

# Simple Certificate Enrollment Protocol

The *Simple Certificate Enrollment Protocol* (SCEP, rhymes with "step") is an X.509 certificate enrollment protocol that uses PKCS#7 and PKCS#10 over HTTP.

- [http://en.wikipedia.org/wiki/Simple\\_Certificate\\_Enrollment\\_Protocol](http://en.wikipedia.org/wiki/Simple_Certificate_Enrollment_Protocol)
- [http://www.cisco.com/warp/public/cc/pd/sqsw/tech/scep\\_wp.htm](http://www.cisco.com/warp/public/cc/pd/sqsw/tech/scep_wp.htm)
- <http://www.ietf.org/id/draft-nourse-scep-22.txt>

Apple uses SCEP for "over the air" certificate enrollment on the iPhone:

- [http://images.apple.com/iphone/business/docs/iPhone\\_MDM.pdf](http://images.apple.com/iphone/business/docs/iPhone_MDM.pdf)
- [http://images.apple.com/iphone/business/docs/iPhone\\_OTA\\_Enrollment\\_Configuration.pdf](http://images.apple.com/iphone/business/docs/iPhone_OTA_Enrollment_Configuration.pdf)
- [http://manuals.info.apple.com/en\\_US/Enterprise\\_Deployment\\_Guide.pdf](http://manuals.info.apple.com/en_US/Enterprise_Deployment_Guide.pdf)

For more information about SCEP and the iPhone, perform this google search:

`Simple Certificate Enrollment Protocol iphone site:apple.com`

On the iPhone, the SCEP protocol is bootstrapped by typing a username/password into a Safari browser window (which immediately suggests that federated access may be possible).

An interesting application of SCEP:

- <http://www.egeniq.com/2010/10/14/mobile-phones-for-two-factor-and-step-up-authentication/>