

# Como emitir e gerar o certificate request

## Gerar o certificado

Criar Diretório: `mkdir ~/domain.com.ssl`

Gerar RSA: `openssl genrsa -out ~/domain.com.ssl/domain.com.key 2048`

Gerar CSR: `openssl req -new -sha256 -key ~/domain.com.ssl/domain.com.key -out ~/domain.com.ssl/domain.com.csr`

## Exemplo

Criar Diretório: `mkdir ~/jcr2.ifsp.edu.br.ssl`

Gerar RSA: `openssl genrsa -out ~/jcr2.ifsp.edu.br.ssl/jcr2.ifsp.edu.br.key 2048`

Gerar CSR: `openssl req -new -sha256 -key ~/jcr2.ifsp.edu.br.ssl/jcr2.ifsp.edu.br.key -out ~/jcr2.ifsp.edu.br.ssl/jcr2.ifsp.edu.br.csr`

As seguintes perguntas serão feitas (respostas abaixo):

You are about to be asked to enter information that will be incorporated into your certificate request.

What you are about to enter is what is called a Distinguished Name or a DN.

There are quite a few fields but you can leave some blank

For some fields there will be a default value,

If you enter '.', the field will be left blank.

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Country Name (2 letter code) [AU]:BR

State or Province Name (full name) [Some-State]:SP

Locality Name (eg, city) []:Sao Paulo

Organization Name (eg, company) [Internet Widgits Pty Ltd]:INSTITUTO FEDERAL DE EDUCACAO, CIENCIA E TECNOLOGIA DE SAO PAULO

Organizational Unit Name (eg, section) []:

Common Name (e.g. server FQDN or YOUR name) []:jcr2.ifsp.edu.br

Email Address []:

Please enter the following 'extra' attributes to be sent with your certificate request

A challenge password []:

An optional company name []:

Após gerar e enviar o CSR para a Reitoria, você deverá baixar os novos certificados **intermediate** e **root** a partir do [LINK](#)

Para fins de registro, segue abaixo o conteúdo dos arquivos:

### **intermediate.pem**

```
-----BEGIN CERTIFICATE-----
MIIEtjCCAzagAwIBAgINAe5flh38YjvUMZqFVzANBgkqhkiG9w0BAQsFADBMMSAwHgYDVQQLExdH
bG9iYWxTaWduIFJvb3QgQ0EgLSBSMzETMBEGA1UEChMKR2xvYmFsU2lnbjETMBEGA1UEAxMKR2xv
YmFsU2lnbjAeFw0xODExMjEwMDAwMDBaFw0yODExMjEwMDAwMDBaMFAXCzAJBgNVBAYTAKJFMRkw
FwYDVQQKEXBHbG9iYWxTaWduIG52LXNhMSYwJAYDVQQDEEx1HbG9iYWxTaWduIFJTQSBPViBTU0wg
Q0EgMjAxODCCASlwdQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBBAKdaydUMGCEAI9WXD+uu3Vxo
a2uPUGATeoHLI+6OimGUSyZ59gSnKvuk2la77qCk8HuKf1UfR5NhDW5xUTolJAgvjOH3idaSz6+z
pz8w7bXfla7+9UQX/dhj2S/TgVprX9NHsKzyqzskeU8fxy7quRU6fBhMabO1IFkjXinDY+YuRluq
IJBJDrnw9UqhCS98NE3QvADFBIV5Bs6i0BDxSEPouVq1lVW9MdlbPYa+oewNEtssmSStr8jvA+Z6
cLVwzM0nLKWmjslYPJLjLnNvBhBWk0Cqo8VS++XFBdZpaFwGue5RieGKdKfNm5KQConpFmrv73W+
eka440eKHRwup08CAwEAaAOCASkwggEIMA4GA1UdDwEB/wQEAWIBhjASBgNVHRMBAf8ECDAGAQH/
AgEAMB0GA1UdDgQWBbT473/yzXhnqN5vjySNiPGHAWKz6zAfBgNVHSMEGDAWgBSP8Et/qC5FJK5N
UPpjmve4t0bvDA+BggrBgEFBQcBAQQyMDAwLgYIKwYBBQUHMAAGGImh0dHA6Ly9vY3NwMi5nbG9i
YWxzZWduLmNvbS9yb290cMwNgYDVR0fBC8wLTArOCmgj4YlaHR0cDovL2Nybc5nbG9iYWxzZWdu
LmNvbS9yb290LXlzMlNybDBHBG9NVHSAEQDA+MDwGBFUdIAAwNDAYBggrBgEFBQcCARYmaHR0cHM6
Ly93d3cuZ2xvYmFsU2lnbi5jb20vcMwVwb3NpdG9yeS8wDQYJKoZIhvcNAQELBQADggEBAJmQyC1f
QorUC2bbmANzEdSIhloU4r7rd/9c446ZwTbw1MUcBQJfMPg+NccmBqixD7b6QDjynCy8SlwIVbb
0615XoFYC20UgDX1b10d65pHBf9ZjQCxQNqQmJYaumxtf4z1s4DfjGRzNpZ5eWI06r/4ngGPoJvp
jemEuunl1lg423g7mNA2eymw0IIYkN5SQwCuaiflFj6GlazhgDEwfpolu4usBCOmmQDo8dlm7A9+
O4orkjgTHY+GzYZSR+Y0fFukAj6KYXwidlNaIFMzhriSqHKvoflShx8xpfywgVcvzfTO3PYkz6fi
NJBonf6q8amaEsybwMbDqKWwIX7eSPY=
-----END CERTIFICATE-----
```

### **gs\_root.pem**

```
-----BEGIN CERTIFICATE-----
MIIEtjCCAzagAwIBAgINAe5ffP3/lzUrZGXWajANBgkqhkiG9w0BAQsFADBXMQswCQYDVQQGEwJC
RTEZMBcGA1UEChMQR2xvYmFsU2lnbiBudi1zYTEQMA4GA1UECzMHU9vdCBDQTEbMBkGA1UEAxMS
```

R2xvYmFsU2lnbiBSb290IENBMB4XDTE4MDkxOTAwMDAwMFoXDTI4MDEyODEyMDAwMFowTDEgMB4G  
A1UECXMxR2xvYmFsU2lnbiBSb290IENBIC0gUjMxZzARBgNVBAoTCkdsb2JhbFNpZ24xZzARBgNV  
BAMTCkdsb2JhbFNpZ24wggeiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQMjXaQeQZ4Ihb1  
wIO2hMoonv0FdHFrYhy/EYCQ8eyip0EXyTLLkvhYIJG4VKrDIFHcGzdZNHR9SyjD4I9DCuul9e2  
FIYQebs7E4B3jAjhSdjQYi8fXvqWaN+JJ5U4nwbXPsnLJlKnc96wyOkmDoMVxu9bi9IEYmpjpij2  
aTv2y8gokeWdimFXN6x0FNx04Druci8unPvQu7/1PQDhBjPogiuuU6Y6FnOM3UEOIDrAtKeh6bJP  
kC4yYOIXy7kEkmo5TgmYHWyn3f/kRTvriBJ/K1AFUjRAjFhGV64I++td7dkmnq/X8ET75ti+w1s  
4FRpFqkD2m7pg5NxdSzhYIXAgMBAAGjggEiMIIbHjAOBgNVHQ8BAf8EBAMCAQYwDwYDVR0TAQH/  
BAUwAwEB/zAdBgNVHQ4EFgQUj/BLf6guRSSuTVD6Y5qL3uLdG7wwHwYDVR0jBBgwFoAUYYHtmGkUN  
l8qJUC99BM00qP/8/UswPQYIKwYBBQUHAQEEMTAvmC0GCCsGAQUFBzABhiFodHRwOi8vb2Nzc5n  
bG9iYWxzZWduLmNvbS9yb290cjEwMwYDVR0fBCwwKjAooCagJlYiaHR0cDovL2Nybc5nbG9iYWxz  
aWduLmNvbS9yb290LmNybDBHBGNVHSAEQDA+MDwGBFUdIAAwNDAYBggrBgEFBQcCARYmaHR0cHM6  
Ly93d3cuZ2xvYmFsc2lnbi5jb20vcvVwb3NpdG9yeS8wDQYJKoZIhvcNAQELBQADggEBACNw6c/i  
vvVZrpRCb8RDM6rNPzq5ZBfyYgZLSPFAiAYXof6r0V88xjPy847dHx0+zBpgmYILrMf8fpqHKqV9  
D6ZX7qw7aoXW3r1AY/itpsilsBL89kHfDwmXHjjqU5++BfQ+6tOfUBJ2vgmLwgtIfR4uUfaNU9Or  
H0Abio7tfftPeVZwXwzTjhuzp3ANNyuXlawa4BJrHED0xcd+7cjiWOx37XMiwor1hkOlreoTbv3Y  
/klvuX1erRjvJlDKPSerJpSZdcfL03v3ykzTr1EhkluefSufFT90y1HonoMOFm8b50bOI7355KKL  
0jlrqncckSziYSQtjplcJDEHsXo4HA=  
-----END CERTIFICATE-----

**A seção abaixo foi mantida por motivos de histórico, caso os certificados intermediário e root acima não funcionem corretamente para você, você pode tentar estes abaixo.**

Após gerar e enviar o CSR para a Reitoria, você deverá baixar o novo certificado **intermediate** e **root** no site do ICPEdu: [LINK](#)

Para facilitar, segue os links de download tirados do site:

**"gs\_root.pem"** [LINK DE DOWNLOAD](#)

**"intermediate.pem"** [LINK DE DOWNLOAD](#)

Certificados emitidos a partir de **27/11/2020** devem obrigatoriamente utilizar o novo "**intermediate.pem**" citado acima.

Para fins de registro, segue abaixo o conteúdo dos arquivos:

## gs\_root.pem

```
-----BEGIN CERTIFICATE-----
MIIDXzCCAkegAwIBAgILBAAAAAABIVhTCKIwDQYJKoZIhvcNAQELBQAwtDEgMB4G
A1UECXMxR2xvYmFsU2lnbiBSb290IENBIC0gUjMxMzEzARBgNVBAoTCkdsb2JhbFNp
Z24xMzEzARBgNVBAMTCkdsb2JhbFNpZ24xMzEzHhcNMjE4MDAwMDAwWWhcNMjE4MDAw
MTAwMDAwWjBMMSAwHgYDVQQLExdHbG9iYWxTaWdulFjvb3QgQ0EgLSBSMzETMBEG
A1UEChMxR2xvYmFsU2lnbjETMBEGA1UEAxMxR2xvYmFsU2lnbjCCASlwdQYJKoZI
hvcNAQEBBQADggEPADCCAQoCggEBAMwldpB5BngiFvXAg7aEyiie/QV2EcWtiHL8
RgJdX7KKnQRfjMsuS+FggkbhUqsMgUdwbN1k0ev1LKMPgj0MK66X17YUhhB5uzsT
gHeMCOFJ0mpiLx9e+pZo34knITifBtc+yysmWQ1z3rDI6SYOgxXG71uL0gRgykmm
KPZpO/bLyCiR5Z2KYVc3rHQU3HTgOu5yLy6c+9C7v/U9AOEGM+iCK65TpjoWc4zd
QQ4gOsC0p6Hpsk+QLjJg6VfLuQSSaGjIOczgdbKfd/+RFO+uIEn8rUAVSNECMWEZ
XriX7613t2Saer9fWRPvm2L7DWzgVGkWqQPabumDk3F2xmmFghcCAwEAAaNCMEAw
DgYDVR0PAQH/BAQDAgEGMA8GA1UdEwEB/wQFMAMBAf8wHQYDVR0OBBYEFi/wS3+o
LkUkrk1Q+mOai97i3Ru8MA0GCSqGSIb3DQEBCwUAA4IBAQBLQNvAUKr+yAzv95ZU
RUm7lgAJQayzE4aGKAcyzmvmdLm6AC2upArT9fHxD4q/c2dKg8dEe3jgr25sbwMp
jjM5RcOO5LIXbKr8EpbsU8Yt5CRsuZRj+9xTaGdWPoO4zzUhw8lo/s7awIOqzJCK
6fBdRoyV3XpYKBovHd7NADdBj+1EbdtTKjd+82cEHhXXipa0095MJ6RMG3NzdvQX
mclfeg7jLQitChws/zyrVQ4PkX4268NXSb7hLi18YlvDQVETI53O9zJrlAGomecs
Mx86OyXShkDOOyyGeMlhLxS67ttVb9+E7gUJTb0o2HLO02JQZR7rkpeDMdmztcPH
WD9f
-----END CERTIFICATE-----
```

## intermediate.pem - à partir de 27/11/2020

```
-----BEGIN CERTIFICATE-----
MIIE+DCCA+CgAwIBAgIQd70NrbPiwI2vSwHjGuic4DANBgkqhkiG9w0BAQsFADBQ
MQswCQYDVQQGEWJCRTEZMBcGA1UEChMxR2xvYmFsU2lnbiBudi1zYTEmMCQGA1UE
AxMxMDVHJ1c3RIZCBsb290IFRmUyBDQSBTSEeYNTYgRzRwHhcNMjE4MDAwMDAwWWhc
NMjE4MDAwMTAwMDAwWjBkMQswCQYDVQQGEWJCUjExMC8GA1UEChMoUmVhZSBO
YWNpb25hbCBkZSBfbnNpbm8gZSBQZXNxdWlzYSAtIFJOUDEiMCAGA1UEAxMZUk5Q
IEIDUEVkdSBPViBTU0wgQ0EgMjAxOTCCASlwdQYJKoZIhvcNAQEBBQADggEPADCC
AQoCggEBAKXy0aVSFMG4AXgSL5oDnUPqls7zPa1Fuik4KqTfSTaz1Q7ucOLI++mg
y+a0QsNCgunY3fXTwWmKMZABj4+K5OCzyNluaAZdG7VN4+euIWrHS6MDycpR31R/
oz7Rle0bxv7mvEUBXoP/UlicYuM3jerIVCg6MsfvA9Zf96wW+Ay5wEmmGwhmNLST
ULwKFLYzrxNoirAfgSFqOveSE4tjrpFuluZYj/E587tpT14sPkIK8iuQmbfe32Jd
sZ9kUKgAOjTnaFH3S1xaKAYsHHIOAlcond2TDneTAdU1B6fvfKHc8IWcGL1luzag
Xy8otoMTjLLAIMusMeGLKchPwUvHyrcCAwEAAaOCABggG0MA4GA1UdDwEB/wQE
AwIBhjAdBgNVHSUEFjAUBgggrBgEFBQcDAQYIKwYBBQUHAwIwEgYDVR0RTAQH/BAgw
```

BgEB/wIBADAdBgNVHQ4EFgQUQzDHBByLy3qOW/5haffUerKFm0gwHwYDVR0jBBgw  
FoAU3k/X3Seu1X9YgeEsR6wjt8Z7V+8wgmZMGCCsGAQUFBwEBBIGGMIGDMDkGCCsG  
AQUFBzABhi1odHRwOi8vb2NzcC5nbG9iYWxzZWduLmNvbS90cnVzdHJvb3R0bHNz  
aGEyZzMwRgYIKwYBBQUHMAKGOMh0dHA6Ly9zZWN1cmUuZ2xvYmFsc2lnbi5jb20v  
Y2FjZXJ0L3RydXN0cm9vdHRsc3NoYTJnMy5jcnQwQQYDVR0fBDowODA2oDSgMoYw  
aHR0cDovL2Nybc5nbG9iYWxzZWduLmNvbS90cnVzdHJvb3R0bHNzaGEyZzMwY3Js  
MFYGA1UdIARPME0wQQYJKwYBBAGgMgEUMDQwMgYIKwYBBQUHAgEWEJmh0dHBzOi8v  
d3d3Lmdsb2JhbHNpZ24uY29tL3JlcG9zaXRvcnkVMAgGBmeBDAECAjANBgkqhkiG  
9w0BAQsFAAOCAQEAof/6KIQsQwsczUZDJrQQD1RpJMQdfh2QqWQ7SXdR1zxKiSgM  
QvvJan2LhxfHW8v4gViMDQayixxTF6P6rrj58NU8IBHVWSoRtWCvnIDit1908xyY  
vecmxAuBTJhpFIDycyGBn41Dsg7cAUKuYQSySESaOm10P1aHKA1LyL95FUNbCyx7  
PACfMdbvlqGvzspH/WV4N8he97btZqBsPCjIINMhtNV1fjMB80wVbGRBtDCEURg7  
VOACKZGeJejOO/HWsONdW76g4YhIEsnmQXJRSND6mTWpaQv2fRVIK4Z0x4Xtoxy9  
iHifx41Q834r5XErkk8cOU6H4mRQy1hLr+0bog==

-----END CERTIFICATE-----

-----BEGIN CERTIFICATE-----

MIIEqTCCA5GgAwIBAgIQd70NdT8uGWAb1U4KAkRGdjANBgkqhkiG9w0BAQsFADBM  
MSAwHgYDVQQLEXdHbG9iYWxTaWduIFJvb3QgQ0EgLSBSMzETMBEGA1UEChMKR2xv  
YmFsU2lnbJETMBEGA1UEAxMKR2xvYmFsU2lnbJAeFw0yMDA3MDUwMDAwMDBaFw0y  
NzA0MjUxMTAwMDBaMFAXCzAJBgNVBAYTAkFMRkwFwYDVQQKEyBHBG9iYWxTaWdu  
IG52LXNhMSYwJAYDVQQDEx1UcnVzdGVkIFJvb3QgVEXTIENBIFNIQTl1NiBHMzCC  
ASlwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAKXRe6ZnoR+4xcoJL/S5vx1D  
qMMe4LCFB+zMMOCi5stfYufK6bBgiYKil42F85z5o1eLKUfj4ycGfnaUvLdSsj  
waP1HMIob2xBMiH9+q1KgyWui1v8KRv+IhdPaxRojgLLM4jIPLIHvqvormGHQI  
x0wi2VM8Grqf+cdkhYXHGTRvBLhAofAhgoWTVzrwTZ6MtAPaCATJ+gcSVQHw9LL  
XM7xVQUkmUwMMpp1mixfKbmlv+DEtAMk9O+kt5R4nPLt7M8IUS1CaezdivbKvvnL  
4Wnc7nXzRC/NNLtuWs+6i154Yj4a9JB19oGBRlnMm673GanbB1r8luZoROKdGakC  
AwEAAaOCAYEwggF9MA4GA1UdDwEB/wQEAwIBhjAdBgNVHSUEFjAUBggrBgEFBQcD  
AQYIKwYBBQUHAwIwDwYDVR0TAQH/BAUwAwEB/zAdBgNVHQ4EFgQU3k/X3Seu1X9Y  
geEsR6wjt8Z7V+8wHwYDVR0jBBgwFoAUj/BLf6guRSSuTVd6Y5qL3uLdG7wwegYI  
KwYBBQUHAQEebjBsMC0GCCsGAQUFBzABhiFodHRwOi8vb2NzcC5nbG9iYWxzZWdu  
LmNvbS9yb290cmMwOwYIKwYBBQUHMAKGL2h0dHA6Ly9zZWN1cmUuZ2xvYmFsc2ln  
bi5jb20vY2FjZXJ0L3Jvb3QtcjMuY3J0MDYGA1UdHwQvMC0wK6ApoCeGJWh0dHA6  
Ly9jcmwWuZ2xvYmFsc2lnbi5jb20vcM9vdC1yMy5jcmwwRwYDVR0gBEAwPjA8BgRV  
HSAAMDQwMgYIKwYBBQUHAgEWEJmh0dHBzOi8vd3d3Lmdsb2JhbHNpZ24uY29tL3Jl  
cG9zaXRvcnkVMA0GCsQGSib3DQEBcWUAA4IBAQA8OVBjtYaLZ+QvyJta++B4k8B  
DklbV6XCijaapjYbZoHssAMd4o+GDr24R0MOMm83sWLdo4gOuNIEwhSVyezr42Ej  
2QBLZEJSZwHnMpfpddc2mlZ5gMN6PECZrz4W+t2xmSgOYQi1uIHliDAoSm4/eppe  
8/SLCIjTYk/mgF5FfnmNDeOhDE+e836s83RyaVzLxTbI3ZfDSCw2WWglSbrXheWg  
ydDeEOmWtqeQjlrTmVX/UwFutWPc4W+v8xZ9KT3vcpG4PZd3ZH0GnckNjBcFiAi

dXm4Aymp9y9XHfAsTfHPH3UMmR7WIVc+iboT/14tIK9n2oASLijjPaACGnpU

-----END CERTIFICATE-----

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Revision #15

Created 19 September 2019 17:55:25 by Luiz Paulo Ferreira Rodrigues

Updated 19 July 2021 16:50:24 by Rafael Manochio