLIC KEY BLOCK-----

3.2. Bob's OpenPGP Secret Key Material

-----BEGIN PGP PRIVATE KEY BLOCK-----

Comment: Bob's OpenPGP Transferable Secret Key

Comment: <https://www.ietf.org/id/draft-bre-openpgp-samples-01.html>

lQVYBF2lnPIBDAC5cL9PQoQLTMuhjbYvb4Ncuuo0bfmgPRFywX53jPhoFf4Zg6mv
/se0XpgecTd0cVttfzC8ycIKrt3aQTiw0G/ctaR4Bk/t6ayNFfdUNxHwk4WCKzdZ
/56fW200F23qIRd8UUJp5IILN4RDdRCtdhVQIAuzvp2oVy/LaS2kxQoKvph/5pQ/
5whqsyroEWDJoSV0yOb25B/iwk/pLUFoyhDG9bj0kIzDxrEqw+7Ba8nocQ1ecMF3
X5KMN5kp2zraLv9dlBBpWW43XktjcCZgMy20SouraVma8Je/ECwUWYuiAZxLILMv
9CurE0txUw6N3RdOtLmYZS9uEnn5y1UkF88o8Nku890uk6BrewFzJyLax5wRZ4F0
qV/yq36UWQ0JB/AUGhVHPdFf6p16eaxBwT5GXvbBUibtF8YI2og5RsgTwtXfU7eb
SGXr15ZMpbA6mbfhd0R8aPxfmDwiI0hBufhMCvUhh1sApMKVZnvIff9/0Dca3wb
vLIwa3T4CyshfT0AEQEAAQAL/RZqbJW2IqQDCnJi40zm++gPqBPiX1RhTWSjwxfM
cJKUZfzLj414rMKm6Jh1cwwGY9jekR0hB9WmwaakT8HtcIgrZNA1YzANGRCM4TLK
3VskxfSwKKna8l+s+mZglqbAjUg3wmFuf9Tj2xcUZYmyRm1DEmcN2ZzpvRtHgX7z
Wn1mAKU1SDJZSQks0zjUMNupcpcyJokdlkUg2+wBznBOTKzGMxVNC9b2g5/tMPUs
hGGWmF1UH+7AHMTaS6dlmr2ZBIyogdnfUqdNg5sZwsxSNrbglKP4sqe7X61uEAIQ
bd7rT3LonLbhkrj3I8wilUD8usIwt5IEcoHhd9HziqZjRcc1BUBkboUEoyedbDV4
i4qfsFZ6CEWoLuD5pW7dEp0M+WeuHX0164Rc+LnH6i1VQrpb10kl4q06ejIpIjBI
1t3GshTuu/mwGBBxs60KBX5g77mFQ91LCRj81SYq0sHRKBhUp4qM869VA+fD0BRP
fqPT0I9IH40a/A3jYJcg622GwQYA1LhnP208Waf6PkQsJ6kyr8ymY1yVh9VBE/g6
fRDYA+pkqKknw9wfH2Qho3ysAA+0mV0X8Hldg+Pc0Zs0e5pCavb0En8iFLvTA0Q2E
LR5rLue9ud7aFuKFU/VdcddY9Ww/vo4k5p/tVGp7F8RYCFn9rSjIwbfvVzi1q5Tx
+akoZbga+4qQ4WyzB/obdX6SCmi6BndcQ1QdjCCQU6gpYx0MddVERbIp9+2SXDyL
hpxjSyz+RGSzi/9UAshT4txP4+MZBgDfK3ZqtW+h2/eMRxkANq0JpxSjMyL0/FXN
WxzTDYewtHNYiAl0w1QZEP0ydZFty9IVzzNFQCIUCGjQ/nNyhw7adSgUK3+BXEx/
MyJPYY0BYuhLxLYcrfQ9nrhaVKxRJj25SVHj2ASsiwGJRZW4CC3uw400YxfKEvNC
mer/VxM3kg8qqGf9KuzJ1dVdAvjyx2Hz6jY2qWcyRQ6IMjwHyd43C4r3jxooYKUC
YnstRQyb/gCSKahveSEjo07CiXMr88UGALwzEr3npFAsPW3osGaFLj49y1oRe11E
he9gCHFm+fuzbXrWmdPjYU5/ZdqdojzDqfu4ThfnipknpVUM1o6MQqkjM896FHm8
zbKVFSMhEP6DPHSCexMfrrSgN03PdwHT06iBaIBBFqmGY01tmJ03SxvSpiBPON9P
NVvy/6UZFedTq8A07OUAx062YUSntT5pmK2vzs3SAZJmbFbMh+NN204TRI72G1qT
t5hcfkuv8hrmwPS/ZR6q312mKQ6w/1pq09qitCFCb2IqQmFiYmFnZSA8Ym9iQG9w
ZW5wZ3AuZXhhbXBsZT6JAc4EEwEKADgCGwMFCwkIBwIGFQoJCAAsCBBYCAwECHgEC
F4AWIQRpm4aI7GCyZgPeIz7/MgqAV5zMAUCXaWe+gAKCRD7/MgqAV5zMG9sC/9U
2T3RrEqEbw533FPNFeflhEVRIZ8gDXKM8hU6cqqEzCmzZT6xYTe6sv4y+PJBGXJFX
yhj0g6FDkSyboM5lit0cTupUR0bVqMgA/Y4UKERznm4fzzH9qek85c41jtLyNufe
doL2pp3vkGtn7eD0QFRaLLmnxPKQ/TlZKdLE1G3u8Uot8QHicaR6GnAdc5UXQJE3
BiV7jZuDyWmZ1cUNwJkKL6oRtp+ZND0QCrLNLecKHcgCqrpjSQG5oouba1I1Q6V1
sP44dhA1nkmLhtx1TOzpeHj4jnk1FaXmyasurrrI5CgU/L20i39DGKTH/A/cywDN
4ZplIQ9zR8enkbXquUZvFDe+Xz+6xRXtb5MwQyW0DB3nHw85HocLwRoIN9WdQEI+
L8a/56Au0whs81lkSuiITjR7r9SgKJC2WlAH17E81hJ3VDW3ELC56KH308d6mwOG
ZRAqIAKzM1T5FGjMBhq7ZV0eqdEntBh3Ec0Ifj2M8rg1MzJv+0mHZ0IjByawikad
BVgEXawc8gEMANYwv1xsYyUNXYK0X1vY/rP1NNPvhLyLIE7NpK90YNBj+xS1ldGD
bUdZqZeef2xJe8gMQg05DoD1DF3GipZ0Ies65beh+d5hegb7N4pzH0LzrBrVNHAr
29b5ExdI7i4iYD5T06Vr/qTU0iAN/byqELEzAb+L+b2DVz/RoCm4PIp1DU9ewcc2
WB380fqt3nLYA5tqJ9XvAiEQme+qAVcM3ZFcaMt4I4dXhdZZNg+D9LiTWcxduPB
leu8iwDRjAgyAhPzpFp+nWoqWA81uIiULWD1Fj+IVoY3ZvgivoY0iEFBJ91bb4te
g9m5UT/AaVDTWuHzbspVlbiVe+qyB77C2daWzNyx6UYBPL0o4r0t0c91kbNE51gj

Z7xz61os0N1U8vq91EFSeQJoSQ62XWavYm1CLmdNT6BNfgh4icLst7Vr1QMX9jzn
JtTPxdXytSdHvpSpULsqJ01610dtm0Nck3z9mj5N5z0k1tg1AH970TGY0e2aUcSx
IRDMXDOPyzEfjwARAQABAAV9F2CwsjS+Sjh1M1vegJbZjei4gF1HHpEM0K0PSXsp
SfVvpR4AoSJ4He6CXSMWg0ot8XKtDuZoV9jnJaES5UL9pMAD7JwIOqZm/DYVJM5h
0ASch1c356/wSbFbzRHPtUdZ09Q30WFNJM5pHbCJPjtNoRmRGkf71RxtvHBzy7np
Ga+W6U/NVKHw0i0CYwMI0Y1KDakYW3Pm+QL+gHZFvngGweTod0f912VLLAmeQR/c
+EZs71NumhuZ8mXcwhUc9JQIh0kp0+wreDysEFkAcSkkbQP3UDUsA1gFx9pbMzT0
tr1oZq2a4QBtXshHzP/ph7KLPn+6qtjks3xB/yjTgaGmtrwM8tSe0wD1RwXS+/1o
BHpxTnQ7Tfe0GUau4KCoOQLv6ELPkWbRBLWuiPwMdbGpvVFAL08+kvKAg9/r+/ny
zMGQHY+J3Jh5JxPiJnHfXNzjIKLbFbIPdSKNyJBuazXW8xIa//mEHMI50cvsZBK
c1AIp7LXzjEjKXIwHwDcTn9pBgDpd0KTH0tJ3JUKx0rWVsDH6wq6iKV/FTVSY5j1
zN+pu0EsskF1Lfxn9JsJihAV03yNsp6RvkKtyN1FazaCVKtDAmkjoh60XNxcNRqr
gCnwdpbgdHP6v/hvZY54ZaJjz6L2e8unNEkYLxDt8cmAyGPgH2XgL7giHIp9jrsQ
aS381gnYwNX6wE1aEikgtY91nqJjwPlibF9avSyYQoMtEqM/1UjTjB2KdD/MitK5
fP0VpvuXpNYZedmyq4UOMwdkiNMGARfm0eT0oLgLRtMT5H97Cn3Yxbk13uXHnu/
ZUZZNe8s+QtuLFU1KAJtLEUutN33TlWQY522FV0m17S+b80xJib3yZVJteVurRh5
HSWHAM+zghQAvCesg5CLXa2dNMkTCmZKgCBvfdLZuZbjFwnwCI6u/NhOY9egKuUf
SA/je/RXaT8m5VxLYMxwqQXKApzD87fv0tLPLVIEvjEsaf992tFEFSNpcG1l/jpd
5AVXw6kKuf85UkJtYR1x2MkQDrqY1QX/XMw00kt8y9kMZUre19aCArcmor+hDhRJ
E3Gt4QJrD9z/bICESw4b4z2DbgD/Xz9IXsA/r9cKiM1h5QMtXvuhyfVeM01enhxM
Gb0H3gjqGnkys0UODGEwr6AV9hAd8RwXmchJLaExK9J5SRawSg6710bAU24SdY
vMQ9Z4kAQ2+1ReUZzf3ogSMRZtMT+d18gT6L90/y+APZiaoArLPhebIAGq39HLMJ
26x3z0WAgRpA1kNsJEXkoiZGPLKIGoe3hqJAbYEGAekACAWIQRpm4aI7GCyZgP
eIz7/MgqAV5zMAUCXawc8gIbDAACKRD7/MgqAV5zM0n/C/9ugt+HZIwX308zI+QX
c5vDLReuzmJ3ieE0DMO/uNSC+K1XEioSIZP91HeZJ2kbT9nn9fuReuoff0T0Dief
rbwcIQHFfkrqSp1K3VWmUGp2JrUsXFVdJy/fkBIjTd7c5boW1jv/6wAsSfiv2V0
JSM8EFU6TYXswGjFVfc6X97tJNeIrXL+mpSmPPqy2bztcCCHkWS51NLWQw+R7Vg
71Fe6yBSNVrQc2/imYG2J9zlowjx1XU63Wdggp2Wxt0l80msB/w80S1fRF5G4SDH
s9HXglXXqPsBRZJYfP+VStm9L5P/sKjCcX6WtZR7yS6G8zj/X767MLK/djANvpPd
NVniEke6hM3CNBXPAMhQBMWhCulcoz+0lxi8L34rMN+Dsbma96psdUrn7uLaB91
6we0CTfF8qqm7BsVAgalon/UUiuMY80U3ueoj3okiSTiHIjD/YtpXSPioC8nMng7
xqAY9Bwizt4FWgXuLm1a4+So4V9j1TRCXD12Uc2l2RNmgDE=
=miES

-----END PGP PRIVATE KEY BLOCK-----

3.3. Bob's Revocation Certificate

-----BEGIN PGP PUBLIC KEY BLOCK-----

Comment: Bob's revocation certificate

Comment: <https://www.ietf.org/id/draft-bre-openpgp-samples-01.html>

```
iQG2BCABCgAgFiEE0aZuGi0xgsmYD3iM+/zIKgFeczAFAl2lnQQCHQAACgkQ+/zI
KgFeczAIHAV/Rr1G1PFKsW0BShC8sVtPfbT1N9lUqyrsgBhrUryM/i+rBtkbnSjp
28R5araupt0og1g2L5VsCRM+q10jF0zrZX0orKfA070HCP3X+M1EquvztMUZGJRZ
7TSMgIY1MeFgLm0w9pDKf3tSoouB0pPe5eVfXviEDDo2z0fdntjPyCMLxHgAcjZo
XqMaurV+nKWoIx0zbdpNLsRy4JZcmn0SFdPw37R8U2miPi2qNyVwcyCxQy0LjN7Y
Awadrs9VE0DrneSVP20pBhl7g+Dj2uXJQRPVXcq6w9g5Fir6DnlhekTLsa78T5cD
n8q7aRusMlALPA0osEN0gINgsVcjuILkPN1eD+zGAgHgdiKaep1+P3pbo5n0CLki
UCAsLnCEo8eBV9DCb/n1FlI5yhQhgQyMYlp/49H0JSc3IY9KHhv6f0zIaRws0JuD
ajcXTJ9AyB+SA6GBb9Q+XsNXjZ1gj75ekUD1sQ3ezTvVfovgP5bD+vPvILhSImKB
aU6V3zld/x/1
```

=mMwU

-----END PGP PUBLIC KEY BLOCK-----

4. Security Considerations

The keys presented in this document should be considered compromised and insecure, because the secret key material is published and therefore not secret.

Applications which maintain blacklists of invalid key material SHOULD include these keys in their lists.

5. IANA Considerations

IANA has nothing to do for this document.

6. Document Considerations

[RFC Editor: please remove this section before publication]

This document is currently edited as markdown. Minor editorial changes can be suggested via merge requests at <https://gitlab.com/openpgp-wg/openpgp-samples> or by e-mail to the authors. Please direct all significant commentary to the public IETF OpenPGP mailing list: openpgp@ietf.org

6.1. Document History

Changes between -00 and -01:

- *converted to XML2RFC v3

- *added internal backreferences to sample material to spread awareness

7. Acknowledgements

The authors would like to acknowledge the help and input of the other participants at the OpenPGP e-mail summit 2019 [[OpenPGP-Email-Summit-2019](#)].

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