

SUBSECRETARÍA

S.G. TEGNOLOGÍAS DE LA INFORMACION Y COMUNICACIONES

Certification Service Provider of the Ministry of Employment and Social Security

Profile for Electronic Office certificate



Version control

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Version	Date	Comments	
1.0	03.12.2009	Final document	
1.1	30.03.2010	ISO/IANA number changes of the MPR and in the oid of the Electronic	
		Office certificate issued by CSPM	
1.2	10.09.2010	Heading Change, suppression of DG de Servicios	
		Suppression of the posibility of certificate request using valid certificates	
1.3	02.08.2011	Changed SGPD to SGTIC	
1.4	30.06.2012	Organization Structure actualization and new format	
1.5	18.06.2015	Added SHA-256	



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1 Introduction

1.1 Presentation

This document contains the profile of the Electronic Office Certificate issued by the Certification Service Provider of the Ministry of Employment and Social Security (CSPM).

This document clarifies and supplements the CSPM Certification Practice Statement (CPSM) regarding Electronic Office certificates.

1.2 Description

The Electronic Office certificate is an authentication system that is mentioned in several articles of the LAECSP and is provided for in Article 17 thereof. It is a technically and legally valid instrument that allows the authentication of Public Administration electronic offices against third parties.

The Electronic Office certificates issued by the CSPM are qualified certificates as defined in the LFE and they meet the requirements for medium level assurance as defined in [EIFEBIII]. Following this scheme, medium level assurance are advanced electronic signature systems based in qualified certificates.

The Electronic Office certificates are X.509 qualified certificates stored in software containers, located in secure application servers.

1.3 Document name and identification

1.3.1 Identification of this document

This document name is Certification Service Provider of the Ministry of Employment and Social Security. Profile for Electronic Office certificate,

with the information in the control version (p. ii).

Internet address of this document is listed in Annex B.

1.3.2 Identification of certificate types

Each certificate type has a dedicated *OID*, included in the PolicyIdentifier field of the certificate. Each *OID* is univocal and is not used to identify different types, policies or versions od issued certificates. OID for Electronic Office certificate is:

• Electronic Office Certificate [1.3.6.1.4.1.27781.2.5.2.2.1]

1.4 End Users

End users are the persons or entities that own and use the electronic certificates issued by the CSPM certification authorities. There are different end user types:

- a. Certificate requester.
- b. Certificate subscriber.
- c. Certificate responsible.



d. Certificate verifier.

Certificate requesters are the public employees of the Administration department.

Certificate subscribers of the Electronic Office certificates are the Public Administrations identified as such in the *Subject* Field. In the *Common Name* attribute is the name of the site (logical name and DNS or IP address) to which the certificate is associated.

Those responsible for the custody of the certificate are the authorized public employees.

Verifiers are the entities (including natural and legal persons, Public Administrations and other organizations and entities) who, using an Electronic Office certificate, issued by CPSM, verify the identity of the site, trusting on the validity of the relationship between an electronic site belonging to the administrative entity subscriber of the certificate and the public key of the certificate.

1.5 Certificate usage

Electronic Office certificates issued under the CPSM shall be used only in the defined transactions inside the permitted systems and applications. Issuance of the Electronic Office certificates under the CPSM obliges the subscriber to the acceptance and use thereof in the terms expressed in the CPSM.

It is emphasized that falls outside the scope of the CPSM to ensure the technological feasibility of applications that make use of any of the certificate profiles defined by the CPSM.

It is not allowed in any way the use of Electronic Office certificates outside the scope described in the CPSM what could cause immediate revocation of the certificates by the misuse of the same.

Electronic Office certificates issued by the CSPM, corresponding to the one defined in the LAECSP, has its usage limited by the law dispositions. The use of these certificates is limited to the site authentication, being excluded the use for document or procedures electronic signature.

1.6 Definitions and acronyms

1.6.1 Definitions

PIN

Within this document the following definitions are used:

cryptographic card.

C	Country: Distinguished Name attribute for an object within a X.500
	directory structure.
CN	Common name: Distinguished Name attribute for an object within a
	X.500 directory structure.
DN	Univocal identification for an item within a X.500 directory.
O	Organization: Distinguished Name attribute for an object within X.500
	directory structure.
OCSP	On line Certificate Status Protocol: This protocol allows checking the
	revocation status of an electronic certificate.
OU	Organizational Unit: Distinguished Name attribute for an object within a
	X.500 directory structure.

Personal Identification Number: Password that protects access to a



PKCS Public Key Cryptography Standards is a set of standards defined by RSA

Laboratories and internationally accepted.

RFC Request For Comments, standard documents emitted by IETF(Internet

Engineering Task Force).

1.6.2 Acronyms

PPAA Public Administrations.

C Country.

CA Certification Authority.
CDP CRL Distribution Point.
CEC Certificate Emision Code.

CN Common Name. CP Certificate Policy.

CPS Certification Practice Statement

CPSM Certification Practice Statement of the Ministry

CRL Certificate Revocation List.
CSP Cryptographic Service Provider.

CSPM Cryptographic Service Provider of the Ministry.

CSR Certificate Signing Request.
CWA CEN Workshop Agreement.

DN Distinguished Name.

LAECSP Law 11/2007 of June 22nd, on electronic access of citizens to Public

Services (Ley 11/2007, de 22 de junio, de acceso electrónico de los

ciudadanos a los Servicios Públicos).

LFE Law 59/2003 of December 19th on Electronic Signature (Ley 59/2003 de

19 de diciembre de Firma Electrónica).

O Organization.

OU Organizational Unit.
OID Object IDentifier.

OCSP On-line Certificate Status Protocol.

RA Registration Authority. RFC Request For Comments. VA Validation Authority.



2 Identification

2.1 Management of names

2.1.1 Types of names

Every certificate contains the DN, defined following the rules of the recommendation [ITU-T X.501], of the person and/or organization identified in the certificate, contained in the Subject field, including a Common Name attribute. All the issued certificates also meet the standard [IETF RFC 3280].

The CSPM guarnatees the unicity of the DN (Distinguished Names) of the Electronic Office certificates.

2.1.2 Normalization and Administrative Identity

The CSPM uses the normalized naming schema *Administrative Identity* proposed by the Spanish administration for every type of certificate and profile.

The Administrative Identity object has the ISO/IANA number 2.16.724.1.3.5.X.X, provided by the Spanish administration as a base to identify it, thus establishing a worldwide univocal identifier.

The Administrative Identity number for the Electronic Office certificate is:

• Electronic Office certificate (Medium level of assurance)

2.16.724.1.3.5.1.2

Certificate	Mandatory "Administrative Identity" fields	
SEDE ELECTRÓNICA	 Type of certificate Name of the subscriber entity NIF of the subscriber entity Descriptive name of the Electronic Office Domain name or IP address 	

Certificate	Optional "Administrative Identity" fields
SEDE ELECTRÓNICA	None



3 Operational requirements

3.1 Application for certificates

Only the public employees working for an administration body are allowed to start the application procedure for an Electronic Office certificate for that body. The Certification Authority shall verify that he is indeed a public employee of the applicant organization.

It is permitted the application without physical presence, based on administrative databases or applicable certificate. The only method currently allowed to request electronic office certificates is via email of an authorized public employee, sent from an internal account of the organism with the completed application form. Special attention will be paid to make sure the application form contains all the data corresponding to the certificate responsible person.

Thus, methods based on indirect physical presence are used, since the physical identity validation has occurred previously and ministry records are constantly kept updated.

The responsible of the certificates are the authorized public employees of the organization.

The person responsible the Certification Entity shall approve or deny applications for certificates of electronic seal. If the request is refused, the Certification Entity shall notify the applicant thereof denial.

The procedures established in this section also apply in case of renewal of certificates, as it involves the issuance of new certificates.

3.2 Issuance of certificates

Upon approval of the application of the Electronic Office certificate, the issuance of the same will be made safely. Delivery and acceptance of the certificate by the subscriber of the same is guaranteed by safe delivery to the responsible person.

The CSPM uses a procedure to generate the certificates that securely links the certificates with the organization information, including the certified public. It also indicates the date and time in which they were issued and measures are taken against forgery of certificates and to ensure the secrecy of the keys during its generation process.

The procedures established in this section also apply in case of renewal of certificates, as it involves the issuance of new certificates.

3.3 Certificate renewal

The renewal of Electronic Office certificates means the issuance of new certificates, being necessary to carry out a new application and subsequent issuance as described in previous sections.

Like with the application for the first time, procedures could be established in the future for the certificate renewal using valid certificates, and, if so, the applicant must authenticate remotely by certificate authentication in hardware support(cryptographic card), allowing no alternative to this practice.



3.4 Certificate revocation

The CSPM authenticates requests and reports relating to revocation of Electronic Office Certificates, checking that they come from an authorized person. Revocation requests must be sent to the Certification Authority reponsible.

Persons authorized to request revocation of this kind of certificates are the responsible persons of the same and the public employees within the organization with a rank level equal o higher to 30.

The revocation mechanisms allowed are through e-mail internal accounts properly validated or by a writing form signed by the applicant for revocation.



4 Profile for Electronic Office Certificate

The fields are the following:

Campo	Descripción	Contenido
1. X.509v1 Field		
1.1. Version	X.509 Standard version for the certificate	2 (= v3)
1.2. Serial Number	Certificate univocal identification number	7c 88 54 93 b6 c9 (sample)
1.3. Issuer Distinguished Name		
1.3.1.Country (C)	Country	C = ES
1.3.2.Organization (O)	Official name of the cryptographic service provider (certificate issuer)	O = MINISTERIO DE TRABAJO E INMIGRACION
1.3.3.Locality (L)	Cryptographic service provider locality	L = MADRID
1.3.4.Organizationa I Unit (OU)	Organizational unit within the service provider, responsible for issuing the certificate	OU = SUBDIRECCION GENERAL DE PROCESO DE DATOS
1.3.5.Organizationa I Unit (OU)	Organizational unit within the service provider, responsible for issuing the certificate	OU = PRESTADOR DE SERVICIOS DE CERTIFICACION MTIN
1.3.6.Common Name (CN)	Common name of the cryptographic service provider (certificate issuer)	CN = AC1 RAIZ MTIN
1.3.7.Serial Number	NIF of the Ministry of Employment and Social Security	S2819001E
1.4. Validity	Validity period: 3 years	
1.4.1.Not Before	Start of validity period	UTCTime YYMMDDHHMMSSZ
1.4.2.Not After	End of validity period	UTCTime YYMMDDHHMMSSZ
1.5. Subject		
1.5.1.Country (C)	País	C = ES
1.5.2.Organization (O)	Official name of the subscriber entity	O = MINISTERIO DE EMPLEO Y SEGURIDAD SOCIAL (sample)
1.5.3.Organizationa I Unit (OU)	Certificate type description	OU = SEDE ELECTRONICA
1.5.4.Organizationa I Unit (OU)	Descriptive name of the Electronic Office	OU = SEDE DEL MINISTERIO DE EMPLEO Y SEGURIDAD SOCIAL (ejemplo)
1.5.5.Serial	NIF of the subscriber entity	SerialNumber = S2819001E (sample)



Campo	Descripción	Contenido
Number		
1.5.6.Common Name (CN)	Domain name or IP address where the certificate is located	CN = sede.meyss.es (sample)
1.6. Subject Public Key Info	Public key, codified following the cryptographic algorithm	
1.7. Signature Algorithm	Signature algorithm	SHA-1/SHA-256 RSA Signature, 2048 bit key length

Y las extensiones son las siguientes:

	Campo	Descripción	Contenido
2.	X.509v3 Extensions		
	2.1. Authority Key Identifier	Identification of the public key corresponding to the private key used to sign a certificate. This extension is used where an issuer has multiple signing keys	
	2.1.1.Key Identifier	Issuer public key identifier	
	2.1.2.AuthorityCertI ssuer	Issuer certification path	C=ES, L=MADRID, O=MINISTERIO DE TRABAJO E INMIGRACION, OU=SUBDIRECCION GENERAL DE PROCESO DE DATOS, OU=PRESTADOR DE SERVICIOS DE CERTIFICACION, SERIALNUMBER=S2819001E, CN=AC1 RAIZ MTIN
	2.1.3.AuthorityCert SerialNumber	Serial number of the CA certificate	
	2.2. Subject Key Identifier	Subject public key identifier (derived from the subject public key using SHA1 hash)	
	2.3. cRLDistributionPoint	Indicates how to obtain the CRL information	
	2.3.1.distributionPo int	Website where CRL is found (distribution point 1)	URL CRL distribution point 1(see annex B)
	2.3.2.distributionPo int	Website where CRL is found (distribution point 2)	URL CRL distribution point 2(see annex B)
	2.4. Authority Info Access		
	2.4.1.Access Method	Id-ad-ocsp	OID 1.3.6.1.5.5.7.48.1
	2.4.2.Access Location	OCSP Web address	OCSP URL (see annex B)



Campo	Descripción	Contenido
2.5. Issuer Alternative Name	Alternative name for the contact person at the Issuer CA	
2.5.1.rfc822Name	E-mail contact address at the issuer CA	admin_ca@mtin.es
2.6. Key Usage	Critical extension to determine certificate usage	
2.6.1.Digital Signature	Used when the subject public key is used for verifying digital signatures	Selected "1"
2.6.2.Content Commitment	Used when the software must allow user to know what is signing	Selected "0"
2.6.3.Key Encipherment	Used for keys management and transport	Selected "1"
2.6.4.Data Encipherment	Used to encipher data other tan cryptographic keys	Selected "0"
2.6.5.Key Agreement	Used in key agreement protocol	Not selected "0"
2.6.6.Key Certificate Signature	Used to sign certificates. It is used in the CA certificates	Not selected "0"
2.6.7.CRL Signature	Used to sign certificate revocation lists	Not selected "0"
2.7. Extended Key Usage		
2.7.1.Server Authenticatio n	TSL web Server Authentication	OID 1.3.6.1.5.5.7.3.1
2.8. Qualified Certificate Statements		
2.8.1.OcComplianc e	Qualified certificate statement	OID 0.4.0.1862.1.1
2.8.2.OcEuRetenti onPeriod	Retention period for information (15 years)	OID 0.4.0.1862.1.3
2.9. Certificate Policies		
2.9.1.Policy Identifier	OID associated to the CPS	OID 1.3.6.1.4.1.27781.2.4.2.2.2
2.9.2.Policy Qualifier ID	CPS specification	
2.9.2.1. DPC	URL for the CPS	CPSM URL location (see annex B)



Campo	Descripción	Contenido
Pointer		
2.9.2.2. User Notice	explicitText field	" Qualified Electronic Office certificate, medium level of assurance. See the terms of use at < CPSM URL location (see annex B)>"
2.10. Subject Alternate Names		
2.10.1. rfc822Nam e	Contact E-mail at the Electronic Office	sedemtin@meyss.es (sample)
2.10.2. dnsName	DNS Name of the Electronic Office	sede.meyss.es (sample)
2.10.3. Directory Name	Administrative Identity	
2.10.3.1. Certificate type	Certificate type	2.16.724.1.3.5.1.2.1= SEDE ELECTRONICA
2.10.3.2. Name	Name of the subscriber entity	2.16.724.1.3.5.1.2.2 = MINISTERIO DE EMPLEO Y SEGURIDAD SOCIAL (sample)
2.10.3.3. NIF of the subscriber entity	NIF of the subscriber entity	2.16.724.1.3.5.1.2.3= S2833002 (sample)
2.10.3.4. Descriptive name of the Electronic Office	Short description of the Electronic Office, including a name	2.16.724.1.3.5.1.2.4 = SEDE DEL MINISTERIO DE TRABAJO E INMIGRACION
2.10.3.5. IP domain	Domain to which the Electronic Office belongs.	2.16.724.1.3.5.1.2.5 = sede.mtin.es (sample)



Annex A: References

EIFEBIII Esquema de identificación y firma electrónica de las Administraciones

Públicas. Bloque III (Public Administrations scheme for identification and

electronic signature. Part III)

ITU-T X.501 ITU-T Recommendation X.501 TC2 (08/1997) | ISO/IEC 9594-2:1998.

IETF RFC 3280 Internet X.509 Public Key Infrastructure Certificate and Certificate

Revocation List (CRL) Profile.



Annex B: Links (URL)

CPSM and certificate profile location:

http://ca.mtin.es/mtin/DPCyPoliticas

OCSP Location:

http://ca.mtin.es/mtin/ocsp

CRL publication address:

- Distribution point 1:

http://ca.mtin.es/mtin/crl/MTINAutoridadRaiz

- Distribution point 2:

http://ca2.mtin.es/mtin/crl/MTINAutoridadRaiz