

iEnigma - The Re-Invention Of The Smart Card



Interviewee: Daniela Previtali
Designation: Director Product Marketing
Company: charismathics

Life is becoming more hectic each day and as a consequence people need faster and improved technologies to help them securing the necessary and sometimes entertaining themselves with the unnecessary.

In the past many cases, public administration entities and the corporate world implemented technologies that were convenient even at security detriment. As new possibilities emerges, there is no need to sacrifice either the performance or the implementation output. Both the security architects and the end-users can now enjoy new unprecedented benefits through the porting of PKI to the smart phone planet.

When PKI was first introduced, many believed that with its unbeatable security standards, which still offers the most efficient protection measures these days, it would quickly go viral. It made its way all over the world overtime to all sort of market segments but never turned out to be a commodity. Its intrinsic secure architecture is what that has somehow penalized its diffusion and PKI still brings an aura of inconvenience, because it is perceived to require the intervention of experts to be fully put in place and appreciated. Therefore, some tried other paths like secure SMS messaging, or one-time password, or even biometrics, just to name a few, and they faced different sort of troubles which made them even reconsider at times their position as security breaches or other impracticalities came about. We now have the tools to deliver PKI to consumers: with iEnigma from charismathics, the smart card concept is in fact totally revolutionized and the mobile phone itself inherits new functionalities.

iEnigma took years of development to become a reality but it was worth the effort, the result is simply amazing. We realized early on that trends would change in such a way that mobility would become a turning point. Think for instance of sales managers, private bankers, as well as doctors, and nurses, just to draw some examples. They do not have the luxury to spend their whole day in the comfort of their office, they rather drive to customers, move from one branch to another, visit patients and customers, etc. And you cannot reasonably expect them to carry their specialist equipment, along with a laptop, a mobile phone, a smart card and its related reader. Some phone devices are so smart to meet most application usages alone without the need for a laptop anymore. But what else can still be eliminated from the equation to make their life easier? The hardware security devices which can instead be embedded in what they mandatorily need. That's how we started a couple of years ago: we were selling smart card technology, and actually still are - to be honest, when we perceived a specific need from the market that had not been met yet.



charismathics - iEnigma

With the patented solution of iEnigma you can accomplish all common PKI operations from the ease of your smart phone. You can therefore log onto your Windows operating system, or even better to a Single Sign On product, like the IBM Tivoli Access Manager for Enterprise Single Sign-On, you can digitally sign files, like PDF which have a legal value, and you can equally sign your emails. It is enough to run the application from your smart phone. Just make sure the Bluetooth is activated in case of use with a computer, have a digital certificate preliminarily installed (and this can even come from the corporate CA the user works for) and the user is ready to start and enjoy a new experience.

Two-factor authentication is still guaranteed by a PIN where the user can type in, just as the user would do with a regular smart card. Currently iEnigma is available for sale on Windows Mobile phones only but we will release the beta version for BlackBerry by September and then for Android by the end of this year. And the version for the iPhone is ready too.

This is indeed a great opportunity for forward thinkers engaged in mobile carriers or large corporations to plan PKI schemes ahead taking into account new possibilities now at reach. It must be underlined in fact that iEnigma can work in a hybrid environment where both resident and mobile solutions can coexist. charismathics has pioneered the mix and match concept away from the traditional proprietary approach, and has made it the key to distinguish itself in the worldwide PKI industry.

Its charismathics Smart Security Interface (CSSI) is in fact the most evolved middleware in the marketplace that supports by itself around 100 different smart card operating systems, multiple platforms (including the least known but highly effective minidriver, tokenD, and Solaris, on top of the common Windows, Mac and Linux), and a wide array of third-party applications. As we expanded the integration to unconventional technologies like TPM, we used the same engine as the core for iEnigma too.

In the most diversified scenario which is however more and more common in today's economy, you could therefore imagine a company that sets up a PKI scheme based on a smart card vendor. They are then acquired by another company that has a different smart card vendor in place. To merge the two they could first of all adopt CSSI; by simply introducing this new middleware, they would save their previous investment and could keep on using smart cards from multiple vendors. On top of that rather than replacing smart cards when they malfunction or are lost, they could optimize their assignment, so that users on-the-go can have iEnigma installed on their smart phone while only resident employees working all day long at their desk can still be handed over a reader and a smart card.

With iEnigma the cost reduction is not just sensible on the hardware side, but it also expands to maintenance and logistics: no more shipping fees and stocks to keep, you just buy the number of licenses you really need. Smart cards and USB tokens are also easily lost, while it's very unlikely a smart phone is kept too far away from you. It is indeed becoming as precious as your wallet.

iEnigma can therefore help corporations modernize and rationalize their security measures: those that could not afford a leap into PKI but felt threatened by both internal and external attacks can now have a cost-effective solution; those that had already protected a VIP share of their customers can now offer an effective way to their entire customer base being sure that they wouldn't be overloaded with support calls; those that were still hesitant will definitely see iEnigma as the revolutionary turning point for their decision makers to finally embrace the security of their assets.

:: To view the original interview, please visit www.TheSmartSense.com. For more information, please contact Kelly@TheSmartSense.com ::