

Connecting to our services

Here you can read how to connect your backend or mobile application to our sandbox, beta and production environments.

- [Connecting to server-to-server APIs \(fe. Sandbox\)](#)
- [Exposing APIs for us](#)

Connecting to server-to-server APIs (fe. Sandbox)

Environments

We have three environments available for our partners.

- Sandbox - this is shared environment, available as demonstration. You can get access before signing a deal with us - [Contact Sales](#) to get access.
- Beta - This is environment you're going to use during integration with our services.
- Production - This is live environment.

Authorization - create Your certificate

Our APIs are secured with Mutual TLS Authentication. You will need certificate signed by us in order to connect. To get a certificate please send us an Certificate Signing Request (CSR). We will sign it and return a valid certificate in a response.

CSR should have following structure:

For Sandbox

Example CSR generation command for Sandbox

Remember to replace parameters and file names with your own data.

Commas cannot be used in parameters.

Minimum key length is RSA 2048.

```
openssl req -new -newkey rsa:4096 -keyout companyName.key -out companyName.csr -nodes -subj  
'/C=US/ST=Florida/L=Miami/O=SomeCompany/OU=main/CN=V-SBX-companyName-  
applicationName/emailAddress=example@user.com'
```

Field	Example value
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Common Name (CN)	<div>V-SBX-CompanyName-ApplicationName</div> <p>Company Name should be replaced with name of your company. Application Name should be replaced with name of application you're developing.</p>
Organization (O)	Name of your company.
Organizational Unit (OU)	<div>main</div> - do not enter any other value.
Locality (L)	City where your organization is located.
State/County/Region (ST)	State/County where your organization is located.
Country (C)	Two-letter country code where organization is located (ISO 3166-1 alpha-2).
Email Address	Email to be contacted in case of forced renewal of the change.

For Beta/Production

You will need separate certificates for Beta and Production environments, however they can be generated in exactly the same way.

Field	Example value
Common Name (CN)	<div>V-CompanyName-ApplicationName</div> <p>Company Name should be replaced with name of your company. Application Name should be replaced with name of application you're developing.</p>
Organization (O)	Name of your company.
Organizational Unit (OU)	<div>main</div> - do not enter any other value.
Locality (L)	City where your organization is located.
State/County/Region (ST)	State/County where your organization is located.
Country (C)	Two-letter country code where organization is located (ISO 3166-1 alpha-2).
Email Address	Email to be contacted in case of forced renewal.

Example CSR generation command for Beta and Production

Remember to replace parameters and file names with your own data.

Commas cannot be used in parameters.

Minimum key length is RSA 2048.

```
openssl req -new -newkey rsa:4096 -keyout companyName.key -out companyName.csr -nodes -subj  
'/C=US/ST=Florida/L=Miami/O=SomeCompany/OU=main/CN=V-companyName-  
applicationName/emailAddress=example@user.com'
```

Exposing APIs for us

Securing your APIs

In some cases we may need to connect to your backend (You expose API for us). In such event our preferred method of securing access is Mutual TLS authentication, where you accept certificates signed by our Certificate Authority(CA). In order to make it work you'll need to:

- Import our CA certificates to your trust store - they are listed below.
- Communicate to us how you expect us to fill fields in certificate.

Main infrastructure

Beta Root CA certificate

```
-----BEGIN CERTIFICATE-----
MIIFvzCCA6egAwIBAgIUx/1asAZz8Bj1hfeDjixPX3/8s78wDQYJKoZIhvcNAQEL
BQAwbzELMAkGA1UEBhMCUEwxZDASBgNVBAGMC01hem93aWVja211MQ8wDQYDVQQH
DAZXZXJzYXcxETAPBgNVBAoMCFZlcmVzdHJvMRQwEgYDVQQQLDAtQUkVQQULExORF
VjeQMA4GA1UEAwWHUFJFUEFJRDAeFw0yMTA2MjkwOTMxNTdaFw00MTA2MjQwOTMx
NTdaMG8xCzAJBgNVBAYTAlBMMRQwEgYDVQQIDAtNYXpvd211Y2tpZTEPMA0GA1UE
BwwGV2Fyc2F3MREwDwYDVQQKDAhWZXJlc3RybzeUMBIGA1UECwwLUFJFUEFJRFB9E
RVYxEDA0BgNVBAMMB1BSRVBBSUQwggiMA0GCSqGSIb3DQEBAQUAA4ICDwAwggIK
AoICAQCT3E0b0vNnaDsUFvGKFXCgEiIb5Rqz2HAwvfZTJEdcrFPDphwv5YeX/qmF
moPtCmQsJAyxxBOKC07qpFbL1kBNMIK0MJbu jnPvMu2yGLcJzwp r jgN+RBta+MA
cMAei9YQ7HAvvcZsPfdmoJSWAO+AVRHBx/RBeHh8wUsBW3t0HJEoBSBCNkIDGeHR
nqMLsdix/s44C+B8uHsrC3HxPP0tcIvO0lMsxC8aaSj2r8++spq87MtOP7HdqNqh
hhgfMUCHGuZyTdmGJWmJCdaOzPHTzrqQ6FGi j21+MiISpVJg6Q9/Kg5VIZm+NIAZ
Birs7fQR/vm0YjWYAsp5dRaCi2Dt+e/O3QY80FfNDR8oQtCk1W4ZTus9RMxBxvfk
u/t1FnHlPzvPwEGSStJurtK9f5LL0UoaGN0hx/xvCd5oThnukKbXXfAqDLUOyelt
6vxpeFobhghlcl4M+xGiZE0cmQIFU4lDrTU+Cd50ENgkCYwlMbqmVZ/9XpY4B6Fd
Go6s06+brlCO6tHwwPl9Z+toUifyDomu/b9mtPt5ATXFE2/OnubTmwXpLiV9NIPv
mX7GXXKf5RX5PsSN5mCjrmlyUtzknRW+JPrKMosqlx2ln1DPIXA608XIdwIBP5/2Q
5cPaYS0cYqW/F0hiStH3bve5Yf7h942Fv5D39J4/zu2j47WUQIDAQABolMwUTAd
BgNVHQ4EFgQUjs64XWuJqXY9PZWPjIkSx4z/EwkWHwYDVR0jBBgwFoAUjs64XWuJ
qXY9PZWPjIkSx4z/EwkWHwYDVR0TAQH/BAUwAwEB/zANBgkqhkiG9w0BAQsFAAOC
AgEARu75eBHNWZo5jElhf+vxswAoATkJfNSItyN+S7uLX/KaJq25Zhr2KKcxMm02b
qvc3cwcYy0m6k7pcae84VrEuZ4coDwnkYtSbtAPEPLS0YznCpZizbNm/rAIQnjpM
Oz5iCu+pnxlm46XYKKhQ+CHifngN7+nnJNomY9ytHiQEGkEoxY/L8ERqEEGmWgC5
+pBht8YHXk9MryVO3I8Iyi4Dseiahav5HQ4fTEfhg289nlosgVIpgf/oKkpWKrkS
E+wkAYCRglrkBiXaeZTpdhnMnaQ4YN+XPkVDP8PlpLlmpD4qfPHuHyQO5/4Yly2K
WICvvPl/zgnxgskdLgpg+R0SL5clOhf2cMMn0EuaeB++GwdoVNppkWu4nnTPUGN
8Kwao5kwxU0P9Fr0lnt3GO9aRC5PJ06kFwaWh9lrjTp4/MuGZgaLSsq6f1S4rgKX
bZ8WCqyGPpNVYs8DoTqxJXeIltBwgqRT2FbOs5BGJU2haQov+/+t61zV245XRl3z
LEQUPnn7f1U2oeQQcgDArvl+Cb0li3AmrYkEYdtmdEsEjyfg50ZuYfy4qJqx3kiY
x/sRhfeMlvRVV63eLzcg+Vpsols2zAGnwyvAX2x+s6ughCLB8Sno22xT03aNhv+g
BpZCD18dJkZDaQk46eQFvswSSQHHXV5g44ZuRe09By5ev4=
-----END CERTIFICATE-----
```

Prod Root CA certificate

```

-----BEGIN CERTIFICATE-----
MIIFpTCCA42gAwIBAgIUKA6at+c8TdPPOzmrKkybHacq7LgWDQYJKoZIhvcNAQEL
BQAwYjJELMAkGA1UEBhMCUExwFzFASBgNVBAGMC01hem93aWVja211MQ8wDQYDVQ
QHZDAZYYXJzYXcxETAPBgNVBAoMCFZlcmVzdHJvMQswCQYDVQQLDAJEQzEMMAoGA1UE
AwwDQVBjMB4XDTE1MDQxMjE0MTM1N1oXDTQxMDQwNzE0MTM1N1owYjJELMAkGA1UE
BhMCUExwFzFASBgNVBAGMC01hem93aWVja211MQ8wDQYDVQQLDAZYYXJzYXcxETAP
BgNVBAoMCFZlcmVzdHJvMQswCQYDVQQLDAJEQzEMMAoGA1UEAwwDQVBjMBJMIICIjAN
BgkqhkiG9w0BAQEEFAAOCAg8AMIICCgKCAgEAgBtkowILbrt3w4n9j8VLP21zGQn3E
5EIOboQIBrCPSBNQs5kBWLiTcxHkqcaAoAzLrL++18IwxJgmnW14GrI9ZOmLJN
+gY/odsraYvYCKlu3NeWuyoHJ/L7OcyuF29qCYo7Jeq3tdDVBY6JKRF06x9SNprH
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RlyNp4SQExmZ/XrZGowbBiUf+gKE0XYWIJ52s6uWi3NVb+I6ndpIsA+ZBT475sSa
G+/4CyLdEOCaV/K9Eu30BD5cVSA/66cXAZd7pn02x/5ISStdbFNsXw20MRH2z1B
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0edbZFbBZeaYsR3g018fmj/gZHO1G76Lc1NY4UeA4Q45kbPdTX8mvRY+/DCAT8hB
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6KtHc2Qd+7NGFQYAcSrZ2M2kIwHga007RcIM0e5hzNNQRCON8EVOyEAetfe2HnsR
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KZTH1LkRo/64nNkCAwEAAaNTMFEWwHQYDVROBBYEFK7R2ygy+7rX+ADXQALnMg35
4f7/MB8GA1UdIwQYMBaAFK7R2ygy+7rX+ADXQALnMg354f7/MA8GA1UdEwEB/wQF
MAMBAf8wDQYJKoZIhvcNAQELBQADggIBAGYxIOj6w9kID96WsedZKIGAi84WfD5
QRUC488t6bhw1uNKj2/hh9wMxWtMJaspEOc99BJZPXwe0v3Cw2nJzv5r1iYjgbA5
mx57yIdliFLCCKGQ9WUsEE8rGKks104yhF20aLpQw7YuRxnExWNugT9nqDvhzZMe
ddQxZsfUG5taIKsqpB1nLARZX12PtDwEse+MsXc0w6ilunjOphR9qbpqYDAmRgmC
CWdhLnG7qwQBd+9Q1fxy431YrMy8e82KmJC9Xcz3bzGIPFhApoTEhzCORtnXEwBZ
X1TXEGTu9hsAy/izr4J+1X5NAQSw+k7PdDXCINJJFCUX4jWOUew6DK5osuQLdCed
FTD/5/r1kUQ84LiMkZpfYJ2EFiZ1L0yHnX41EqVdMe5edTzB00PoNUvwilMqKwMc
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Sfz3XA/4lceVybhG0wam12lA35NKMg62lf1DcmtnSf/lHXf2gT+bp08nLwrd5f7+
amz6GxH49L5lynVIsq0P/MG1H6afALmWkN0zb/bmLSApIBtZ3g+yCF9p8QzN+BMr
Tlm++HuiHa5Q
-----END CERTIFICATE-----

```

Asia region

Due to on-soil regulations, Verestro has launched some of it's services on servers localized in India. If you're using this infrastructure, use certificates listed below. If you're not sure, which certificates to use contact your Verestro's sales representative or project manager.

Asia Beta Root CA certificate

```
-----BEGIN CERTIFICATE-----
MIIFzzCCA7egAwIBAgIUXTpYRZICP6fIQGWaNumtbPI89dkwDQYJKoZIhvcNAQEL
BQAwZDZELMAkGA1UEBhMCUEwxFDASBgNVBAGMC01hem93aWVja211MREwDwYDVQ
DAhXYXJzemF3YTEUMBIGA1UECgwLVmVyZXN0cm8gU0ExCzAJBgNVBAMkLUMRww
GgYDVQDDBNQV9WRVJFU1RST19ERVZfQVdTMB4XDTEyMTAxODE0MDU0OVoXDTEy
MDgyNjE0MDU0OVoowdZELMAkGA1UEBhMCUEwxFDASBgNVBAGMC01hem93aWVja211
MREwDwYDVQDDAhXYXJzemF3YTEUMBIGA1UECgwLVmVyZXN0cm8gU0ExCzAJBgNV
BAMkLUMRwwGgYDVQDDBNQV9WRVJFU1RST19ERVZfQVdTMIICIjANBgkqhkiG
9w0BAQEFAAOCAgEAMIICGKAgEAlIsGfebab+VhdvmHXHhyfWl6hXK72fuJvxvX
q5eJZ74U7+DVCNJU5j7WSYGCXoBvH41jqd9luzKkcwXFW5MhKuCYHmzetKMlI4KMz
VWR2nOtVOoRmPTA0EhfQzP4pC0GRB0Gtg+ygKJ/oJ3S7zwnzZOTVfVusePeIOPKM
7r6cNqq25bl7BgokKlc/St7qoclGrXfgnuAlFWfG5Gt+OdhdHF/AAUTmk84Dxjwz
JDiCg8Ydr8RaphkTzcuHPPdhWLI2I9yrZJnkK+MzlBXAKotOTTMteoI5I4LlOaVN
r9xKqYrQnKnexrBtLmWDMlpZnYJQ9GzwjWB4n29EJ44Kx4wd/YvvS3da7zbjYLG
HeEd20dDyMtYkJPqkJe0ElGpVDiQCEoAAfpXcAmTsgD3uzIlyRf3/+3zRuBC82m3
xGCozITXevHF6GDNmtVINtI9uemBnTMpahGVNJgR2moJ40nqoN1leonGln+yCAao
HKM4G6u52jt8qbeobhuE4rFmr7xvRl4GVFCNOJ8Gceb2PVAeKowjIudFEQxXus9c
jtv1JraELJ3GY6evbLlxeQVTLvpDtVcMO5DaxjNq6ywpXauuYwTqQFdm55m2Elip
BdCL/CiwX5Rv6GOL417pvo7ZsqSi0HpEiUbDorIxFOY2OGm7sFHBtniZBZkt16+8
LiDc3LECAwEAaANTMFewHQYDVR0OBByEFElbbRpKRbuJU7FDfo+JduYCUuVrMB8G
AlUdIwQYMBAAFEElbbRpKRbuJU7FDfo+JduYCUuVrMA8GA1UdEwEB/wQFMAMBAf8w
DQYJKoZIhvcNAQELBQADggIBAB31ff6N2p9jDDXuZJKfM3cLN/BwmOJbKxRtPN7Y
6ElcS/VvlcUU50jBr9PMJQcH/XoOTwKJeu7Z7WC0G0nbpYN35r3OEFQoZYw3Jlel
s84oc/UPQjtwan/gUkwTIsBlUP0msvlyAS7vy+AkYVF45RICWLy1GLlO/JMPrLE/
npJn7WCWHLHgoV82ZGni77RvmHfcew2yDoH0NqyBrkEf/jgBqpqWFI4u0H4i6mi4
BGgB9Hi6yr/UXhZqa5s3f8XvgW7qRHluCPSVsIIvPnRera/4KcRg5YuW7ZjTVQWK
d5112pLq9p0gMIVSDPlp++MEo/toYC/140MeIq2BitgJtJAKdOm/jL6Zlozr84
cKGTHQuicK3IMuGMeqKp+ANl7zkbVrnGDKNHT/iaJav+ss+h3tYd56RYPHJ3P10u
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```
YgNYYGYsY3gyxmCYZi8siU/WNYKVsk4AAx44LNMaHcaXki6xwv2dHDkwPpz0bxji
y4sHqtKJjaIQueGBQlZ6u93OKZdhe6JUDQrTQMBb63A52RM0vvExSJXJKVB3YU4M
xtKjiU7RUcmbQevlXl9aCj0e00DpGUp/3EzGIGqi2b5MyXc9rVkyZf1KjeZ8PW0D
AkHoST0CDMXVRESVccPu/tScYmgy4Vh7Vs73DEgwiqsTdSFJXZ4Ve5i4xAxAxbx7
IXJd
-----END CERTIFICATE-----
```

Asia Prod Root CA certificate

```
-----BEGIN CERTIFICATE-----
MIIF0TCCA7mgAwIBAgIUahZ36TmUOvRmFB+tyxuGjdYS/qQwDQYJKoZIhvcNAQEL
BQAwEDELMAkGA1UEBhMCUEwxFDASBgNVBAGMC01hem93aWVja2llMREwDwYDVQQH
DAhXYXJzemF3YTEUMBIGAlUECgwLVkVSRVNUUk8gU0ExCzAJBgNVBAsMAklUMR0w
GwYDVQQDDBRDQV9WRVJFU1RST19QUk9EX0FXUzAeFw0yMjEwMTgxNDMzNTlaFw0z
MjA4MjYxNDMzNTlaMHGxCzAJBgNVBAYTA1BMMRQwEgyDVQIDAtNXpvd2llY2tp
ZTERMA8GA1UEBwwIV2Fyc3phd2ExFDASBgNVBAoMC1ZFUKVTVFJPIFNBMQswCQYD
VQQLDAJjVDEdMBSGA1UEAwwUQ0FfVkvSRVNUUk9fUFJPRF9BV1MwggiMA0GCSqG
SIb3DQEBAQUAA4ICDwAwggIKAoICAQDVKex8sF2K7XU/RRqomX+yID3yMWYMKDXE
E2rozRR2i0l4lgSHqNOZE/Ev0avC4xQznzka0qSV9iK+awmK+y2wEQZC8dVrCifa
H+XRbb3E6Kwvl8Ma5+9TWHJepXAw699TAeEm5U9ataNxdqCdtelbuz+gpIgfOMyb
urgiu/KzqYIEL2vXNUjru6trXKn49+lboOyJRQflrEdr3bUFTIS+0XH3brRkd3F
XeVakunCU/A5n+EWWE1ERxxWYFcYmoU+swtm7K3lrsu2MqWObF+0q9Ip1lgRGrSc
hoNvne06rXvqxylsgFeCPC008kP8b2QFcCz7tX6EpJv19e+xsB+ATBqGwb9TOARw
QfnODdpqW/vF7qmS75KxPzP264h+j3Y8acj7co8IL4q6v+jQg7dZbJm8Oy6FW3Bi
awSLz2liKl+5d+xGvBAZ2VmlgR9xyGfIf6lWavdU1NX17gnmo7W0C/KYE7RDAeuM
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JE0NgMGCKPAhh5QgGLK3KzGPMskhy8gJQwW5R03bE9XmmMUz8Jl03F9nxK+kRNK7
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HwYDVROjBBgwFoAUMC8VXsFZWJwCJS6BoF1ABixKO28wDwYDVROTAQH/BAUwAwEB
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UtilkVP07pKPAKXq4XoXBSQBq3gKA8zM1AeJD6RJ2v1lR8eTszejadRX66lWpnP/
6k/8qZi9lVKJm4l6uZtZTlD3Cw8IvmEwdHPNbDvVxfI+2ksM7oPOuo0eo3X8nmkgV
8TeWrfBc3vj8Oa4M3NVV+bNMrrL9vqfYSxn07e2IOzbmSNOhGANE4NERAmbn6v9p
/EzTLF+lNbRL8ZaxilJsWj4CIOE7n+BaVIsQypLD7toOytpgTG5h52vSl+tcVuKb
uOoAjrrjTzYH4l8bZE4ffL9xdSUWV00EkHFNZwPIdf9GHqnAD5iEgBod5sawlgFF
ULm8D28nfLzjQ0e5ualyPBjKpbT0jwx5SYLFxxkXSsk5QLOBCXYEP0c3wYmk5TPn
JxJ589zjkxmlf35JKyG4J9xN3uyiMA9XomUgpy+JMnczCuuP0U4mXOB3Y0UkXf70
BFASD6NPT9QelAql6ibz8vhIunP3//wqCkiiBrNdeN1Ybdd3pfii4+mUCUcbeSaP
bd0mlBV9OLyLDpyZ/w6ws/NfclJcqu4ltuu2UxAnHiahXViswS4Lp8OC0I+rhviV
j5Umxio=
-----END CERTIFICATE-----
```