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# SWITCH

The Swiss Education & Research Network

## **EV certificates: is it really *time to Go Green?***

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2nd SWITCHpki RAO Meeting

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# As seen on TV^H^Hthe Web, recently

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It's time to Go Green  
Get more than just a Padlock

**NEW Extended ServerSign**  
Activate the Green Bar in IE7  
Get the highest level of trust

Internet Explorer  
rovebank.com/ WoodGrove Bank [US]

INTRODUCTORY SPECIAL PRICING AVAILABLE NOW [click here](#)

Available from several CAs, since December 2006  
Officially introduced with the launch of Windows Vista  
(30 January 2007)

**EV** stands for **Extended Validation**

# How EV came into existence

In 2005, several CAs (Verisign, Geotrust, Cybertrust, Comodo et al.) created an informal club dubbed the **CA Forum**, with first public reports of its existence in December 2005

Later on, the club was joined by a couple of (browser) software vendors – and therefore renamed to **CA/Browser Forum**

24 member CAs as of April 2007:

Certum	<b>Entrust, Inc.</b>	<b>Network Solutions, LLC</b>	TDC Certification Authority
<b>Comodo CA Ltd</b>	<b>GeoTrust, Inc.</b>	<b>QuoVadis Ltd.</b>	<b>Thawte, Inc.</b>
<b>Cybertrust</b>	<b>GlobalSign</b>	RSA Security, Inc.	Trustis Limited
<b>DigiCert, Inc.</b>	<b>GoDaddy.com, Inc.</b>	<b>SecureTrust Corporation</b>	<b>VeriSign, Inc.</b>
<b>DigiNotar</b>	IdenTrust, Inc.	Starfield Technologies, Inc.	<b>Wells Fargo Bank, N.A.</b>
Echoworx Corporation	ipsCA, IPS Certification Authority s.l.	Swisscom Digital Certificate Service	<b>XRamp Security Services, Inc.</b>

[printed in **bold** = currently configured for EV certs in Microsoft Windows]

Plus 4 browser vendors: Microsoft, Mozilla, Opera, KDE

# The EV SSL Guidelines – basic facts

First version became public in October 2006:  
**“Version 1.0 - Draft 11”**

No updates since then, but several CAs have updated their existing (or issued new) CP/CPSes in the meantime and are selling EV SSL certificates now

A 65-page document, currently

Of those 65 pages, 18 are about **“information verification requirements”** – this is the core of the guidelines

Limited to “server-authentication SSL/TLS on the Internet” for the time being (not applicable to user authentication, S/MIME, code signing etc. – *may be covered in future versions*)

Will not be issued to (1) *General partnerships*, (2) *Unincorporated associations*, (3) *Sole proprietorships*, (4) *Individuals (natural persons)* – will also make it hard for universities, probably

May actually convey a false sense of trust to users, cf. section 2 (c):  
**Excluded Purposes.** *EV Certificates focus only on the identity of the Subject named in the Certificate, and not on the behavior of the Subject. As such, an EV Certificate is **not** intended to provide any assurances, or otherwise represent or warrant:*

- (1) That the Subject named in the EV Certificate is actively engaged in doing business;*
- (2) That the Subject named in the EV Certificate complies with applicable laws;*
- (3) That the Subject named in the EV Certificate is trustworthy, honest, or reputable in its business dealings; or*
- (4) That it is “safe” to do business with the Subject named in the EV Certificate.*

On the other hand, these guidelines include good ideas like setting detailed requirements for subject verification and technical properties (key lengths, extensions revocation management etc.)

# Browser support

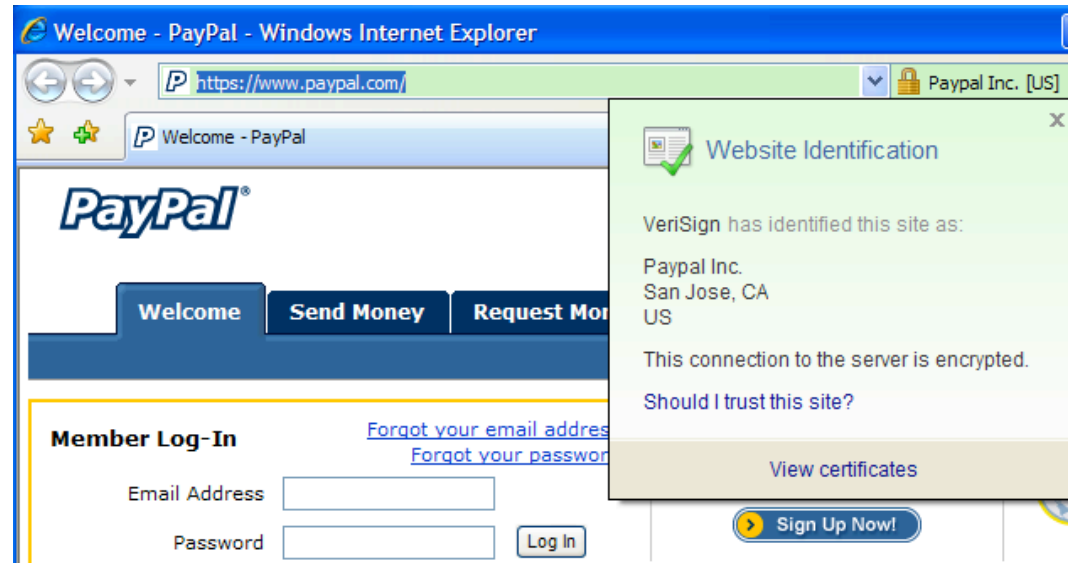
Limited to IE7 currently:

Firefox 3 is expected to have (some sort of) support for them, with its new location bar

(cf. e.g. [https://bugzilla.mozilla.org/show\\_bug.cgi?id=366797](https://bugzilla.mozilla.org/show_bug.cgi?id=366797))

Not sure about the others:

- Opera: *There is a lot more that needs to be implemented before we can release a version with support for EV, but we will do so When It's Ready.* (<http://labs.opera.com/news/2006/10/09/>)
- Konqueror: <http://dot.kde.org/1132619164/> ... did anything happen since?
- Safari: ? (Apple is not even a member of the club)



## In short

EV SSL certificates are difficult (if not impossible) to get for organizations without an entry in a trade register or similar

They carry a hefty price tag: currently from \$450 (GoDaddy) to \$1499 (Verisign), for a one-year EV cert

Are only recognized by MSIE7 for the time being

The guidelines stipulate a couple of useful (minimum) requirements, but on the other hand are prone to being “abused” for purely commercial reasons / marketing purposes

*(“The impact of Extended Validation certificates on your business can be summed up in one word: TRUST”, “Maximizing Site Visitor Trust Using Extended Validation SSL” etc.)*

Won't be part of the SWITCHpki offering anytime soon



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