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# payShield Cloud HSM Business Brief

Launch new payment solutions faster



# EXECUTIVE SUMMARY



Business applications everywhere are making more use of the cloud



The payments market is no different. Knowing how and when to move payment workloads to the cloud can be challenging.

Ensuring business continuity and ongoing security compliance are critical factors to address.



A payment HSM performs the same fundamental role, irrespective of where it is located – protecting sensitive data and cryptographic keys. A cloud-based approach takes away the operational pain of running an HSM estate and shifts the risk for ensuring uptime to the service provider.



Cloud may be the ultimate destination, but you still need to trust the technology and the vendor – the Thales payShield Cloud HSM service builds on what thousands of existing Thales payment HSM users already know and trust.



We want to help you leverage the opportunities of the cloud while enabling you to move at your chosen pace. Thales is your partner and has the expertise to help you decide what is best for your business which likely will involve a hybrid approach - comprising a mixture of on-prem and cloud applications and HSM solutions. With the cloud HSM option, you will benefit from efficiency and flexibility while maintaining the prerequisite high levels of security.



Since everything in your payment infrastructure is no longer under in-house control, you will be managing the different risks involved in trusting a third party service provider – similar to how many banks today leverage the card issuing solutions from the ['Banking and Payment' business line](#) at Thales.



Check out our TCO Calculator

Improvements in your business processes made possible by a new approach to HSM deployment will inevitably enable you to achieve long term financial benefits.

The remainder of this document helps you understand the contribution that **Thales hosted HSMs** can make on such a journey.



# THALES PAYSHIELD CLOUD HSM IS...



...An alternative way for you to fulfil your payment security needs, offering your organization a more agile and faster rollout solution for payment security compared to the traditional on-prem ownership model.



It enables you to launch new projects faster



It accelerates HSM deployment in support of your business growth



It improves your cash flow relating to new payment security requirements



Thales is here to support your HSM needs, be it migration to the cloud, continuing with on premises HSMs or environment – it is your choice, let us be your **trusted advisors.**



## WHY FLEXIBILITY IN YOUR PAYMENT HSM INFRASTRUCTURE IS IMPORTANT

Over the lifetime of your payment HSM estate, you likely will experience regular demands for more capacity, new functionality or access by more applications spread across multiple locations where your organization operates.

An on-prem HSM estate can support such requirements – however you may face challenges associated with increased time to deploy, higher costs and local replication of equipment, staff and associated services.

With a full or partial cloud-based approach to your payment HSM needs, it is possible to deliver the solution you need in a more **efficient**, **lower cost** and **flexible** way.

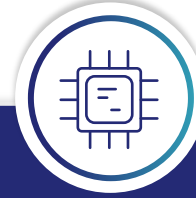
Some specific areas where the payShield Cloud HSM service can help deliver important flexibility include:



Sharing production HSMs across multiple applications, staff and regions is easy – the physical constraints of on-prem installations are removed



Accessing the latest certified hardware and software is available on demand – planning for physical device replacement is no longer necessary



Adding extra devices for resilience, backup and capacity purposes is simplified – ordering, taking delivery and installing HSMs is replaced with a simple online subscription process



## INCREASED AGILITY



When you subscribe to the payShield Cloud HSM service there is no need for your team to be involved in any of the installation and basic configuration tasks – Thales handles all of this securely on your behalf, freeing up your staff for other important tasks core to your business.



Extra HSM capacity can be made available very quickly, bypassing the traditional order, delivery and secure handling processes you need to manage yourselves for an on-prem HSM estate – Thales has always additional HSM capacity available for you to leverage quickly without any investment from you in spares or storage facilities.



Often having HSMs available in locations other than where your own data centers are situated is advantageous - for example, when you wish to spin up services quickly in new territories. Thales payShield Cloud HSM enables you to subscribe to HSMs in a growing list of locations worldwide (starting with the US and Europe) while facilitating service access to staff across multiple geographical regions – physical country barriers are eliminated.





# GETTING STARTED IS EASIER THAN EVER



We have a [TCO calculator](#) that illustrates how your total investment is typically significantly less in the first 3 years with the OPEX subscription model compared to the traditional CAPEX ownership model – you also experience improved cash flow.



First and foremost, with our cloud service, there is no upfront investment required in Thales technology – you start your monthly subscriptions once your HSM has been provisioned and the connection from your application has been established.



The HSMs used in the service are the same payShield 10K HSMs that you would use in any on-prem estates you run today. Your team can make use of the existing management and monitoring tools (including smart cards and readers) avoiding the cost and time delay in ordering, installing, configuring and testing new accessories.



Future migration to the latest hardware is simple – we update your subscription, eliminating the lengthy and costly physical HSM migration process you typically undertake every 7 to 10 years with your on-prem HSM estate.



## WHAT OUR OPTIMIZED CLOUD INFRASTRUCTURE MEANS FOR YOU



Your staff will no longer be directly involved in many of the time consuming and complex HSM lifecycle management tasks including installation, network configuration and faulty HSM replacement. Such activities are often proprietary to the HSM technology, not performed very often but still require specialist resources on an ongoing basis – staffing and refresher training is now undertaken by Thales on your behalf.

Using the Thales payShield Cloud HSM service reduces travel requirements for your team as all HSM configuration, management and ongoing diagnosis is performed remotely rather than wholly or partially inside data centers.



There is significant potential for higher uptime with the cloud HSM estate compared to what you can achieve today with an on-prem deployment. The main reasons are Thales can leverage its economy of scale and create higher levels of resilience, redundancy and capacity at lower cost – the savings benefits are shared with you directly through reduced TCO costs.



You will also experience security benefits in that the data centers will be continually kept in compliance with the latest security standards and certifications. This includes hardware and software and associated physical infrastructure features such as firewalls, switches, cameras, room entry/exit and secure racks together with the associated audit trails.

Our service inherently delivers high levels of future-proofing for your overall payment security infrastructure.



## KEY TAKEAWAYS

When you are ready to migrate some or all of your payment workloads to the cloud, payShield Cloud HSM is proven and ready to help.



It offers an optimized, flexible and future-proof alternative to traditional on-prem HSMs



It simplifies your business processes associated with payment HSMs, while delivering lower TCO



It makes your organization more agile, requiring no upfront investment in HSMs to launch new solutions

**THALES**  
Building a future we can all trust

Thales as an organization has been committed to a proactive and responsible approach to environmental protection for **more than 15 years**.

Our payShield Cloud HSM service with its **higher efficiency, lower transport demands** and **optimized data center** footprint plays a small but important goal in this overall objective.

Learn more about the payShield Cloud HSM service on our web site.

Our payShield Cloud HSM Technical Brief provides additional details on how the Thales approach to hosted HSM solutions can help your organization now.

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