

CECHDITY®

PKCS #9 Amendment for PTDs

PKCS Workshop 2002 Magnus

Motivation



- Currently, there's:
 - No way to indicate suggested MIME type (if not given MIME message)
 - No way to indicate device's display/presentation capabilities
- So, an attacker could:
 - Disguise a message using a bogus Content-Type and/or character set
 - Take advantage of a particular device's deficiencies

Proposal



- PKCS #9 attributes for PTD to be included in the signed message
 - Alleged Content-Type
 - Presentation Capabilities
- Syntax & Value set:
 - Alleged Content-Type
 - UTF8String, value provided in CKM_CMS_SIG mechanism parameters
 - Presentation Capabilities
 - CC/PP, UAProf, something else? Or just make & model?

Problems



- Especially for the presentation capabilities
 - Change of display
 - Use of external speakers
 - Abuse of owner
- Workaround
 - Just an open format string?