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 - CAdES
 - XAdES ASiC-S(E)
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 - () CAdES
 - () XAdES ASiC-S(E)
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- -
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- - 0
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1		() .
2		: , Base64 , HTML- .
3		"cald".
4		PKCS#11, ' , , . PKCS#11, .
5		
6		() .
7		

(Java, Maven, Cipher Signer Server): <https://github.com/stokipny/sjwsa-singer-server-client>

0.

1		() .
2		: , Base64 , HTML- .
3		"cald".
4		
5		
6		() . .

7		0 .
8		

1		0 .
2		: , Base64 , HTML- .
3		"cald".
4		
5		
6		
7		0 . .
8		0 .
9		

CAdES

1		0 .
2		: , Base64 , HTML- .
3		"cald", "signatureType" "cadesType".
4		
5		
6		0 . .
7		0 .
8		

XAdES ASiC-S(E)

1		0 .
2		: , Base64 , HTML- .
3		: • XAdES: "cald", "signatureType", "xadesType". • ASiC-E XAdES: "cald", "xadesType", "asicForm=ASiC_E" • ASiC-E CAdES: "cald", "cadesType", "asicForm=ASiC_E" • ASiC-S CAdES: "cald", "cadesType", "asicForm=ASiC_S" • ASiC-S XAdES: "cald" , .
4		, ' .
5		
6		
7		0 . .

8		0 .
9		

1		0 .
2		: , Base64 , HTML- .
3		"cald". "dataToSignQualifier" "alreadySigned". "signatureType" "attached". "duplicateSign" "true", .
4		
5		
6		0 .
7		

1		0 .
2		: , Base64 , HTML- .
3		: , Base64 , HTML- .
4		"cald". "dataToSignQualifier" "alreadySigned". "signatureType" "detached". "duplicateSign" "true", .
5		
6		
7		0 .
8		

() CAdES

1		0 .
2		"cald", "signatureType" "cadesType".
3		
4	()	"keyStorePassword" "dataToSign".
5		

() XAdES ASIC-S(E)

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1		0 .
2		: , Base64 , HTML- .
3		: • XAdES: "cald", "signatureType", "xadesType". • ASIC-E XAdES: "cald", "xadesType", "asicForm=ASIC_E" • ASIC-E CAdES: "cald", "cadesType", "asicForm=ASIC_E" • ASIC-S CAdES: "cald", "cadesType", "asicForm=ASIC_S" • ASIC-S XAdES: "cald" , .
4		
5	()	"keyStorePassword" "dataToSign".
6		

()

1		0 .
3		: • XAdES: "cald", "signatureType", "xadesType". • ASIC-E XAdES: "cald", "xadesType", "asicForm=ASIC_E" • ASIC-E CAdES: "cald", "cadesType", "asicForm=ASIC_E" • ASIC-S CAdES: "cald", "cadesType", "asicForm=ASIC_S" • ASIC-S XAdES: "cald" , .
4		
5	()	"keyStorePassword" "dataToSign".
6		

1		0 .
2		: , Base64 , HTML- .
3		: , Base64 , HTML- .
4		
5		
6		0 .
7		

, .

(Java, Maven, Cipher Signer Server): <https://github.com/stokipny/sjwsa-singer-server-client>

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1		0 .
2		: , Base64 .
3		"cald".
4		
5		, . : , Base64 .
6		
7		() . : , Base64 .
8		

().

1		0 .
2		: , Base64 .
3		"cald".
4		
5		, . : , Base64 .
6		
7		() . .
8		() . : , Base64 .
9		

1		0 .
2		: , Base64 .
3		"cald".
4		
5		
6		() . : , Base64 .
7		

1		0 .
2		: , Base64 .

3		"cald".
4		
5		
6		() . .
7		() . : , Base64 .
8		

1		() .
2		: , Base64 , HTML- .
3		3 4 .
4		
5		() .
6		

0.

1		() .
2		: , Base64 , HTML- .
3		
4		
5		() . .
6		() .
7		

1		() .
2		: , Base64 , HTML- .
3		: , Base64 , HTML- .
4		
5		
6		() .
7		

1		0 .
2		"cald".
3		
4		
5		

1		0 .
2		"cald".
3		
4		
5		

0

1		• • (default) , ' ,).
2		0 , .
3		
4		
5		() . ⚠ • , 0 . • 0 .

1		• • ((default) , ' ,).
2		PKCS10_DELIVERY_TYPE="RETURN_IN_RESPONSE". '.

3	0 0 0	0: • , RO-jCMP. • 0, () API. • 0
4		
5		
6		, .