SafeNet Luna Network HSM

Upgrade Guide



All information herein is either public information or is the property of and owned solely by Gemalto NV. and/or its subsidiaries who shall have and keep the sole right to file patent applications or any other kind of intellectual property protection in connection with such information.

Nothing herein shall be construed as implying or granting to you any rights, by license, grant or otherwise, under any intellectual and/or industrial property rights of or concerning any of Gemalto's information.

This document can be used for informational, non-commercial, internal and personal use only provided that:

- The copyright notice below, the confidentiality and proprietary legend and this full warning notice appear in all copies.
- This document shall not be posted on any network computer or broadcast in any media and no modification of any part of this document shall be made.

Use for any other purpose is expressly prohibited and may result in severe civil and criminal liabilities.

The information contained in this document is provided "AS IS" without any warranty of any kind. Unless otherwise expressly agreed in writing, Gemalto makes no warranty as to the value or accuracy of information contained herein.

The document could include technical inaccuracies or typographical errors. Changes are periodically added to the information herein. Furthermore, Gemalto reserves the right to make any change or improvement in the specifications data, information, and the like described herein, at any time.

Gemalto hereby disclaims all warranties and conditions with regard to the information contained herein, including all implied warranties of merchantability, fitness for a particular purpose, title and non-infringement. In no event shall Gemalto be liable, whether in contract, tort or otherwise, for any indirect, special or consequential damages or any damages whatsoever including but not limited to damages resulting from loss of use, data, profits, revenues, or customers, arising out of or in connection with the use or performance of information contained in this document.

Gemalto does not and shall not warrant that this product will be resistant to all possible attacks and shall not incur, and disclaims, any liability in this respect. Even if each product is compliant with current security standards in force on the date of their design, security mechanisms' resistance necessarily evolves according to the state of the art in security and notably under the emergence of new attacks. Under no circumstances, shall Gemalto be held liable for any third party actions and in particular in case of any successful attack against system or equipment incorporating Gemalto products. Gemalto disclaims any liability with respect to security for direct, indirect, incidental or consequential damages that result from any use of its products. It is further stressed that independent testing and verification by the person using the product is particularly encouraged, especially in any application in which defective, incorrect or insecure functioning could result in damage to persons or property, denial of service or loss of privacy.

© 2017 Gemalto. All rights reserved. Gemalto and the Gemalto logo are trademarks and service marks of Gemalto N.V. and/or its subsidiaries and are registered in certain countries. All other trademarks and service marks, whether registered or not in specific countries, are the property of their respective owners.

Product Version: 7.0 Document Part Number: 007-013804-001, Rev. A Release Date: June 2017

Contents

1 Introduction	7
Welcome	7
Upgrade Models	7
At Time of HSM Order and Afterward	7
Today's Process Gets Better	7
Systems in the Process	8
Using this Document	8
2 Upgrade Options	
Factory Upgrades	Q
Field Upgrades	9
3 Return Material Authorization	
Repair	10
Replacement	10
4 Revoking a License	
5 Getting Information	
Querying Entitlements	12
Seeing What Upgrades Are On the HSM Appliance	12
	10
6 Purchasing Upgrades	
Entitlement Email	
Entitlement Certificate	13
7 Managing Upgrade Entitlements with GLP	
Login to GLP with Entitlement Identifier	14
Login to GLP with Email Address and Password	14
Registering	15
Viewing Entitlements	15
Enter Quantity	16
Select HSM	17
Who is Activating?	18
Complete Activation	18
Save License String	19
Listing Purchased Entitlements	20
LISTING ACTIVATIONS	20
Listing Registered Devices	21
8 Managing Upgrades on HSM Appliance	
Transfer License String to HSM Appliance	23
Logging in to the HSM	23
Getting the HSM Fingerprint	23

Applying the Upgrade	24 24
APPENDIX A Troubleshooting	
Applying Upgrade on HSM Appliance	25

1 Introduction

Welcome

The SafeNet Luna Network HSM is a feature-packed product that offers most customers all the out-of-the-box capabilities they need. Gemalto offers upgrades on some models for those customers that need additional capacity. This guide describes the upgrades, how to order them and the steps to apply them.

For all customers, an "upgrade" includes additional partitions. For our Korean customers, Gemalto also offers an upgrade to enable Korean-specific cryptographic algorithms.

Upgrade Models

SafeNet Luna Network HSM comes in three series and for each series in three models. Gemalto designates the last two digits of the product identifier as the model. In the example "Luna S750," the model is "50." The three models available are: "00," "50" and "90." Models "50" and "90" are capable of upgrades. With this release of SafeNet Luna Network HSM, model "00" does not accept upgrades.

At Time of HSM Order and Afterward

Gemalto customers can choose to have upgrades applied at the *factory* at time of HSM order. Customers also have the option to order an upgrade and apply it themselves as a *field* upgrade. Factory upgrades free customers from some of the steps necessary to enable capabilities on the HSM. On the other hand, field upgrades offer maximum flexibility in how to distribute upgrades amongst a fleet of HSMs. The choice is yours. This guide describes in detail the steps for both factory upgrades and field upgrades.

Today's Process Gets Better

The process described in this guide represents the start of a new method for Gemalto to entitle customers with upgrades. Those customers familiar with partition upgrades for the Luna SA 5/6 product will instantly see the benefits of the new method. Gemalto is working on and has lots of plans to improve the process. In some places in this guide, the text notes coming changes to give you advance notice of a planned process improvement.

Systems in the Process

Before starting into a detailed description of how to order and apply upgrades, an introduction to the systems involved is useful for context. These systems are:

- *Gemalto order entry*. All products upgrades included have part numbers. The Gemalto order entry system uses part numbers to specify the product(s) purchased by a customer. The first step to obtain an upgrade is to obtain its associated part number. After entering and validating an order, the Gemalto order entry system sends you an email with instructions on how to apply a field upgrade or review an activated factory upgrade.
- *Gemalto Licensing Portal* or *GLP*. GLP is a self-service web portal where customers can activate and revoke¹ upgrades. From GLP, customers can also view details of purchased upgrades.
- SafeNet Luna Network HSM. The HSM appliance is ultimately the target for the upgrade.

Using this Document

This guide takes advantage of hyperlinks to enable you to navigate back-and-forth between high-level overview sections and detailed instructions. Purple text amongst black text is usually a hyperlink. Click on the colored text to go to the relevant reference. To return, simultaneously hold the *Alt* and *left arrow* keys.

¹ Revoke is a capability under development.

2 Upgrade Options

Factory Upgrades

This option has you order SafeNet Luna Network HSM(s) and upgrade(s) at the same time. Gemalto installs the upgrade(s) on the HSM(s) at time of manufacture so that when you receive the product, the upgrade entitlement is activated on your behalf. After placing your order, you receive an email from Gemalto's order entry system with details of your upgrade entitlement. You have no action: when you receive your HSM(s), the upgrade is installed and ready for service.

Field Upgrades

This option enables you to order an upgrade for SafeNet Luna Network HSM(s) under your management. After placing your order for an upgrade, you receive an email from Gemalto's order entry system with instructions on how to obtain your entitlement. Attached to the email is an entitlement certificate with an entitlement identifier. At a high level, after you receive the email, the steps you perform are:

- 1. Logon to the Gemalto self-service GLP portal
- 2. Register if this visit is your first and/or you did not register previously
- 3. Enter the quantity of the entitlement you want to activate
- 4. Select the HSM that you want to upgrade
- 5. Identify who is activating the entitlement
- 6. Complete the activation
- 7. Save the license string to file
- 8. Copy the license string file to the HSM appliance
- 9. Login to the HSM appliance
- 10. Login to the HSM
- 11. Apply the upgrade

At the time of preparing this guide, Gemalto was working to eliminate two steps from the field upgrades process. If the email you received indicates that this change is still in progress, you need to do two additional steps that precede the ones in the list above:

- 1. Login to the HSM(s) that you want to upgrade
- 2. Show and record the HSM fingerprint.

Use the HSM fingerprint in place of the HSM serial number for step 4 above.

3 Return Material Authorization

In the exceptional event that you must return an HSM to Gemalto, the unit you receive in exchange or receive back will represent "the configuration" before the failure. "The configuration" means the base part number plus any upgrades appearing in GLP as activated for the HSM appliance. Note, therefore, that if you previously had Gemalto's customer care team revoke one or more upgrades, the HSM appliance sent to you will **not** have the upgrade(s).

Repair

Gemalto will apply *activated* upgrades to the repaired HSM appliance. For a repaired HSM appliance, the HSM serial number remains unchanged. You can use the same serial number of the repaired HSM appliance in the GLP portal.

Replacement

Gemalto will apply *activated* upgrades to the replacement HSM appliance. A replacement HSM appliance has a different serial number from the one returned. Be aware that you need to use the new serial number for the replacement HSM appliance in the GLP portal.

4 Revoking a License

Gemalto offers you the freedom to purchase and apply upgrades to any HSM appliance you possess. If you have already applied an upgrade to an HSM appliance and want to remove the upgrade and apply it to a different HSM appliance, we refer to this process as *revoking a license*. Revoking a license permits you to transfer an upgrade from one HSM appliance to another. A simple use case is transfer of an upgrade from a development HSM appliance to a production HSM appliance.

A self-service feature to revoke a license is in development and Gemalto hopes to release it soon. Until released, please contact Gemalto customer care to revoke a license on your behalf. After a customer care representative revokes a license, you can re-activate it in the GLP portal.

5 Getting Information

Querying Entitlements

From within the GLP portal, you can view your upgrade entitlements. Follow these steps to do so.

- 1. Find an entitlement identifier provided in a previous email from Gemalto's order entry system and logon to GLP with the EID. OR
- 2. If you previously registered, use your login credentials to access GLP. Login credentials are a valid email address and password.
- 3. _Viewing_EntitlementsSelect "My Orders" to see a list of entitlements you have purchased.
- 4. Select "My Activations" to see a list of entitlements you have activated.
- 5. Select "My Devices" to see a list of HSM serial numbers that you have registered with GLP from previous activations activities.

Seeing What Upgrades Are On the HSM Appliance

To see what upgrades are applied on the HSM appliance, logon as an administrator to the appliance and use the sysconf license list command. Here is an example.

6 Purchasing Upgrades

To place an order for an upgrade, you need the relevant Gemalto part number. Be aware that there are two part numbers: one for factory-installed upgrades and one for field upgrades (that is, customer installed). Gemalto offers partition upgrades in "five-packs" up to a total aggregate of 100 partitions. By way of an example, suppose you have a model S790 appliance. The base number of partitions for this model is 10. Suppose you want to upgrade your HSM to have 30 partitions. You would order quantity four upgrades: 20 partitions. After you apply this full entitlement to your HSM, you will have the desired 30 partitions.

Entitlement Email

After you have placed your order for an upgrade and a Gemalto customer care representative has entered the order, you receive an email with detailed instructions on how to obtain and apply your upgrade. Very likely, you followed a link to this user guide from the entitlement email you received.

Entitlement Certificate

Attached to the upgrade email is an entitlement certificate. On this certificate is an entitlement identifier that you need to activate your upgrade. Here is an example of an entitlement certificate and where to find the EID.

SafeNet License Certificate of Entitlement

Thank you for your recent SafeNet Hardware Security Module (HSM) purchase.

Below please find your Certificate of Entitlement. Please keep this for your

records.

We thank you for your business

Entitlement ID:	d8bdce04-acc0-4786-bf4	ic-7fa2c5fabba5	
Sold To	Wayne Inc.		
End Customer:			
Customer Purchase Order:	Luna partition 1026	Gemalto/SafeNet Sales Order:	11067962
Item Number:	908-000395-001	Quantity:	1
Description:	LUNA PARTITION UPGR	ADE 5 PACK	
Order Book Date:	10/26/2016	Solution ID:	

7Managing Upgrade Entitlements with GLP

Login to GLP with Entitlement Identifier

On the GLP portal "Welcome" screen, enter the entitlement identifier provided to you in an email from Gemalto's order entry system in the "Enter Entitlement ID" window box.



Login to GLP with Email Address and Password

On the GLP portal "Welcome" screen, enter the credentials you created when you registered with GLP.

Registering

On your first logon to the GLP portal, you have an opportunity to complete the optional user registration process. This registration makes subsequent logons to the GLP portal more convenient. After completing a few mandatory fields, you can subsequently access the GLP portal with an email address and password.

O [*] Create Your Account G∈ ×		Read Wagne		
← → ♂ ⑦ 127.0.0.1:8080/ecp/auth/create				☆ :
🔛 Apps 🗅 Desi Music Mix! BETA 🛛 🌆 USGlobalSat MR350- 🗸 🕻	Monnit Wireless Sensi 🛛 🌠 Get Wireless Indoor A	📕 Recent Earthquakes fo 🛛 🚹 LG Solutions :: FTG So	AnywhereUSB - Netwo	» 📃 Other bookmarks
gemalto [×]			English -	
Licensing Portal Asterisk	(*) indicates a required field		Apr 25, 2017 8:24:04 AM	
Enter Your Account Inform	ation			
Email Address*		Password*		
Confirm Email Address*		Confirm Password*		
Set Your Security Preferen	ces			
Security Question 1*	•	Security Question 2*	•	
Security Question 1 Answer*		Security Question 2 Answer*		
Enter Your Personal Inform	nation			
Name*		Company Name United	d States 👻	
		Cancel	Next	
© 2006- 2017 Gemalto		Privacy Policy Terms & Conditions	Contact Gemalto gemalto.com	~

Viewing Entitlements

After you have logged into GLP, click on "My Assets" to see the list and status of your upgrades.

0 0						₹ ☆
s 🗋 Desi Music Mut BETA 🧱 USGlobalSat MRUSO - 🧿 Monnit Wireless Serce 🔛 Get Wireless	Indoor A – Necent Earthquakes 1: 🕒 1.6 Solutions : P	116 Sc 🚩 AnywhereU	58 - Net 🧕 O	oud Provisioning ry-	🖆 Pricing Slack	Other books
gemalto*	English	• 🕈 Home	/ Welcome rajĝieo	ptest2inc.com 🕒		
	Acti	ivate: Enter		60		
		What is it? / When	e do I find it?			
Licensing Portal			May 2	12, 2017 1: 24:45 PM		
My Assets 🚯						
Products (2)						
Instruction : The following list displays all product that product. To activate a given order, click the a	that are available to your company. To view the list of ociated Activate button from the list of orders.	f orders for a given pro	oduct, click the Vi	ew button for		
Products				Export CSV		
Product	iame •	Activated	Available	View		
NOREAN ALGORITHMS, JUNA NETWORK HSM 7+ (FIELD-UP- Parts 906-000393-001	BADE) 2.0	1	3	View		
PARTITION S-PACK, LURA HSMT+ (FIELD UPGRADE) 1.0 Parts 308-000395-001		5	25	Vew		
Orders (3)						
Activations (4)						
Devices (3)						

Enter Quantity

After you have selected an entitlement and clicked on the Activate button from the *My Assets* view, you see a screen similar to the next example. Enter the desired quantity to activate in the "Quantity to Activate" field. Click *Next* to complete the process.

0" Product Activation Ger #				passa data data			
6 C O			-				ŵ
10 April [] Des Most Mar BITA S USBORATAT	malto"	Get Wastern Indone /	Be formt farfrigater h	D 10 Soldere : 110 S	Anywhere USB - Name Anywhere USB - Name Anywhere I Webs	ne reglespinstins son	Sp Promp (Seal + Other bookmants
	A (C) —						
Lice	nse Activation					Way 33, 2017 1, 29,05 Pt	×
	Step 1 - Select Lizeme	Step 2 - Se	lect HSM	Step 3 - Activator	5	ep 4 - Finish	
0	ompanyi (CP 16572 INC) Onlar II atifiament ID: anx2x2016 (nd5 ntifi)	13053230 Owler Bate 0 els2-2205119esetb	6/22/2017 Extitionent I	spiration to Experision			ь
	and we	Product Name	Activ	and Austald	le Quantify To	Autouto 🗧	l I
	E PARTITION 5-PACK, UN Partie SOL-000205-001_0	A HSMT+ (FIELD UPGRADE) gitation None	1.0	2		3 8	
					Canvol	Sec.	
0.000	3011 Generalia			Privacy Pail	icy Terms&Conditions Co	rised Gemailto gemailo cor	

Select HSM

You have two options to select the HSM. If you are visiting GLP for the first time or you have a new HSM to activate, select the "Enter New HSM SN" check box and enter the HSM serial number in the window to the right of "HSM SN:" in the bottom, right of the *License Activation* screen.

o Product Activation (Ger +			passes where there				
+ · C O				-			\$ I
El Appe 🗋 Des Muse Mar BTA 💼 USDONALES MUSIC O Mones Wee	ess Serri 🎽 Get Wastess Indoar /	Re forunt Earthquates	D 10 Solutions (FTD 5)	AnywhereUS8 - Net	Coul Provisiming :	22 Proceed Silect	Other bookmarks
genato			tothon.		ne difetting ar the	ł	
1 March							
License Activation					May 22, 2017 1 29 31 Pt	k.	
Sec. 1. Substitute		lest time	Guel Arthony		und Datab		
Sorp 1 ' Select Loon	Ne Sieb 2 - Se		Surp 3 - Activator	,	orp 4 - Piniso		
Company ICP TEST2 Inc. Entitlement IDI anatolitish	Onler II: 12052231 Onler Date: 1 05-489 (hds2-229521/kearb	25.22.2157 ExtRement	Expiration No Expiration				
	Product						
PARTITION 5-PACK, LUNA HOM Party Sol (2010) - 001 Quantity	PARTITION 5-PACK, LUNA HSMT+ IFEED UPCRACH 3.0 Parts 508 000095-001 Quantity To Activate : 1			* EnverNew #5H SN			Q
			HSM SR:				
Criter sorrensents							
			Cancel	Innius	Sec.		
						·	
@ 1009-3011 Gamains			Privacy Pale	y Terms & Conditions Co	ortsect Gemartio gemartio.com		

In you want to activate an entitlement for an HSM previously identified to GLP, select the "Use Existing HSM SN" check box and choose the HSM from the drop-down menu.

	Ар	ply to 💡		
O Enter Ne	O Enter New HSM SN		sting HSM SN	
HSM SN:	Select HSM SN			N
	Select HSM SN			2
	052218			
	052299			

Click Next to continue.

Who is Activating?

GLP is a common portal used by you, our customer, as well as by Gemalto personnel to activate entitlements on behalf of customers². In most cases, you select the "I am activating for myself" check box. Only if you are activating for someone else do you need to enter the email address in the field provided for this purpose.

Image: Control	Jo' Product Activation Ger +		passes where they		
If ways Described to 1813 Concert Matrix Set If when bedowner If Schlaren 1913 Approxed Houses and Internet Set If When bedowner <	+ - C 0				\$ I
genals • • • • • • • • • • • • • • • • • • •	El Apps D Des Music Mar BITA NUSCionattat MRUNC O Monart Weekes Ser	Mart Weelers Indexr / Martes Recent Earthquates	 D 15 Solutions : FTS 5: 	Anywhetel/58 - Net: Doub Provisioning	 Priceg Salk * Other bookmarks
License Actuation Nay 2007 2008 (License) Step 1 - Select License Step 2 - Select HSM Step 3 - Actuation Step 1 - Select License Step 2 - Select HSM Step 3 - Actuation Step 1 - Select License Step 2 - Select HSM Step 3 - Actuation Step 1 - Select License Step 2 - Select HSM Step 3 - Actuation Step 1 - Select License Step 2 - Select HSM Step 3 - Actuation Step 3 - Select License Step 3 - Select HSM Step 3 - Actuation Step 4 - Finish Step 4 - Finish Step 4 - Finish Step 4 - Select License Step 4 - Select HSM Step 4 - Finish Step 5 - Select HSM Step 4 - Select HSM Step 4 - Finish Step 5 - Select HSM Step 4 - Select HSM Step 4 - Finish Step 6 - Select Actuation gets rester HSM Step 4 - Finish Step 4 - Finish Step 6 - Select Actuation gets rester HSM Step 4 - Finish Step 4 - Finish Step 6 - Select Actuation gets rester HSM Step 4 - Finish Step 4 - Finish Step 6 - Select Actuation gets rester HSM Step 4 - Finish Step 4 - Finish Step 6 - Select Actuation gets rester HSM Step 4 - Finish Step 4 - Finish	gemalto		English +	• wome / Welcame office(200.200)	Ð
License Activation Ny 23 325 49 FM Step 1 - Select License Step 2 - Select 1HSM Step 1 - Artiviator Step 4 - Finish Gengeager (CP 15572,000) Onlier # 13352220 Onlier Goldson (S220027) Extilianment Registration Ins Equipation Step 1 - Select License Step 2 - Select 1HSM Step 3 - Artiviator Step 4 - Finish Step 1 - Select License Onlier # 13352220 Onlier Goldson (S220027) Extilianment Registration Ins Equipation Step 1 - Select License Step 1 - Select 1 Select All Option Asteriak (") Institutes a required field. Step 1 - Select License Canona Activating on binkel of extitier server (P) Step 1 - Select 1 Select 1 Select 1 - Select					
License Activation Step 1 - Select HSM Step 1 - Activation Step 4 - Finish Step 1 - Select License Step 2 - Select HSM Step 1 - Activation Step 4 - Finish Comparent (CP TEST2 mc Ordere Ruish122200 (Preter Bate 05/222007) Extitutement Exploration In Exploration Extitutement Exploration In Exploration Step 1 - Activation Step 1 - Activation Extitutement Exploration In Exploration In Exploration Extitutement Exploration In Exploration Step 1 - Select In Splon Activation of Select And Option Activation of Select Extitutement Exploration In Exploration Step 1 - Activation of Select In Exploration Activation of Select In Exploration In Exploration In Exploration Step 1 - Activation of Select In Exploration In Exploratio	<u></u>				
Step 1 - Select License Step 2 - Select HSM Step 3 - Activative Step 4 - Finish Company ICP 10322 INC Online IN 100222007 Knittlement Rightwitten Its (spontion) Retifiement Rightwitten Its (spontion) Asserbik (*) indicates a required field. Select Aix Option Asserbik (*) indicates a required field. * Jean activating for myself I am activating on herical Address * Select Min Obser* Control Institution	License Activation			95ay 22, 2017 3 31.46	Par
Generatory ICP TEST2 INC Onder IN 120322201 Control IN 120322017 Extitionment Exploration Into Exploration Extitionment IDL analyzability body Select An Option Attentia (*) indicates a required field. Select An Option Attentia (*) indicates a required field. Image: Address of User* Cantom Email Address * Materia (*) indicates a required field. Image: Address of User* Cantom Email Address * Materia (*) indicates a required field.	Step 1 - Select License	Step 2 - Select HSM	Ship 3 - Activator	Step 4 - Finish	
Sempary 10P 11512 MC Onder R 113122220 Onder R 113122201 Existement Exploration Select An Option Asserbit (*) indicates a required field. ** I am activating for myself I am activating on behalf of another user Image: Canton Email Address * Email Address of User* Canton Email Address * Solitik Solitik					
Select As Option Annual Address of User Timul Address of User Canton Ended Address of User	Companyi ECP TEST2 INC. Contar a	12072220 Order Date 05/22/2017 Entitlement	Expiration No Expiration		6
Select As Option Anterial (*) indicates a required field.					
Item activating for myself Item activating on behalf of another user Ensal Address of Over* Castion Ensal Address * Station Station	Select An Option			Asterisk (*) indicates a required field	6
Envali Address of User* Candina Envali Address * Submit Canvel Previne Ret	 Fam actualing for myself 	I am activating on behalf of another user	0		
Cancel Province Real	Email Address of User*	Ganfirm Email Address *	Salah 1		
Canvel Province Beet					
			Cantel	Previous Sett	
6 000 ISI' Samato Privacy Tarico Terms 5 Conditions Contact Genato per allo com	@ 1008-3101* Generality		Privicy Palicy 1	ama & Conditional Contact Generation generation	-

After selecting the activator and entering the email address if activating for someone else, click Next to continue.

Complete Activation

The final step to complete activation is to navigate to the *Step 4 – Finish* screen. Here, you get confirmation that the activation process succeeded. Additionally, you can click on the *Download License File* button to have GLP display the license string.

² For example, factory-activated entitlements involve Gemalto personnel.

o' Product Activation Gen #			a - parameter data			
+ C 0					\$ I	
El Apps Des Mose Mar BETA	USXobattat MRIM- O Movert Weekes Serv	😭 Get Weeken Indone / 🛛 👪 Recent Earthqua	ini 1 🗋 15 Soldens : 175 S 🚩 Ar	ywhereUSB - Net:- 💁 Cloud Provisioning :	Pricing State + Coller bookmarks	
	gemalto"		Ergish •	hanne / Welcome valifier piert/2002 com 🛈		
	License Activation			May 22, 2017 1:32:34 PM		
	Step 1 - Select License	Step 2 - Select IRSM	Step 3 - Activator	Step 4 (Istal)		
	Activation Complete	Downloads				
Product Name			Att	did		
	MARTITION 5-PACK, LUNA HORF+ (RELD UPGRADE) 1.8 Parts 100-000395-001 Explodies None			1		
	PARTITION S-PACK, LUNA HSMT+ (FIELD UP Parts 100-000395-001 Expitation: None	dioxed) the		1		
	PARTYTON 5-PACK, LUNA HISRO (PALLE) UP Party 100-000395-001, Exploration None	10000) 1.0	Dynamicski (terms Hin		

Save License String

When you complete activation of an entitlement, GLP generates a license string. This license string is what the SafeNet network HSM uses to validate an upgrade and subsequently apply it. Thus, you save this license string to a file so that you can transfer it to the HSM in a subsequent step.

License certificate					×
		License generated successfully			
License Certificate					
Contact: jane.doe@acme.co	om	Custome	er: WAYNE INC.		
List of Activations					
Product Key	Name	AID	Quantity	Remaining Quantity	
e3ff59dc-7a1f-45bc-be08- 224251cd015b	LUNA PARTITION UPGRADE 5 PACK 1.0	82b67668-ce9a-459c-9712-0e66b121f720	3	1	
4					+ -
License String					
16 LUNA PARTITIONS 5PA SLM_CODE CL_ND_LCK NiL Q1wmn4jFIKH5PCYw14iJLrbr) 0e66b121f720	CK NI LONG NORMAL *1K9CMFJXJBVU6LC X6dqejXK2AjoJqVZ9gf(. STANDALONE ADD 1_KEYS INFINITE_KEY 20400 NiL NiL NiL 5_MINS 5_PACK 0 CZ3ik1vgfksJbKMdl8cGyViF34EsG1tyXKcEw:Y	(S 27 OCT 2016 2 (NrGAfo##AID=82	1 19 NEVER NiL b67668-ce9a-459c-9712	2-
		Save to	File Append To	File E-mail C	K

The default filename for the saved file is lservrc.



^

You should rename this file to something more meaningful, especially when you have multiple upgrades to manage. One suggestion is to name the file by the upgrade and quantity: N_partitions_S.lic, where N is the number of partitions the entitlement enables and S is a sequence number to create unique filenames. For example, 5_partitions_1.lic, 5_partitions_2.lic, 10_partitions_3.lic. If you have a fleet of HSMs, you might want to include the HSM serial number in the filename as a means to organize upgrades (e.g., 5_partitions_567250_1.lic where 567250 is the HSM serial number).

You use secure copy to transfer the saved license string file to the HSM.

Listing Purchased Entitlements

The "My Orders" option from the main page of the GLP gives you a summary of the upgrades you have purchased, how many you have activated and how many are available to be activated.



Listing Activations

The "My Activations" option lists the entitlements that you have activated. From this list, you can get a corresponding license string. In a future release of GLP, you can use this view to revoke an activated entitlement.

Apps 🗋 Desi Music Mult BETA 🌇 U	SOLOBARSAE MIRCEL	O Monard Weeless Ser-	🚰 Get Washing Bodour /	Mi forent Ea	theyaliye 1 🗋 16 Sol	lutions : FTG 5- 🚩 AnywhereUSB - Neri-	Coul I	hove a ming to	Se Priceg State +	Other bookers
	gemalto	5			Togisti	• House / Weisen	a nijecziec			
	E Activit Instruc	ions (5) tion (The following list de	plays all activations for ye	ur company.						
		Actuations					3	aport CSV		
	Activation Data =	Autovaliae (1)	followed 0	TEM Second Number	Locking Code	I have be Traded	- Lawrow File	Activated		
	8/22/2017	£1094386-095c-4448- ac36-4953a0790909	aex2x205.0cd5-485: bda2-2290129eaeb	052218	"LIMUABBVUTAINLE	PARTITION S-PACK, LUNA HSM7+ (FIELD SPCRADE) 1.0 Part/FIOE-000305-001 Expiration: None	Described	1.		
	5/22/2017	2456942-0542-4766- 8468-00542486242	aex2a205-bod5-486- bda2-229513Neaelt	052214	*1.04.3488V0T4DNUE	PRETITION 5-PACK, LUBA H5M7+ (FIELD UPGRADE) 1.0 Partmice-001095-001 Explorations None	Dominal	3		
	8(22)2007	01421508-c4e7-458a 8542-66468/94620	6cs78091-5es1-4645- 9585-67a0bdad75a5	013218	*SIMIABBVUTA2NUE	KOREAN ALGORITHMS, LUBA NETWORK HSM 7+ (FIELD UPGRADE) 2.0 PartProt 000010-001 Exploritum: Name	Documents of	ĩ		
	1/22/2007	6-409903-8730-4772- .aeb1-047x35x8a37a	53756385-7546-4684 6596-928038714434	052299	*117THOREASTINGTON	PARTITION 5-PACK, LUNA HSM7+ (FELD UPGRADE) 1.0 PartPHOL000205-001 Exposition: None	Sector 1	1		
	1/22/2017	01232095 2445-4305 4317-350845799846	80756389-7546-4654 8098-9380-8714434	052210	*SIMUABBVUT42NUX	PARTITION S-PACK, LUNA HSM7+ (FELD OPCRADE) 1.0 Partnice collops oct. Exploration: Nove	Description	i		
	I Device	101								

Listing Registered Devices

The "Devices" option lets you see what HSMs you have registered with GLP.

o" Gemaito World Leader In: X					i - 0 - 1
< → α [0					\$
🔛 Apps 🗋 Desi Music Mixt BETA 🌇 USGlobalSat MRUSO-I 💽 Monwit W	eeless Seno 📲 Get Wireless	Indoor A 📑 Recent Earthquakes 1: 🗋 1:G Solutions : 17G Sc 🚩 AnywhereUSB - Ne	et== 🔒 Cloud P	hovisioning sy	Sack
gemalto		English • Home / Welc	ome raj@ecptest	2inc.com 🛈	
		What is R? / Where do I f	ind it?		
Licensing Portal			May 22, 201	17 1:34:41 PM	
My Assets 🕚					
Products (2)					
Orders (3)					
Activations (5)					
Devices (3)					
Instruction : The folio	ving list displays all devices	isplays all devices that have an associated activation for your company.			₽.
Devices			0	xport CSV	
HSM Serial Number =	Locking Code	License Activated	Activated	View	
052218	"LIMJA00VUT42NLE	KOREAN ALGORITHMS,LUNA NETWORK HSM 7+ (FELD UPGRADE) 2.0 Part9908-000393-001 Expiration:None	1	Vew	
		PARTITION 5-PROK, LUNA HISMI'+ (FIELD UPGRADE) 1.0 Partition-000316-001 Expiration:None	8		
052299	12Y7TKXLK528CTD9	PARTITION 5-PRCK, LUNA.HSM2+ (FIELD UPGRADE) 1.0 Partition-000315-001 Expiration:None	1	Vew	
6 1996 3917 Genutes		Private Balance Terms & Constitioner	and and framework	man alla com	

The *View* button enables you to get a more detailed summary for a specific device: what feature(s) you have activated, when and the corresponding license file.



8 Managing Upgrades on HSM Appliance

This section provides further details and examples for the steps you perform to and as administrator of your SafeNet Luna Network HSM. For brevity, this section uses the term *HSM appliance* in place of the full product name.

Transfer License String to HSM Appliance

Use secure copy (scp) or any equivalent tool to copy license string files to the HSM appliance.

```
licenses]$ scp 5_partitions_1.lic admin@192.168.1.103:
```

Logging in to the HSM

The process to authenticate to the internal HSM in the HSM appliance depends upon the product model. Here is an example screenshot for the Luna A7xx model: password-based authentication.



Getting the HSM Fingerprint

The sysconf fingerprint license command displays the fingerprint for the HSM serial number. You only need this fingerprint if Gemalto has not completed development the Gemalto licensing portal that uses the HSM serial number for entitlement activation.

[myluna] lunash:>sysconf fingerprint license Fingerprint for Use With Entitlement Management System HSM serial #56725 : *1K9CMFJXJBVU6LC

Applying the Upgrade

The sysconf license apply command upgrades the appliance with an entitlement specified by a license string. The command takes two arguments: a mandatory filename that contains the license string; and an optional force to override the prompt to proceed. The following screenshot shows a forced upgrade for the Korean suite of algorithms.

[myluna] lunash:>sysconf license apply -filename kcdsa.lic -force
Force option used. Proceed prompt bypassed.
FwUpdate3 Application Version 2.5
SafeNet Firmware/Capability Update Utility
This is a destructive capability update Proceed prompt bypassed Update Result : 0 (Success)
Command Result : 0 (Success)

Listing Applied Upgrades

You can see what upgrades are applied on the appliance with the sysconf license list command. The output resembles the following example.

[run	-in] lunash:>sysconf license	list	
#	FEATURE	VERSION	QUANTITY
1 2	LUNA_PARTITIONS LUNA PARTITIONS	1.0 1.0	10 20
3	LUNA_PARTITIONS	1.0	10
Comm	and Result : 0 (Success)		

Note that the *QUANTITY* column represents the total number of partitions associated with an upgrade. In the output above: 10 partitions is quantity two, five-pack upgrades; 20 partitions is quantity four, five-pack upgrades.

APPENDIX A Troubleshooting

This appendix provides some guidance for situations you might encounter.

Applying Upgrade on HSM Appliance

The Lush command sysconf license apply installs an upgrade on your HSM appliance. The following list identifies potential messages you could see when you run this Lush command and the meaning for each message.

Cannot find <filename></filename>	You provide as a parameter to the sysconf license apply the filename that contains the license string you obtained from the GLP portal. This message means that the filename you provided cannot be found on the HSM appliance. Use my file list to see what files are available.	
Cannot find Iservrc	You should not encounter this message. If you do, please contact Gemalto technical support for assistance.	
Invalid licensed feature	The license string is corrupted in the feature attribute. Confirm that you saved the license string without modification after activating the upgrade in the GLP portal.	
Invalid licensed feature version	The license string is corrupted in the feature version attribute. Confirm that you saved the license string without modification after activating the upgrade in the GLP portal.	
Invalid licensed HSM serial number	The license string is for an HSM with a serial number that is different from the serial number on this HSM appliance.	
<feature> not licensed for this appliance</feature>	The license string is for an HSM with a serial number that is different from the serial number on this HSM appliance.	
License is already applied	The license string matches an entitlement already applied on this HSM appliance.	
LUNA_RET_HSM_TAMPERED	The HSM is in a tampered state and must be cleared of the tampered state before the upgrade can be applied.	
Update Result : 12 (Error detecting HSM)	The HSM administrator is not logged in.	

SafeNet Luna Network HSM Upgrade Guide

Document PN 007-013804-001, Rev. A, Copyright © 2017 Gemalto, Inc., All rights reserved.

License is unknown/not available (feature)	The HSM appliance software needs to be updated to support a newer feature.	
Upgrades not available for this model of HSM	Only x50 and x90 models of HSM support upgrades.	
Upgrade to <#> partitions not available for this model of HSM	Applying the upgrade would exceed the upper limit for the maximum number of partitions on the HSM.	
Unable to determine model of HSM	You should not encounter this message. If you do, please contact Gemalto technical support for assistance.	