

### STORMSHIELD

Network Endpoint Data



(Vo)

# QUICK START GUIDE SDS Enterprise 9.1.X

STORMSHIELD

#### Stormshield Data Security Enterprise





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# Introduction

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# Glossary

- CRL: Certificate Revocation List
- EXE: Non-Custom SDS Agent Installation File Format
- GPO: Group Policy Object
- MSI: Customizable SDS Agent Installation File Format
- PKI: Public Key Infrastructure
- SDAM: Stormshield Data Authority Manager
- SDS: Stormshield Data Security
- SDSe: SDS Enterprise version
- SGBD: Database Management System
- SMTP. Simple Mail Transfer Protocol
- USI: SDSe account installation file format
- USX: SDSe account update file format

### Variable list

- Find and replace the following variables with your own values to automatically customize the configuration described in this document:
- %IP\_SDAM
- %HOSTNAME\_SDAM
- %IP\_SQL
- %HOSTNAME\_SQL
- %IP\_LDAP
- %HOSTNAME\_LDAP
- %IP\_MAIL
- %HOSTNAME\_MAIL
- %IP\_CLIENT1
- %HOSTNAME\_CLIENT1
- %USERNAME\_CLIENT1
- %IP\_CLIENT2
- %HOSTNAME\_CLIENT2
- %USERNAME\_CLIENT2

### Objective of this document

- The purpose of this document is to guide end users or partners in understanding the installation, configuration and use of SDSe.
- This is the quick start guide to establish a POC (Proof of Concept), and it gets to the basics to help you quickly understand how SDSe runs.
- It does not deal with all use cases or all of the product's options, but contains sufficient information for you to install SDSe without having received certification training.
- Time to complete the POC:
- 1 day for installation
- 1 day to test all features



- The SDSe POC consists of several steps in order to set up the server:
  - Configuring a Microsoft IIS server
  - Installing a PKI (contained in the SDAM)
  - Installing an administration workstation connecting to the SDAM (Windows 10 PC)
  - Installing a user workstation (Windows 10 PC)

# Technical requirements

Stormshield Data Authority Manager

- The SDAM can be installed on:
  - Windows 7 (32 bits and 64 bits)
  - Windows Server 2008 R2 (64 bits)
  - Windows Server 2012 R2 (64 bits)
- It needs:
  - A Microsoft IIS Web server in version 7.0 or higher
- This server can be virtualized
- An account with administrator privileges is required



# Stormshield Data Security Suite

- An account with administrator privileges is required
- SDS 9.1.X can be installed on:
  - Windows 7 SP1 (32 or 64 bits)
  - Windows 8.1 (32 or 64 bits)
  - Windows 10 (32 or 64 bits)

 The Stormshield Data Mail module is compatible with Outlook (2010 and upwards)

### Outlook

- For Outlook 2010:
  - Office 2010 Service Pack 2
  - KB2597137 (<u>http://support.microsoft.com/kb/2597137</u>)
  - KB2881055 (<u>http://support.microsoft.com/kb/2881055</u>)
- For Outlook 2013:
  - Office 2013 Service Pack 1
  - KB2878323 (http://support.microsoft.com/kb/2878323)
  - KB2881040 (<u>http://support.microsoft.com/kb/288104</u>)



Stormshield Data Security	9.1.3 9.1.4		.4	
Microsoft Office 2010 Service pack <b>Min</b>	SP1	SP2	SP1	SP2
Mandatory Microsoft KB	2597137 2881055	2881055	2597137 2881055	2881055
SQL Server Compact Min	Edition 4.0		Edition 4.0	
Visual Studio 2010 Tools for Office Runtime <b>Min</b>	VSTO Runtime 4.0		VSTO Runtime 4.0	
.NET Framework <b>Min</b>	4.5.2		4.5.2	





Stormshield Data Security	9.1.3	9.1.4
Microsoft Office 2013 Service pack <b>Min</b>	SP1	SP1
Mandatory Microsoft KB	KB2878323 KB2881040	KB2878323 KB2881040
SQL Server Compact Min	Edition 4.0	Edition 4.0
Visual Studio 2010 Tools for Office Runtime <b>Min</b>	VSTO Runtime 4.0	VSTO Runtime 4.0
.NET Framework <b>Min</b>	4.5.2	4.5.2



# No prerequisites

## ACTIVE X (mandatory)

- Only for administration and administrators of the SDAM solution.
- To access the SDAM web interface, the workstation must be able to install an unsigned ActiveX (signed by Stormshield but not Microsoft).
- The SDAM URL must be declared as a trusted site in IE.
- Administrator privileges are required on the computer, and there must be no GPO that restricts the use of Internet Explorer.

# INTERNET EXPLORER

On Internet Explorer 11, the URL or IP address of the SDAM server must be defined in the compatibility view settings.

Click on Settings → Compatibility View Settings

	ት 🖈	<b>\$</b>
Print		
File		•
Zoom (100%)		•
Safety		
Add site to Apps		
View downloads	Ctrl+	J.
Manage add-ons		
F12 Developer Tools		
Go to pinned sites		
Compatibility View settings		
Report website problems		
Internet options		
About Internet Explorer		



- The SDAM must have read / write access to the LDAP server to be able to import users, and export user certificates in the "UserCertificates" attribute.
- SDS accounts must have read-only access to the "UserCertificates" fields to download the certificates of other users (this can be done with user accounts).

### SMTP ACCESS (optional)

 The SDAM must be able to access an SMTP server or an SMTP relay to send e-mails to administrators and users (the SDAM only sends e-mails, but does not receive them; you do not need a mailbox for the SDAM).

### CRL PUBLICATION

- If you need to exchange secure data with external users, the CRL must be publicly available.
- On a web server, the CRL must be available for free download (for example on <u>http://www.company.com/sdsCRL.crl</u>).
- This is a .crl file (SDS will download it), so no need for a web page.
   Example: http://crl.stormshield.eu/stormcorpdatasec.crl

# Architecture of the POC

#### CONNECTION MATRIX

- For a SDAM located behind a firewall and acting as a PKI:
- Open the HTTP (or HTTPS) connection for an administrator to access the web administration interface Connection: "Admin Station" to SDAM in HTTP / HTTPS
- Open the SMTP connection so that users can receive *.usi* files (SDS agent account installer) by e-mail *Connection: SDAM to "Mail Server" on SMTP*
- Open the LDAP connection (or LDAPS) for public certificate delivery Connection: SDAM to "AD Server" on LDAP/LDAPS
- Set up a file transfer to forward .usx (SDS agent update file) or available web directory
- There are three ways to download the CRL: - HTTP/HTTPS - LDAP/LDAPS - File transfer

#### POC DIAGRAM



### Best Practice diagram



# Installing the IIS server

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# Installing the IIS server

An IIS server must be installed and configured in order for the SDAM management console to run successfully (the screenshot below was taken on Windows server 2008 R2)

Click on Start → Administrative Tools → Server Manager

Click on Roles

Server Manager		
File Action View Help		
🗢 🔿 🙋 📅 🗟 🖉		
Server Manager (WIN2008R2)  Carlot Roles  Carlot Features  Diagnostics  Configuration  Storage	Storage         Name         Windows Server Backup         Disk Management(Local)	
<b>Server Manager</b> File Action View Help		
🗢 🔿 🙍 📊 🔒 👔		• /
Roles Configuration Storage	Storage         Name         Windows Server Backup         Disk Management(Local)	

Right click on **Roles** and select **Add Roles** 

Select Web Server(IIS) and click on Next





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Click on Next again



At the **Role Services** step, leave all the options checked by default and add the following:

- 1. Application Development: select ASP, CGI and ISAPI Extension
- 2. Common HTTP features: be sure that Static Content is selected (if not, select it)
- 3. Security: be sure that Request Filtering is selected (if not, select it)

After you have checked that all options have been correctly selected, click on **Next**.

dd Roles Wizard Select Role Services Before You Begin Select the role services to install for Web Server (IIS): Server Roles Role services: Description: Web Server (IIS) Application Development provides Directory Browsing infrastructure for developing and ✓ HTTP Errors Role Services hosting Web applications. Use these HTTP Redirection features to create Web content or Confirmation extend the functionality of IIS. These technologies typically provide a way to Progress Application Development perform dynamic operations that ASP.NET Results result in the creation of HTML output, .NET Extensibility which IIS then sends to fulfill client ✓ ASP requests. CGI ✓ ISAPI Extensions ISAPI Filters Server Side Includes Health and Diagnostics Logging Tools Request Monitor Tracing Custom Logging ODBC Logging - Security Basic Authentication More about role service: < Previous Next > Cancel

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Click on **Install** to start the installation of IIS





# Installing the SDAM server

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# Installing the SDAM server

Launch a command prompt with administrator privileges and then run the installer via the command below msiexec /i "Stormshield Data Authority Manager 9.12.688.msi" (name of the *.msi* could vary based on the SDAM version)

#### Stormshield Data Authority Manager 9.13.931 Welcome in the setup program for Stormshield Data Authority - 🗆 × Manager 9, 13, 931 Please click Next to proceed. Stormshield Data Security . . . . . . . . . . . Next >

Stormshield Data Authority Manager 9.13.931

#### ninistrator: C:\Windows\System32\cmd.exe

Microsoft Windows [Version 6.1.7601] Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\svstem32>cd ..

C:\Windows>cd ..

C:\>cd "Stormshield\_Data\_Authority\_Manager\_9.13.931\_ENU\_OFFICIAL\_INTERNE(1)"

:\Stormshield\_Data\_Authority\_Manager\_9.13.931\_ENU\_OFFICIAL\_INTERNE(1)>msiexec "Stormshield Data Authority Manager 9.13.931.msi"\_

X

Cancel

Stormshield Data Authority Manag Licence Key	jer 9.13.931	-	æ
Licence key:	1		
	J		
talishield			



ield Data Authority Manager 9.1	3.931		×
ion Folder			8
Install Stormshield Data Authority M C:\Program Files (x86)\Arkoon\Secu	anager 9.13.9 rity BOX Autho	31 to: brity Manager\	Change
	(Prof		
	ion Folder Install Stormshield Data Authority M C:\Program Files (x86)\Arkoon\Secu	ion Folder Install Stormshield Data Authority Manager 9.13.9 C:\Program Files (x86)\Arkoon\Security BOX Autho	Next >

🛃 Stormshi	eld Data Authority Manager 9.13.931	X
Database	Folder	
Ø	Install Stormshield Data Authority Manager 9.13.931 database to: C:\SBMData\ Change	
InstallShield —	< Back Next > Cancel	

Stormshield Data Authority Manager 9.13.931	Stormshield Data Authority Manager 9.13.931	
Enable automatic configuration of the website?	Ready to Install the Program  Click Install to begin the installation.  If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	
InstallShield	InstallShield < Back Install Cancel	


### Option: SQL Server recommendations

#### If this is a demo/POC installation, please do not do this step. Allow incoming network connections from the server %HOSTNAME\_SDAM

In this example, the DB is called "SQLEXPRESS"

👼 Sgl Server Configuration Manager					
File Action View Help					
Sql Server Configuration Manager         File       Action         View       Help         Sql Server Configuration Manager (Local)         SQL Server Services         J. SQL Server Network Configuration (32bit)         SQL Server Network Configuration (32bit)         SQL Server Network Configuration         SQL Server Network Configuration         SQL Server Network Configuration         SQL Server Network Configuration         Protocols for SQLEXPRESS         SQL Native Client 10.0 Configuration	Protocol Name Shared Memory Named Pipes TCP/IP	Status Enabled Disabled Disabled Disabled	TCP/IP Properties Protocol P Addresses Protocol P Addresses  Cartery Stress Str	? X	
			Enabled Enable or disable TCP/IP protocol for this server instar	ice	
			OK Cancel Apply	/ Help	

In the same TCP/IP Properties window, click on the second tab

тср/	IP Properties		<u>?</u> ×
Pro	otocol IP Addresses		
	IP4		
	Active	Yes	
	Enabled	No	
	IP Address	fe80::5efe:192.168.10.3%12	
	TCP Dynamic Ports	0	
	TCP Port		
	IP5		
	Active	Yes	
	Enabled	No	
	IP Address	fe80::100:7f:fffe%13	_
	TCP Dynamic Ports	0	_
	TCP Port		
	IPAll		
	TCP Dynamic Ports	0	- 11
	TCP Port	1433	
			<u> </u>
Т	IP Port		
ТС	P port		
_			
	OK	Cancel Apply He	p

#### Option: SQL Server recommendations

If this is a demo/POC installation please do not do this step.

On the server where SQL is installed, create a firewall rule to allow incoming traffic over port 1433

🍻 Windows Firewall with	h Advanced Security												
File Action View He	lp												
🗢 🔿 🛛 🗖 🔜	?												
Windows Firewall with	Inbound Rules												!
Inbound Rules	Name	Group 🔺	Profile	Enabled	Action	Override	Program	Local Address	Remote Address	Protocol	Local Port	Remote Port	Allowe
	Access SQL server port TCP/1433		All	Yes	Allow	No	Any	Any	Any	TCP	1433	Any	Any

#### Option: SQL Server recommendation (continued)

- Script for the creation of the base available in the directory:
   C:\Program Files (x86)\Arkoon\Security BOX Authority Manager\Database
- Creation of the base in command line:
   sqlcmd -S myServer\instanceName -d Database
   -i <path>\create\_database\_SqlServer.sql

= <path>

#### Option: SQL Server recommendation (continued)

• Creation of the base with Microsoft SQL Management Studio

create_database_SqlServer.sql - SRV-WIN201	2\SQLEXPRESS.CARacine (SRV-WIN2012	Administrateur (52))	- Microsoft SQL Server Man	agement Studio (Adminis	trateur)	_ 0 ×
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🗄 💷 🙀 🛛 CARacine 💿 🚽 🦿 Exécuter 🕨 Déboguer 💻 🗸 📅 🖷 🔒 🚏 🖷	🎧 🦉 💭 🗏 😫 連連 🏭 🖓 🖕 👘					
Explorateur d'obiets 🗾 🗸 🗖	create database SelSenver cel SPV WIN201205	OLEVAPESS CAPasing (SP)	()///N/2012\ A dministrateur (52))	Proprié	tés	<b>-</b> म ×
Connecter V V V V	create_database_sqiserver.sql - SKV-wilv2012\3	QLEAPRESS.CARacine (SK)	- win2012(Administrateur (52))	± Param	ètres de connexion	en cours
	SOL script for Microsoft SO	L Server database				
SRV-WIN2012\SQLEXPRESS (SQL Server 11.0.2100 - SRV-WIN2012\Administrateur)						
Bases de données				≡ <b>⊿</b> Co	nnexion	
GARseine	BEGIN TRAN ARKOON_TABLES;			No	m de la connexion	SRV-WIN2012\SQLEXPRESS (SR\
				_ ⊿ Dé	tails de la connexio	n
🗄 📑 Sécurité				Éta	t de la connexion	Ouvrir
m 🛅 Objets serveur	TABLES			He	ure de début de la c	oni
🔤 📴 Rénlication				He	ure de fin de la conr	nexi
🔤 🧰 Gettion	CREATE TABLE ACCOUNTS (			D	de suivi de session	
a 🔤 oction	szUserID	NVARCHAR(32)	NOT NULL,	Lia	nes de la connexion	ret 0
	iAccountAlgoCryptID	INT	NOT NULL,	No	m complet	SRV-WIN2012\SOLEXPRESS
	iAccountAlgoHashID	INT	NOT NULL,	No	m de connexion	SRV-WIN2012\Administrateur
	PRIMARY KEY(szüserid)			No	m du serveur	SRV-WIN2012\SOLEXPRESS
	- );			SPI	D	52
	CREATE TABLE ADMINISTRATORS (			Ta	mos ácoulá do la cou	22
	lAdminID	INT	NOT NULL,		rips ecoule de la col	11.0.2100
	szAdminName	NVARCHAR(64)	NULL,	vei	rsion du serveur	11.0.2100
	lAdminType	INT	NOT NULL,	⊿ Eta	it de l'agregat	
	szUserID	NVARCHAR(32)	NULL,	Ech	necs lors de la conne	exic
	sztcAdminCertifValue	NVARCHAR(max)	NULL,	Eta	t	Ouvrir
	SZTCAdminkeyid	NVAKCHAR(max)	NULL,	He	ure de début	
	sztcAdminBights	NVARCHAR(64)	NULL.	He	ure de fin	
	PRIMARY KEY(lAdminID)	(01)		Lig	nes retournées	0
	);			No	m	SRV-WIN2012\SQLEXPRESS
				Tei	mps écoulé	
	CREATE TABLE ADMINISTRATORSPAR	AMSCLEAR (				
	IAdminID	INT	NOT NULL,			
	szParamiD	NVARCHAR(250)	NUL NULL,			
	1PacamValue	TNT	NULL.			
	PRIMARY KEY(lAdminID, szPa	ramID)				
	);	,				
	iAlgoTD	TNT	NOT NULL.			
	bAlgoIsForCrypt	INT	NOT NULL,			1
	bAlgoIsForHash	INT	NOT NULL,			
	bAlgoIsForKey	INT	NOT NULL,			1
	bAlgoIsForBase	INT	NOT NULL,	$\overline{\mathbf{v}}$		
	100 % • <		NOT NULL	>		
	Connecté. (1/1) SRV-WIN2012	SQLEXPRESS (11 SRV-V	VIN2012\Administra CARacine	00:00:00 0 lignes		
				Nom d	le la connexion.	
				Ln 8	Col 13	Car 13 INS

# Installing SDS Suite on the administration workstation

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#### Installing the evaluation version

Install the DEMO version of the SDS agent on the workstation that you will use to configure the SDAM via the web management interface.

During installation, if you **DO NOT NEED SD Connector** component, please ignore this error message relating to PowerShell





### Installing the official version

Install the official version of the SDS agent on the workstation that you will use to configure the SDAM via the web management interface

	~		~				
G STORMSHIELD DATA SECURITY - ENTERPO	RISE - V 9.1.30931				Publish	ed the 2	2017-05-1
Release Note : EN / FR User Guide : EN / FR							
NAME	TYPE	VERSION	FORMAT	ARCHI OS	LANGUAGE	SIZE	SHA256
SDS_Suite_9.1.30931_ENU_Release_x64	Enterprise	Agent	msi	x64 window	s en	83M	Display
SDS_Suite_9.1.30931_ENU_Release_x64_setup	Enterprise	Agent	exe	x64 window	s en	91M	Display
SDS_Suite_9.1.30931_ENU_Release_x86	Enterprise	Agent	msi	x86 window	s en	55M	Display
SDS_Suite_9.1.30931_ENU_Release_x86_setup	Enterprise	Agent	exe	x86 window	s en	61M	Display
SDS_Suite_9.1.30931_FRA_Release_x64	Enterprise	Agent	msi	x64 window	s fr	83M	Display
SDS_Suite_9.1.30931_FRA_Release_x64_setup	Enterprise	Agent	exe	x64 window	s fr	91M	Display
SDS_Suite_9.1.30931_FRA_Release_x86	Enterprise	Agent	msi	x86 window	s fr	54M	Display
SDS Suite 9.1.30931 FRA Release x86 setun	Enternrise	Agent	070	x86 window	e fr	61M	Dienla

AGENT

DEMO

SERVER

TOOLS

C&M

ENTERPRISE

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STORMSHIELD NETWORK SECURITY

STORMSHIELD ENDPOINT SECURITY

STORMSHIELD VISIBILITY CENTER

STORMSHIELD DATA SECURITY

**NETASQ** 

During installation, if you **DO NOT NEED** SD Connector component, please ignore this error message relating to PowerShell

#### Stormshield Data Suite X The release of PowerShell installed on this workstation is not compatible with Stormshield Data Connector. If you install the component, you will need to install the required release of PowerShell. OK

### Registering your Stormshield Data Security product

						Legal terms	Terms of Use and Services	My profile L
Browse	«	Dashboard	Register SDS Software	×				
Order	Â				Associated		×	
<ul> <li>Create a new order</li> </ul>					company:	STORMSHIELD (NETASQARROON)		
<ul> <li>List of drafts</li> </ul>								
<ul> <li>Orders in progress</li> </ul>					License key:			
<ul> <li>Realized orders list</li> </ul>					Reseller:			
<ul> <li>Serial number database</li> </ul>								
Deal Registration							Register	
Register a new Deal								
▶ Deal List								
<ul> <li>User Guide</li> </ul>								
RMA Details								
Product Details								
Product								
<ul> <li>Product management</li> </ul>								
Licenses								
<ul> <li>Register a SNS appliance</li> </ul>								
<ul> <li>Register SNS Software</li> </ul>								
End of life								
SES - General								
tin Beginten and a second second								
SDS - General								
<ul> <li>Register an SDS instance</li> </ul>								
		1						



- In the following pages, two scenarios are presented:
  - 1. POC scenario, only one database needs to be created for the root CA (Access DB). In the Administration Guide uploaded from MyStormshield you will find the procedure on how to migrate from Access DB to SQL. Refer to the sections <u>Creating the root PKI</u> and <u>Configuring Internet Explorer +</u> <u>Initializing the root PKI</u>.
  - 2. Best Practice scenario, two databases are needed (SQL DB) for the root CA and the child CA. Refer to the sections above and to the section <u>Initializing a child PKI (option)</u>.

# Creating the root PKI

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## Installing the Access DB for the Root CA

- Identifier: The identifier is essentially used internally by the SDAM
- Label: The label is used in all SDAM pages to refer to the user database

## Click on **Create a new database** and **Run as administrator**





	Database Please enter th	e identifier of the dat	abase to be create	
0	Identifier:	rootca RootCA		
Stormshield Data Security	Label.			
		< Back	lext > C	Cancel

### Installing the Access DB for the Root CA (continued)

#### If you choose to create a "Microsoft SQL Server" database, see <u>SQL Server</u> <u>recommendations</u>





### Installing the Access DB for the Root CA (continued)





Configuring Internet Explorer + Initializing the root PKI

### Initial connection to the SDAM web management interface

Internet Options ? ×
General Security Privacy Content Connections Programs Advanced
Select a zone to view or change security settings.
Internet Local intranet Trusted sites Restricted sites
Trusted sites This zone contains websites that you trust not to damage your computer or your files. You have websites in this zone.
Security level for this zone
<b>Custom</b> Custom settings. - To change the settings, click Custom level. - To use the recommended settings, click Default level.
Enable Protected Mode (requires restarting Internet Explorer)     Custom level     Default level
Reset all zones to default level
OK Cancel Apply

#### Trusted sites



You can add and remove websites from this zone. All websites in this zone will use the zone's security settings.

#### Add this website to the zone:



Remove

 $\times$ 

#### Websites:

Require server verification (https:) for all sites in this zone

Close

# Initial connection to the SDAM web management interface (continued)

Trusted sites	×
You can add and remove websites from this zon this zone will use the zone's security settings.	ne. All websites in
Add this website to the zone:	
	Add
Websites:	
http://%IP_SDAM	Remove
Require server verification (https:) for all sites in this	zone
	Close

Compatibility View Settings	×
Change Compatibility View Settings	
Add this website:	
	Add
Websites you've added to Compatibility View:	
http://%IP_SDAM	Remove
Display intranet sites in Compatibility View	
Use Microsoft compatibility lists	
Learn more by reading the Internet Explorer privacy s	statement
	Close

# Initial connection to the SDAM web management interface (continued)

Internet Options ?	
General Security Privacy Content Connections Programs Advan	ced
Select a zone to view or change security settings.	
🥥 🔩 🗸 🚫	
Internet Local intranet Trusted sites Restricted sites	
Trusted sites	
This zone contains websites that you trust not to damage your computer or your files. You have websites in this zone.	
Security level for this zone	
<b>Custom</b> Custom settings. - To change the settings, dick Custom level. - To use the recommended settings, dick Default level.	
Enable Protected Mode (requires restarting Internet Explorer) Custom level Default level	]
Reset all zones to default level	
OK Cancel Appl	у

Settings <ul> <li>Display video and animation on a webpage that does not use</li> <li>Disable</li> <li>Enable</li> <li>Download signed ActiveX controls</li> <li>Disable</li> <li>Enable</li> <li>Prompt</li> <li>Download unsigned ActiveX controls</li> <li>Disable</li> <li>Enable</li> <li>Prompt</li> <li>Download unsigned ActiveX controls</li> <li>Disable</li> <li>Enable</li> <li>Prompt</li> <li>Download unsigned ActiveX controls not marked as safe for scripting</li> <li>Disable</li> <li>Enable</li> <li>Prompt</li> </ul> <li>Initialize and script ActiveX controls not marked as safe for scripting</li> <li>Disable</li> <li>Prompt</li> <li>Trakes effect after you restart your computer</li> <li>Reset custom settings</li> <li>Reset to:</li> <li>Medium (default)</li> <li>Reset</li> <li>OK Cancel</li>		Security Settings - Trusted Sites Zone								
Display video and animation on a webpage that does not use Disable Enable Download signed ActiveX controls Disable Enable Prompt Download unsigned ActiveX controls Disable Enable Prompt Initialize and script ActiveX controls not marked as safe for scripting Disable Enable Prompt Trates effect after you restart your computer Reset to: Medium (default)	S	Settings								
Download signed ActiveX controls Disable Enable Prompt Download unsigned ActiveX controls Disable Enable Prompt Initialize and script ActiveX controls not marked as safe for scripting Disable Enable Prompt Frakes effect after you restart your computer Reset custom settings Reset to: Medium (default) Keset OK Cancel		<ul> <li>Display video and animation on a webpage that does not use</li> <li>Disable</li> <li>Enable</li> </ul>	ſ							
<ul> <li>Choice</li> <li>Prompt</li> <li>Download unsigned ActiveX controls</li> <li>Disable</li> <li>Enable</li> <li>Prompt</li> <li>Initialize and script ActiveX controls not marked as safe for scripting</li> <li>Disable</li> <li>Enable</li> <li>Prompt</li> <li>Trakes effect after you restart your computer</li> <li>Reset custom settings</li> <li>Reset to: Medium (default)</li> <li>Reset</li> <li>OK Cancel</li> </ul>		Download signed ActiveX controls     Disable     Enable								
Download unsigned ActiveX controls Disable Enable Initialize and script ActiveX controls not marked as safe for scripting Disable Disable Enable Prompt *Takes effect after you restart your computer Reset custom settings Reset to: Medium (default) Keset OK Cancel		Prompt     Develop duration of Antion Y controls	_							
<ul> <li>Prompt</li> <li>Initialize and script ActiveX controls not marked as safe for scripting</li> <li>Disable</li> <li>Enable</li> <li>Prompt</li> <li>*Takes effect after you restart your computer</li> <li>Reset custom settings</li> <li>Reset to: Medium (default)</li> <li>Reset</li> </ul>		Download unsigned Activex controls     Disable     Enable								
Disable Enable Prompt *Takes effect after you restart your computer Reset custom settings Reset to: Medium (default) Reset OK Cancel		Prompt     Initialize and script ActiveX controls not marked as safe for scripting								
*Takes effect after you restart your computer          Reset custom settings         Reset to:       Medium (default)         OK       Cancel		<ul> <li>Disable</li> <li>Enable</li> <li>Prompt</li> </ul>	(							
*Takes effect after you restart your computer Reset custom settings Reset to: Medium (default)										
Reset custom settings         Reset to:       Medium (default)         ✓       Reset         OK       Cancel		*Takes effect after you restart your computer								
Reset to: Medium (default) V Reset OK Cancel	F	Reset custom settings	/							
OK Cancel	F	Reset to: Medium (default) V Reset								
		OK Cancel								

# Initial connection to the SDAM web management interface (continued)

STORMSHI

Open Internet Explorer from the workstation where you installed SDS agent and go to the following website: http://%IP\_SDAM:8080/bin/manager.exe/initBase

You need to install the activeX (if you have an error, please check your IE settings on the previous slide)

http://%IP_SDAM:8080/bin/manager.exe/initBase Stormshield Data Security × Stormshield Data Security Authority Manager	1 🖈 🛠
nitialize database	
Stormshield     Stormshield	Initialize
ormshield Data Authority Manager 9.13.931 - Copyright © 1996-2017 Stormshield	

#### Initializing the RootCA

After you have installed the activeX, initialize the RootCA database



Here, you need to insert the password that will be used to start the database

Enter pa	ssword					
			-			
A Databas	e					
	Identifier	rootca				
9	Label	RootCA				
🙈 Startup	password					
***.	A database must be started up prior to being used. The startup procedure requires a password to be presented. It must contain between 8 and 64 characters.					
-	Password					
	Password confirmation					
			_			
Kev stor	1360					
,	aze					
	a50					
<i>5</i> 200	aBe					
	age	Store keys in the <b>internal</b> cryptographic module				
	Key storage	<ul> <li>Store keys in the internal cryptographic module</li> <li>Store keys in a hardware cryptographic module</li> </ul>				

Click on **Proceed** at the bottom of the page

## Initializing the RootCA (continued)

Encrypt	ion key creation						
<u> </u>	Confidential data manage	d by Stormshield Data Authority Manager are encrypted using a secret key,	itself wrapped with a	n encryption key.			
	Key creation	<ul> <li>Draw an encryption key</li> <li>Import an encryption key from a PKCS#12 file: File name</li> <li>Password</li> </ul>	RSA 2044	3 bits V	Browse	Click on <b>Proceed</b>	
	Exportable key	Mark key as exportable					
			A Report	The draw of the encryption k inistrator's password The main administrator is the	e only administrator authenticated through	s <b>successful.</b> a password.	
	Insert the Ad	ministrator password that you will	-	Password Password confirmation	••••••		
			🙈 Database	certification authority			
			<b>*</b>	Certification authority	<ul> <li>Do not create an authority</li> <li>Draw an authority key</li> <li>Import an authority key from a Province of the second secon</li></ul>	<cs#12 file<="" td=""><td></td></cs#12>	
			🙈 Validation	n			
	STORMSHIELD			The following operations will  backup of the administrato certification authority's key	be performed: r's password; r draw by the internal cryptographic module		

#### Initializing the RootCA (continued)

Create ce	rtification authority's key					
🙈 Certificati	on authority's key					
R	Key size     RSA 2048 bits ✓       Exportable key     ✓     Mark key as exportable					
A Validation						$\checkmark$ $\downarrow$
	The following operations will be performed: • certification authority's key draw by the internal cryptographic module.	Authority	y certification			
		Authority	The draw of the certification authority's	key by the internal cryptographic r	nodule was <b>successful.</b>	
			Common name     RootC       Organization     Storm       Organization unit     Storm       City     Milan	CA Ishield IshieldPOC		
			State or province Lomb Country Italy ( DN	ardia (IT)	✓	
		Authority	/ certification			
	Click on <b>Finish</b> .	<b>*</b>	O Key certified by an external author	ity		
	Now the database has been			Validity period	20 years V The certificate will be valid until Tuesday, February 23, 2038.	
	Initialized.		Self-certified (root) key	Algorithm	Certificate signed by SHA-256 and RSA  The number of certificates in the certification	
				Depth	path starting from this authority, excluding the unlimited v end certificate	
S	TORMSHIELD			Key identifier	✓ Include key identifier (SubjectKeyId)	

### Configuring the CRL of the RootCA

Now you need to connect to the SDAM web interface and create the CRL for RootCA. To do so, use the link http://%IP\_SDAM:8080/bin/manager.exe/OpenSession

Stormshield Data	a Security		
Authority Manager			
😹 Main menu			
🍇 Users management			
🞲 Certification authority	nent		
administrators			
🍪 Settings	Database		
External certificates	🍪 General settings		
ightight Setup customization	秦 Users		
Total I	Certification authority	Certificates management	
Stormshield Data Security			

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### Configuring the CRL (continued)

A Certificati	on authority		
	Subject resolution mask	CH= <commonname> L<locally- (d="&lt;Drganization" ou="&lt;DrgInite"> C=<country></country></locally-></commonname>	
🙈 External o	ertificate requests pre-fill		
	Organization		
_	Organization unit		
	City		
	State or province		
	Country	[rone] V	

#### Generated certificates

<b>*</b>	Default certificate validity duration	2 years 🗸	
	Default key size for CSPs	2048 bits 🗸	
	Algorithm	Certificate signed by SHA-256 and RSA $\checkmark$	
	'Email' field	When generating a standard certificate (for which the SubjectAlternativeName extension was not filled at request time)         Leave the email address in the identity only         Opy the identity email address into the certificate's SubjectAltName field         Move the identity email address to the certificate's SubjectAltName field	
	Resolution mask of external certificates' LDAP DN		
	Resolution mask of LDAP entry's search filter	(mail= <altnameemail>)</altnameemail>	
	Certificates already published on the LDAP server	Default <ul> <li>Keep</li> <li>Delete</li> <li>Replace certificates that have the same usages and the same issuer</li> </ul>	
	File-based publication	Activate file-based certificates publication Publication folder: C:\SBMDatavootca\CertsPublished File format: Binary	

•

## Configuring the CRL (continued)

Add the URL for the CRL download http://%IP\_SDAM:8080/rootcrl/rootca.crl You can add more than one URL if you would like to have more than one distribution point

Revocation	lists (CRLs)		
2	Algorithm	Thumbprint algorithm used for signature SHA-256 🗸	
	CRL validity duration	24 hours	
	CRLs publication DN LDAP		
	Current CRL's generation ocation	C:\SBMData\rootca\Cr\vootca.cri	
	CRLs archiving folder	C:\SBMData\rootca\CrlHistory	
	CRL generation	By default, request CRL generation at each revocation	
	Expired certificates	Include expired certificates in CRL	
	CRL distribution points	http://%IP_SDAM:8080/rootcrl/rootca.crl Add Copy Delete	
		Distribution point: http://%IP_SDAM:8080/rootcrl/rootca.crl	

#### Automatic CRL generation service

Generation service	✓ Activate automatic CRL generation
Frequency	1 hours
Generation time	
	Generation service Frequency Generation time

#### Click on Apply modifications

STORMSHIELD

# Initializing a child PKI (option)

#### Option: initializing the Child CA

To initialize a base, go to the following web page and then select the base: http://%IP\_SDAM:8080/bin/manager.exe/initBase

) (=) 🗟 http://192.1	168.10.3:8080/bin/manager 🔎 👻 🧯	🕏 Stormshield Data Security ×	<b>↑</b> ★ 4
Stormshield Dat Authority Manager	a Security		STORMSHIEL
nitialize data	abase		
A CONTRACT			
-	Database	ChildCA 🗸	
6			Initialize
Stormshield Data Security			

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Click on Initialize

Stormshiel Authority Mar	d Data Security		≝ childca کو Back to selection	
Enter pas	sword		Î	
A Database				XI
	Identifier Label	childca childca		
🙈 Startup p	assword		@ @	
***	A database must be started Password Password confirmation	up prior to being used. The startup procedure requires a password to be presented. It must contain between 8 and 64 characters.		
🙈 Key stora	ge		• • • 🗸	
*	Key storage	Store keys in the <b>internal</b> cryptographic module     Store keys in a <b>hardware</b> cryptographic module     Slot / Token: No slot or token activated		
A Validation	1		@ @	
	The following operations wil calculation of the startup f insertion of general setting creation of a keystore in th	be performed: ey derived from the password; s into the database; e internal cryptographic module.	Proceed >>	

Stormshie Authority M	anager		
Encrypti	ion key creation		
Validation	Confidential data managed by Key creation Exportable key on The following operations will > encryption key drawn by th	<ul> <li>y Stormshield Data Authority Manager are encrypted using a secret k</li> <li>Draw an encryption key</li> <li>Import an encryption key from a PKCS#12 file: File name Password</li> <li>Mark key as exportable</li> </ul>	ey, itself wrapped with an encryption key.
		Click on <b>Proceed</b>	

<u> </u>	The draw of the encryption b	key by the internal cryptographic module was <b>successful</b> .	
🙈 Main a	dministrator's password		
***.	The main administrator is th	e only administrator authenticated through a password.	
	Password		
	Password confirmation		
🙈 Databa	ase certification authority		
		O Do not create an authority	
	Certification authority	Draw an authority key	
		$\bigcirc$ $% \left( {{\rm{Import}}} \right)$ mport an authority key from a PKCS#12 file	

#### Authority certification

#### Report

R

 

 Stormshield Data Security Authority Manager

 Create certification authority's key

 Certification authority's key

 Image: Certification authority's key draw by the internal cryptographic module.

#### Click on Proceed

The draw of the certification	n authority's key b	y the internal	cryptographic	module was succes	ssful.

#### Authority identity

Common name	Child CA
Organization	
Organization unit	
City	
State or province	
Country	France (FR)
DN	

#### Authority certification

• Key certified by an external authority			
	Validity period	10 years V The certificate will be valid until Tuesday, August 8, 2028.	7
<ul> <li>Self-certified (root) key</li> </ul>	Algorithm	Certificate signed by SHA-1 and RSA V	
	Depth The number of certificates in the certif	The number of certificates in the certification path starting from this authority, excluding the end certificate $\checkmark$	_
	Key identifier	✓ Include key identifier (SubjectKeyId)	

#### Validation



The following operations will be performed: backup the authority's identity to the database;

display the certificate request page.

Reach certi	fication authority	
		The content of the certificate request is copied into the clipboard and the subject field of the email is automatically filled in.
	Send the certificate request by email	Email address:
		Edit message
		The content of the certificate is automatically copied in the clipboard.
	Go to the CA's server page	Server's URL:
		Reach URL

Click on Request processed

Stormshield Data Security Authority Manager	
Initialize database	
Database initialization complete.	
The certificate request has been <b>successfully</b> issued.	
™ Home	

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### Option: configuring the Child CA CRL

Stormshield Data	Security		
Authority Manager			
😹 Main menu			
🍇 Users management			
💱 Certification authority			
💐 Administrators			
🍪 Settings	🗐 Database		
External certificates	🍪 General settings		
🍓 Setup customization	Sec. Users		
	💕 Certification authority	Certificates management	
	or Settings		
	🎲 Setup customization		
Stormshield			
Data Security			
Stormshield Data Authorit	y Manager 9.14.444 - Copyrig	ht © 1996-2018 Stormshi	eld



#### Certificates management

Certification authority	
-------------------------	--

	Subject resolution mask	CN= <commonname>,L=<locality>,OU=<orgunit>,O=<organization>,C=<country></country></organization></orgunit></locality></commonname>
🙈 Extern	al certificate requests pre-fill	
	Organization	
	Organization unit	
	City	
	State or province	
	Country	(none)



#### Generated certificates



Default certificate validity duration	2 years 🗸
Default key size for CSPs	2048 bits 🗸
Algorithm	Certificate signed by SHA-1 and RSA V
'Email' field	<ul> <li>When generating a standard certificate (for which the SubjectAlternativeName extension was not filled at request time)</li> <li>Leave the email address in the identity only</li> <li>Copy the identity email address into the certificate's SubjectAltName field</li> <li>Move the identity email address to the certificate's SubjectAltName field</li> </ul>
Resolution mask of external certificates' LDAP DN	
Resolution mask of LDAP entry's search filter	(mail= <altnameemail>)</altnameemail>
Certificates already published on the LDAP server	Default <ul> <li>Keep</li> <li>Delete</li> <li>Replace certificates that have the same usages and the same issuer</li> </ul>
File-based publication	<ul> <li>Activate file-based certificates publication</li> <li>Publication folder:         <ul> <li>C:\SBMData\jkr\CertsPublished</li> <li>File format:</li> <li>Binary</li> </ul> </li> </ul>

#### Revocation lists (CRLs)

x

Algorithm	Thumbprint algorithm used for signature SHA-1 🔽	
CRL validity duration	24 hours	
CRLs publication DN LDAP		
Current CRL's generation location	C:\SBMData\childca\Crl\childca.crl	
CRLs archiving folder	C:\SBMData\childca\CrlHistory	
CRL generation	☑ By default, request CRL generation at each revocation	
Expired certificates	Include expired certificates in CRL	
	http://%IP_SDAM:8080/childerl/childea.crl Add	
	Сору	
CRL distribution points	Delete	]
	Distribution point:	
	http://%IP_SDAM:8080/childcrl/childca.crl	

-			
Generation service	Activate automatic CRL generation		
Frequency	24 hours		
Generation time			
ations			
cations			
	Send email notification on certificate request deposit		
Certificate request deposit	Email address:		
	Subject:		
	Template:	C:\SBMData\jkr\MailTemplates\template_request.sbp	
Internal request validation	Send email notification on validation of internal request		
	Email address:		
	Subject:		
	Template:	C:\SBMData\ikr\MailTemplates\template_validation_internal_admin.sbp	
	Send a notification email to the requestor		
	Subject:		
	Template:	C:\SBMData\kr\MailTemplates\template_validation_internal_user.sbp	
External request validation	Send email notification on validation of external request		
	Email address:		
	Subject:		
	Template:	$C: ISBMD ataijkr 'MailTemplates template_validation_external_admin.sbp \\$	
	Send a notification email to the requestor		
	Subject:		
	Template:	C:\SBMData\jkr\MailTemplates\template_validation_external_user.sbp	

Confirm operation: Apply modifications

#### Option: validating the Child CA


Stormshield	Data Security		🙈 Certific	ate request		
Authority Man	ager Properties	Certificate management	<b>*</b>		The text below contains the formatted request to be sent to the certification authorityBEGIN NEW CERTIFICATE REQUEST MICHOCCANACOLVIDATEMAGENEMENT CONFIDENCE CONTAILED TABLE AND CONFIDENCE	
Key and c	ertificate for the a	Issue a certificate request		Certificate request in base 64 format	MLIDIJANDYCHYLIYYUONUDUFAAUCAUSAHIIDGXAULDAGIIYD-GAUGALIINFAKANA MTxmadg258HAWWWRYL5X405+KANJHyyLTOIJLIGUGALIINFAKANA KBQ18-ceTstxSQ5G5LDbySCET+WIITOHSG5G1ISSAYQDGXGCOGn0jQ3rX4X3HSA 46Hg214md1rfHWjDLI2TRIDng4F4sIXTUHKHKAAKHymSNWXIKGCOSANJQ3rX43HSA 46Hg214md1rfHWjDLI2TRIDng4F4sIXTUHKHKAAKHymSNWXIKGCOSANJQ3rX43HSA 46Hg214md1rfHWjDLI2TRIDng4F4sIXTUHKHKAAKHymSNWXIKGCOSANJQ3rX43HSA 46Hg214md1rfHWjDLI2TRIDng4F4sIXTUHKHKAAKHymSNWXIKGCOSANJQ3rX43HSA 46Hg214md1rfHWjDLI2TRIDng4F4sIXTUHKHKAAKHymSNWXIKGCOSANJQ3rX43HSA 46Hg214md1rfHWjDLI2TRIDng4F4sIXTUHKHKAAKHymSNWXIKGCOSANJQ3rX43HSA 46Hg214md1rfHWjDLI2TRIDng4F4sIXTUHKHKAAKHymSNWXIKGCOSANJQ3rX43HSA 46Hg214md1rfHWjDLI2TRIDng4F4sIXTUHKHKAAKHYmSNWXIKGCOSANJQ4F3C0 17XFq20Hg7Hg7VG7UsZHX9ZXCAKH4W71G6654cvy2h0fCy7U44TKNJ99MxIVO 21LDhFTp+AYVG7UsZHX9ZKCAKH4W71G6654cv2h0fQ4SU49J144V03 12LDhFTp+AYVG7UsZHX9ZKCAKH4W71G6254c4F254G0HQ4SH201M07HWKXUj94F4T D6KTUCTUWD3±4c4V941F4KD55FGA1yQ5C44F254G0HQ6KH2619M0EKH201M07HK	
	-				<pre>8hFgr6pEy5DgWIAf7psw+HSeML3gLC5uJwHKSdmkcL03sgphBGWLDtGOOIRICn pFKLYykjayin/9HMKrBG/feY0gfhSgQN7ecUoIvvy0B11YfDYN3ikXfkeHk= END NEW CERTIFICAIE REQUEST</pre>	
	Common name Organization	Child CA Stormshield			Copy to disboard Saya as	
	Organization unit	R&D	🙈 Reach o	ertification authority		
	City	Lyon			The content of the certificate request is copied into the clipboard and the subject field of the email is automatically filled in.	
	State or province			Send the certificate request by email	Email address:	
	Country	FR	_		The content of the ce Voulez-vous ouvrir ou enregistrer Child CA.p10 (1000 octet(s)) à partir de 192.168.6.2?	Ouvrir Enregistrer 🔻 Annuler 🗙
🙈 Key						
				Click	on <b>Save</b>	
X	Algorithm	RSA 2048 bits				
	Created on	Wednesday, August 8, 2018 11:03:26 AM				
	Security module	Internal				

 To ask for a certificate, go to the following web page: http://%IP\_SDAM:8080/bin/manager.exe/PkiIndex?baseid=rootca



Stormsł Authority	nield Data Security Manager		Paste from the cliphoard      Import from a file     File containing the PKCS#10 request to be sent out:     C:\Users\ Downloads\Child CA.p10 Parcourir	
Certifi	cate request	👩 Certificate	te	
<b>*</b>	Standard certificate Fill out and submit a certificate request Submit a request from a PKCS#10 structure Advanced certificate	Alternative	Template Certification authority ve identity Email address Demain name	
	<ul> <li>Fill out and submit an advanced certificate request</li> <li>Submit an advanced certificate request from a PKCS#10 structure</li> </ul>		IP address	
Stormshield	Data Authority Manager 9.14.444 - Copyright © 1996-2018 Stormshield		Universal principal name	
		Contact		
			Email address	
		410	Phone number	
			Comment	

#### Click on Send request

• Connect to the RootCA on the following web page and select the base: http://%IP\_SDAM:8080/bin/manager.exe/OpenSession

Stormshield Data Security			Stormshield Da	ata Security	-A
Authority Manager			😹 Main menu		
			🍣 Users management		
Open session			Certification authority	Display pending requests	
· ·					
			i Settings		
	Database	rootcaaccess     V       Using the main administrator's password	External certificates     Setup customization	Sector Certification authority	
Stormshield			0	<ul> <li>Administrators</li> <li>Settings</li> <li>External certificates</li> <li>Setup customization</li> </ul>	
Data Security			Stormshield Data Security	Setup customzation	
Stormshield Data Authority Manager 9.14.444 - Copyri	ght © 1996-2018 Stormshield				
			Stormshield Data Autho	ority Manager 9.14.444 - Copyright © 1996	-2018 Stormshield

List of pe	ending requests	
A Requests	: request 1 out of 1	
Request Id	Summary	
	Child CA Subject: C= R,O=Stormshield,OU=R&D,L=Lyon,CN=Child CA	
▶ 1	Date of request: Wednesday, August 8, 2018	
_	Template: Certification authority	
Stormshield Da	ta Authority Manager 9.14.444 - Copyright © 1996-2018 Stormshield	

п	×	m	r
l e			-
18	-		
14	_	_	
. •	-	_	-
12	=		

Requestor's email address	
Requestor's phone number	
Requestor's comment	
Denial comment	In case you deny this request, you may enter a comment that will be displayed when the requestor views the status of his/her request:

Confirm operation: Confirm request

\* Certificate of Child CA This certificate is an intermediate authority certificate 🕀 🧕 Subject: Child CA Stormshield Data Security 🗉 🧕 Issued by: Root CA Access Serial No: 06 **Authority Manager** Valid from août 2018, 08 to août 2028, 08 Public Key (H) 震 Main menu Certificate footprints • Signature E. Authority Key Identifier E. Certificate request validation Key Identity H. Key Usage F Issuing Basic Constraints Certificate format version: 3 The request has been successfully validated. Certificate export Base 64-encoded certificate's value -Certification authority: Root CA Access Copy to clipboard Save file Save as.. Certificate serial number 6 Copy of the certificate into Stormshield Data Security Copy... Copy of the certificate into your browser if you possess its private key Copy...

• Connect to the Child CA on the following web page and select the base: http://%IP\_SDAM:8080/bin/manager.exe/OpenSession



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Stormshield I Authority Manag	Data Security	
ੋ Main menu	Properties	Certificate management
		Issue a certificate request
Key and ce	rtificate for the a	LL t Import a new certificate
Identity		
	Common name	Child CA
	Organization	Stormshield
	Organization unit	R&D
	City	Lyon
	State or province	
	Country	FR
🙈 Key		
R	Algorithm	RSA 2048 bits
600	Created on	Wednesday, August 8, 2018 11:03:26 AM
	Security module	Internal

Stormshield Data Security Authority Manager	Stormshield Data Security Authority Manager
Import certificate  Selection Capture Plain Actan	Certificate import
Paste from the clipboard   Insert the value of the certificate:   Import from a file   File containing the certificate to import:	<ul> <li>Image: Certificate of Child CA This certificate is an intermediate authority certificate Subject: Child CA Subject: Child CA Subject: Child CA Subject: Child CA Subject: Child CA Serial No: 05 Valid from août 2018, 08 to août 2028, 08 Public Key Certificate footprints Signature Authority Key Identifier Key Identify Key Usage Issuing Basic Constraints Certificate format version: 3</li> </ul>
C:\Users Downloads\Child CA - 6 [KeyCertSign,CRLSign].crt Parcourir	Stormshield Data Authority Manager 9.14.444 - Copyright © 1996-2018 Stormshield

#### Click on Import the certificate

Click on Import

• Connect to the Root CA on the following web page and select the base: http://%IP\_SDAM:8080/bin/manager.exe/OpenSession

Stormshield Data Security Authority Manager	Stormshield Data Security Authority Manager	
🝖 Main menu	Ain menu	
Home	Certification authority	
Certification authority	Key and certificate for the authority	
Administrators		
External certificates		•
Getup customization		
Data Security	Stormshield Data Security	
Stormshield Data Authority Manager 9.14.444 - Copyright © 1996-2018 Stormshield		

Certificate	tails
	Certificate of Root CA
	This certificate is an intermediate authority certificate
	Subject: Root CA
	Ssued by: Root CA Access
	Serial No: 06
	Valid from août 2018, 08 to août 2028, 08
	Public Key
	Certificate footprints
	Signature
	Authority Key Identifier
	Key Identity
	Key Usage
	Issuing Basic Constraints
	Certificate format version: 3
_	
Certificate	port
~	
	Base 64-encoded certificate's value
	Copy to clipboard
	Save file
	Paulo ac
	Jave as

• Connect to the Child CA on the following web page and select the base: http://%IP\_SDAM:8080/bin/manager.exe/OpenSession

a Main menu	Stormshield Authority Mana	Data Security
Home	😹 Main menu	Operations
<ul> <li>Users management</li> <li>Certification authority</li> <li>Administrators</li> <li>Settings</li> <li>External certificates</li> </ul>	External co	ertificates added to address books
	<b>(</b>	Certificates are added to the address book of all users during their distribution.
Stormshield Data Security		≥ inter2k16

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😹 Main menu	Se Main menu	$\bullet$
Import external certificate	External certificate import	
A Selection	Certificate of Root CA This certificate is a root certificate	A
Insert the value of the certificate:	<ul> <li>     Subject: Root CA     Serial No: 01     Valid from August 2018, 21 to August 2028, 21     Valid from August 2018, 21 to August 2028, 21     Valid From August 2018, 21 to August 2018, 21     Valid From August 2018, 21 to August 2018,</li></ul>	
Paste from the clipboard	A Properties	
Import from a file     File containing the certificate to import:     Browse	Label Root CA ×	
Confirm operation: Import	You are about to add this certificate to users' address books when they are distributed.      Confirm operation: Import	

# Configuring the IIS server virtual directory

STORMSHIELD

# Configuring the IIS server

Create a virtual directory on the IIS server under the Stormshield Data Authority Manager website for the CRL service



Create a virtual directory on the IIS server under the Stormshield Data Authority Manager website in order to be able to distribute update files for SDS



#### Double click on MIME Types



Right click and select Add in order to add .usx MIME Types

File View Help	(S) Manager Sites → Stormshield Data Authority Manager →	- 5		
Connections	MIME Types         Use this feature to manage the list of file name extensions and associated content types that are served as static files by the Web server.         Group by:       No Grouping         Image: the interver inte	Actions Add Help Online Help	Add MIME Type         File name extension:         .usx         MIME type:         application/octet-stream         OK	
Configuration: 'Stormshield Data Authority	Manager' web.config	😭 🕅 5:53 PM 🗖		

Expand Stormshield Data Authority Manager and click on the virtual directory rootcrl. Double click on Handler Mappings.



Click on Edit Feature Permissions, flag the option Read and click on OK

Internet Information Services (IIS) Manager							$\wedge$
G Stormshie	ld Data Authority Manager 🕨 rootcrl 🛛	•					
File View Help							
Connections	- Handler Manning				Actions		K
🔍 - 🗔 🖄 🔝		12			Add Managed Handler		
Start Page     WIN2008R2 (DEMO\Administrator)     Ministrator)	Use this feature to specify the resou specific request types.	irces, such as DLLs and	l managed code, t	hat handle responses for	Add Script Map Add Wildcard Script Map		
⊡ isites	Group by: State 🔹				Add Module Mapping	Edit Feature Permissions	2 X 2
E Stormshield Data Authority Manager	Name A	Path	State	Path Type 🔺	Edit Feature Permissions		
∃	Disabled				Revert To Parent	Permissions:	
⊡	CGI-exe	*.exe	Disabled	File	View Ordered List	T CHIIBBIONS.	
	ISAPI-dll	*.dll	Disabled	File	😢 Help	Read	
s statements s	StaticFile	*	Disabled	File or Folder	Online Help		
Trootcri     Trootcri	Enabled					C Script	
tools	ASPClassic	*.asp	Enabled	File		Everyte	
🗄 🔁 rootupdate	aspq-Integrated-4.0	*.aspq	Enabled	Unspecified		· Execute	
	aspq-ISAPI-4.0_32bit	*.aspq	Enabled	Unspecified			
	aspq-ISAPI-4.0_64bit	*.aspq	Enabled	Unspecified		OK	Cancel
	AssemblyResourceLoader-Integr	* avd	Enabled	Unspecified			
	AXD-ISAPI-4.0 64bit	*.axd	Enabled	Unspecified			
	cshtm-Integrated-4.0	*.cshtm	Enabled	Unspecified			
	cshtm-ISAPI-4.0_32bit	*.cshtm	Enabled	Unspecified			
	cshtm-ISAPI-4.0_64bit	*.cshtm	Enabled	Unspecified			
	cshtml-Integrated-4.0	*.cshtml	Enabled	Unspecified			
	cshtml-ISAPI-4.0_32bit	*.cshtml	Enabled	Unspecified			
		* 11 1					
	Features View Content View						
Configuration: 'Stormshield Data Authority Manager/rootcrl' w	eb.config				• .:		

Select virtual directory rootupdate and double click on Handler Mappings



#### Click on Edit Feature Permissions, flag the option Read and click on OK



Configuration: 'Stormshield Data Authority Manager/rootupdate' web.config

# Configuring the Exchange server (option)

#### Configuring Exchange Inbound Connector

Introduction	Local Network settings
Local Network settings	Use these local IP addresses to receive mail:
Remote Network	Local IP address(es) Port (All Available III + T)
New Connector	
	Specify the FQDN this connector will provide in response to HELO or EHLO:

dit Receive Connector Binding			×
IP Address to Use			- 72
C Use all IP addresses available on	this server		
Specify an IP address:			
%IP_MAIL			
Example: 192.168.1.10			
Port to Use			-
Port:		25	
	ОК	Cancel	

New Re	eceive Connector	New Re			
Introduction	Remote Network settings		Remote Network settings		
Local Network settings	Receive mail from servers that have these remote IP addresses:	Local Network settings	Receive mail from servers that have the	se remote IP addresses:	×
Remote Network	IP address(es) Remove the selected items.	Remote Network	IP Address		
New Connector		New Connector	IP Range		
Completion		Completion			
					0
					_
Help	< Back Next > Cancel	Help		< Back Next >	Cancel



ntroduction Local Network	New Connector The wizard will use the configuration below. Click New to continue.
settings	Configuration Summary:
Remote Network settings	SDAM
lew Connector	Name: SDAM Type: Custom
Com <mark>ple</mark> tion	IP Address(es): SIP_Mail: Port 25
	Remote IP range(s): %IP_SDAM /32
	To copy the contents of this page, press CTRL+C.

a Managament Concolo			SDAM Properties	×	
ion View Heln			General Network Authentication Permission Group		
			General Network / Mananacation Premission Groups	°   [ ]	
			Specify which security mechanisms are available for in	ncoming connections	
crosoft Exchange On-Premises	📾 Hub Transport 1 object	Actions	Transport Layer Security (TLS)		$\langle \langle \rangle \rangle$
Organization Configuration	Y Create Filter		Enable Domain Security (Mutual Auth TLS)		X
Server Configuration	Na A Role Version Message Tracking Enabled	Export List	Basic Authentication		
Client Access	2K8R2 Hub Transport, Client Acc Version 14.2 (Build 247.5) True	View	Offer Basic authentication only after starting T	LS	
Hub Transport		Q Refresh	E Enderer Conservation Fortier		
Recipient Configuration		P Help	I late antical Windows at the stice		
Toolbox		A	J     Integrated Windows authentication     Fitemalk Secured facewarde with IPace)     S	DAM Properties	
		2K8R2	<ul> <li>Externally Secured (for example, with insec)</li> </ul>	General Network Authentication	Permission Groups
		🛼 Manage Mailbox Role		General Network Authentication	
		🖹 Manage Client Access Role		Specify who is allowed to connect t	o this Receive connector
	2 objects	Manage Diagnostic Logging Properties		Anonymous users	
	Receive Connectors	New Receive Connector		I Exchange users	
	Name A Status	Properties		Exchange servers	
	Default Disabled			Legacy Exchange Servers      Detect	
	SDAM Enabled	SDAM O Disable			
		> Demove			
	Properties	Properties			
	Help	🕜 Help			
Þ					
		, 			
]] 🔽 📂		🦝 🖓 🖓 🛵 🕞 🐂 9:57 AM 🔤		ОК	Cancel Apply Help
		🗢 🔤 🐨 🐨 🐨 🖬 8/22/2017 💳			

X

# Creating special SDS accounts

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Now you need to create two special users (Signatory and Recovery) Click on Users Management  $\rightarrow$  Users  $\rightarrow$  Special users  $\rightarrow$  Policies signatory

Stormshield Data Security Authority Manager												₩ RootC4	A 🕱 Main 🏠 Hom	administra e > Users	ator 🔌 ( manage	Close session ment > User	5					
ੋ Main menu	🧟 Special users		Users creat	ion	合 Users	s management	👔 c	Certificates man	agement	🖓 LDAP												
	Recovery account																					
Users list	Policies signatory																					
The database cor	ntains <mark>0</mark> user of whi	ch <mark>0</mark> is s	pecial																		🕞	~
🍖 А В	C D			G		L J	к		м	N	0	Р	Q	R				w	х	Y	z	
Search criteria																					2	
										Spec	ial accounts											

#### Special accounts (continued)

Securi	ty policies signatory crea	ation										
🙈 User												
	Identifier	Signatory account										
	Description	Signatory account										
ACCOL	Int											
R	User account protection	Encryption AES 256 bits V										
	algorithms	Thumbprint SHA-256 V										
o Usor i	asswords											
ol ober	545540145											
* * *	Initial password	hCe2G2h1pSf7										
~		<ul> <li>Disable the security officer password</li> </ul>										
		Use the following security officer password:										
	Security officer password for	epiAwfPBuSPG+hkA										
	user account	Epiramir Duor Omina										
		This naceword will allow you to unblock the account of a user if he/she loses his/her naceword										
JUser's	identity											
	Name	Signatory										
	Given name	Account										
	Organization	Stormshield										
	Organization unit	StormshiedIPOC										
	City	Milano										
	State or province	Lombardia										
	Country	Italy (IT)										
	Email address											

#### Key and certificate

R	Certification mode Validity period	Internal CA - Signature
	Key role	🗌 🧁 Encryption 🛛 🎿 Signature
	Key algorithm	RSA 2048 bits 🗸
	Subject	$\label{eq:CNS} CN=Signatory\ Account, S=Signatory, GN=Account, L=Milano, OU=StormshiedIPOC, O=StormshiedIPOC, O=Storms$
Publicatio	'n	
l.	DN of LDAP entry	cn=Signatory Account,ou=StormshiedIPOC,o=Stormshield

#### Click on Create user

#### Special accounts (continued)

Click on Users Management → Users → Special users → Recovery account

Stormshield Data Security Authority Manager													🦉 RootC	A 💐 Main 🏠 Hom	administrat ne > Users	tor 🔌 C manager	lose session nent > User	n S					
ੋ Main menu	🧟 Special users		🕏 Users creatio	on	/ Users	s management	1	Certificates m	anagement	R LDAP													
	Recovery account																						
Users list	Policies signatory																						
The database contains 0 user of which 0 is special																							
																							5
👫 А В	C D	E	F	G	н	L J	к	L	м	N	0	Р	Q	R	S	т	U	v	w	х	Y	Z	
Search criteria																						Q	
Special accounts																							

#### Special accounts (continued)

a User				Certification mode	Internal CA - Encryption	
	Identifier	Recovery Account	оло.	Validity period	10 years V Until Wednesday, February 23, 2028	
	Description	Recovery Account		Key role	🗸 🦰 Encryption 🗌 🔔 Signature	
Accourt				Key algorithm	RSA 2048 bits V	
Accou				Subject	CN=Recovery Account S=Recovery GN=Account L=Milan OU=StormshieldPOC C	
0	liner a securit protection	Encryption AES 256 bits 🗸		oubjeet		
<b>N</b>	algorithms	Thumbprint SHA-256 V	A Public	ication		
User p	asswords			DN of LDAP entry	cn=Recovery Account,ou=StormshieldPOC,o=Stormshield	
* **	Initial password	1pl4yzUZtZHx		,		
*		Disable the security officer password International Intern				
		Use the following security officer password:				
	Security officer password for user account	epiAwfPBuSPG+hkA General password		This certificate will be register as a recovery certificate in all users accounts in this database.		
					Visible to every user to whom it is applied	
		This password will allow you to unblock the account of a user if he/she loses his/her password.		Attributes		
User's	identity				Modifiable by all the users to whom it is applied	
					🗹 🗖 All Stormshield Data Security components	
	Name	Recovery			Security BOX SmartFILE	
30	Given name	Account		Stormshield Data Security	🗌 🥔 Stormshield Data Virtual Disk	
	Organization	Stormshield		components on which it is applied	Stormshield Data File	
	Organization unit	StormshieldPOC			Stormshield Data Mail	
	City	Milan			Ctemphield Data Team	
	State or province	Lombardia				
	Country	Ltaly (IT)				

Click on Create user

# Setting up SDS account configuration



#### Click on Main menu → Settings → Users Management

🙈 User creat	tion				
\$	Security officer password for	O By default, use this password for all accounts:			
	the user accounts	Suggest (and store) a different password for each account     Disable security officer password for all accounts			
	Subject resolution mask	CN= <commonname>,S=<surname>,GN=<givenname>,L=<locality>,OU=<orgunit>,O=<or< th=""></or<></orgunit></locality></givenname></surname></commonname>			
	Common name format	Surname followed by given name			
		O Given name followed by surname			
🙈 Distributio	on				
	User account distribution folder	C:\SBMDatairootca\Users			
	Number of password entry attemps before locking	3       for the user password         3       for the security officer password			
	Card account	Make a copy of the private and public keys into the user account			
	Address book	✓ Add to each user's address book the certificates of all users present in the database			
	Thumbprint algorithm for updates (.usx)	Thumbprint algorithm used for signature SHA-256 V			
	LDAP publication of updates (.usx)	<ul> <li>Activate LDAP publication of updates</li> <li>Caution, chose this option only if the users' LDAP entries belong to a class that accepts the update publication attribute, as set in the LDAP configuration.</li> </ul>			
	File-based publication of updates (.usx)	Activate file-based publication of updates Publication folder:			
	File-based publication of setup files (.usi)	Activate file-based publication of setup files (.usi) Publication folder:			

					/
🙈 Certificate i	mport and export				
					_
1	User certificate import and export folder	C:\SBMData\rootca\Certs			
	Certificate import	Authorize import of old certificates			
	C:\	SBMData\rootca\Certs			
	Format for certificate export	O Binary format			
	Trust chain export	Add trust chain when exporting certificates			
	Extension for exporting several certificates	p7b extension     p7c extension     sbc extension			$\setminus$
🙈 Email notific	ations				1
2	Information email	Send an information email before the certificates expiration Number of days: Frequency: Email address: Template:	30	expiration_mail.sbp	
				/	

#### Click on Apply modifications

#### Option: LDAP settings

#### Click on Main menu → Settings → then select LDAP Synchronization

#### Settings


#### Option: LDAP settings (continued)

LDAP syn	chronization settin	gs		Þ										
🙈 Server	erver  Server name			·										
ų.	Server name Port number LDAP version	%HOSTNAME_LDAP       389       2 ¥		<u>թ</u>										
	Protocol	SSL SSL												
	Encoding	O UTF-8 • ANSI												
	Duration of a connection attempt	30 seconds												
🙈 Authentic	ation			A P										
		$\ensuremath{}$ Authentication with a plaintext password		1										
		DN: Password:	cn=Administrator, CN=users, DC=stotrmshiedl, dc=corp	<u>a N</u>										
	Authentication selection													
		Domain or workgroup name:												
		User name: Password:												
		Fassword;												

#### If you are connected to AD, set **sAMAccountName** as the Identifier

🙈 Search	1	
$\bigcirc$	Base DN	CN=users,DC=stotrmshiedl,dc=corp x
	Class of recognition for "person" type entry	person
	Search time limit	30 seconds
Publica	ation	
	Keys to be published	<ul> <li>All keys</li> <li>The key with the encryption role and the key with the signature role</li> </ul>
👩 Publica	ation of new certificates	
<b>*</b>	DN resolution mask	cn= <commonname>,ou=<orgunit>,o=<organization></organization></orgunit></commonname>
🙈 Name	of attributes	
	Email address	mail
	Common name	Cn
	Certificate in binary format	userCertificate;binary
	Identifier	uid Or sAMAccountName if you are connected to Microsoft Active Directory
	Given name	givenName
	Name	sn
	Authority certificate in binary format	caCertificate;binary
	CRL in binary format	certificateRevocationList;binary
	Security policies update in binary format	sboxPolicyUpgrade;binary

Click on Apply modifications

#### Option: SMTP settings

## Click on Main menu → Settings → Outgoing mail server and add all necessary information to allow the SDAM to send e-mail using your e-mail server

Stormshi	eld Data Security		🗋 Child-CA	Main administrator 🛛 🗞 Close session
Authority M	lanager		<u>@</u> 1	Home > Settings > Outgoing mail server
🚴 Main menu				
Outgoin	g mail server setti	ngs		
🙈 SMTP Se	erver			<b>I</b>
<b>7</b>	Name of local server	%HOSTNAME_SDAM		
_	Name of remote server	%HOSTNAME_MAIL		· · · · · · · · · · · · · · · · · · ·
	Port number	25		
🙈 Connec	tion identifier			
	Username			
	Password (non-hidden)			
	Sender's email address	no-reply.sdam@demo.local		
			Confirm o	peration: Apply modifications

## Creating SDS account templates

#### Creating a template

#### Click on Main menu $\rightarrow$ User management $\rightarrow$ User templates then click on Operations $\rightarrow$ Create a template

Stormshield D Authority Manage	Pata Security			🕃 RootCA 🕱 Main adm 🏠 Home > Users ma	inistrator 🏾 🗞 Close session nagement > User templates
😹 Main menu	Operations				
List of temp	Create a template				
🙈 User templat	es: 0 User template				🕞
Identifier			Description		<b>e</b>
Stormshield Data Aut	thority Manager 9.13.931 - Copyrig	nt © 1996-2017 Stormshiel	1		<b></b>

#### Creating a template (continued)

ain menu	A Home > Users management > Templates > Template creation			
Template	C#	Users' identities		
Identifier     Template1       Description		Organization Organization unit City	Stormshield       StormshieldPOC       Milan	
User accounts protection algorithms Encryption AES 256 bits V Thumburint SHA-256 V	cr cr	State or province Country Users keys and certificates	Lombardia Italy (IT)	
Security officer password for user accounts		Key 1		
<ul> <li>Disable the security officer pass</li> <li>Generate a different backup pas</li> <li>Use the following security officer</li> <li>Use the following security officer</li> </ul>	word sword for every user password:	Certification mode Validity period Key role Key algorithm	Internal CA - Encryption         2 years         Until Sunday, February 23, 2020         Encryption         Encryption         Signature         RSA 2048 bits	
This password will allow you to u	INDIOCK the account of a user if he/she loses his/her password.	Key 2 Certification mode Validity period	Internal CA - Signature       2 years       Until Sunday, February 23, 2020	

Key algorithm

RSA 2048 bits 🗸

#### Click on Create template

### Creating a template (continued): configuring the PoC

### Click on Main menu $\rightarrow$ Users management $\rightarrow$ User template and select the template that you have already created

Stormshield Da Authority Manager	ta Security		📓 RootCA 🕱 Main administrator 🛛 🗞 Close session								
😹 Main menu	See Properties	占 Template management	🚓 Components	Operations							
			Stormshield Data Virtual Disk				•				
Template			Stormshield Data File								
			Stormshield Data Kernel								
🙈 Template			Stormshield Data Mail			🗔	<b>6</b>				

#### Click on Connection and personal code – Password mode

2	Icon in configuration panel	☑ Not visible	
Tab	16		
140			
	Screensaver tab	V Not visible	
	Connection tab	✓ Not visible	
	Authentication tab	✓ Not visible	
	O No action		
-	Lock session	Cannot be medified by the user	
	And unlock on waking up	Connot be modified by the user	9
	ODisconnect		
	Screen saver	✓ Not visible	1
On	Windows session locking		

	۲	At connection only				✓ Cannot be	modified by the user				
	0	On each signature or decrypt	ion operation			_					
	0	Every 15	minute(s)			✓ Cannot be	modified by the user				
	(	Change your secret code				Not visible					
- Ch-											
	nge :	secret code						•••			
<u> </u>		Description of the second second									
<u> </u>		10 day(c)				Cannot be	modified by the user				
		uay(s)				Cannot be	modified by the user				
	~	Impose change every			<ul> <li>Cannot be modified by the user</li> </ul>						
		30 day(s)				✓ Cannot be	modified by the user	-			
	~	Inhibit change before				<ul> <li>Cannot be</li> </ul>	modified by the user	-			
		1 day(s)				✓ Cannot be	modified by the user				
- Per	tonal	code syntax									
1001	Jona	loue syntax						•••			
2	•	Number of alphabetical chara	ctors					- I			
ĕ		minimum:	1	maximum:	32						
2		Number of sum of all the set									
	Ĩ	minimum:	ers 1	maximum	32	_					
<b>S</b>		minimum.		maximum.	52						
	•	Number of other characters				_	Impose secret code ch	ange			
		minimum:	1	maximum:	32		at first connection				
	*	Total number of characters				_					
		minimum:	8	maximum:	32						
	•	Help text for the user									
		Your password must conta	in between 8 and	32 characters.		^					
						$\sim$					
a Log	on to	o Windows						e 😛			
<b>.</b>	۲	Do not activate				Cannot be n	nodified by the user				
	0	Using the following informatio	n: (User, Log on to, I	Password, Confirmation)			indunica by the user				
					C	onfirm operati	Apply modification	S			
						-					
		Click or	Δnn	lv modif	in	atin	ns				
				iy iliouli		นแบ					

#### Automatic profile updates

Click on Main menu  $\rightarrow$  Users management  $\rightarrow$  User template and select the template that you have already created. Then click on Components  $\rightarrow$  Stormshield Data Kernel.

Select Automatic update and fill in the following value under the Download section: http://%IP\_SDAM:port/update/<UserId>/<UserId>.usx



#### Click on Apply modifications

### CRL configuration

Click on Main menu  $\rightarrow$  Users management  $\rightarrow$  User template and select the template that you have already created. Then click on Components  $\rightarrow$  Stormshield Data Kernel.

Storm Author	nshield Data ity Manager	Security			administrator <b>&amp; Close sessio</b> ement > Templates > Template	9 <b>n</b> 91	
😹 Main me	nu	Se Properties	6	Template management	🧟 Components	Operations	
Tem	olate				Stormshield Data Virtual Disk Stormshield Data File		^
- Ter	malata				Stormshield Data Kernel		
<u>a</u> ler	nplate				Stormshield Data Mail		
_					Stormshield Data Team		
	Identifier		Template1		Stormshield Data Shredder		
D	Description				Stormshield Data Sign		
	Created on		Friday, Febr	ruary 23, 2018 5:41:40	Import from master		
	Last modificat	tion on	Friday, Febr	uary 23, 2018 5:49:05	PM		
	Latest distribu	ution date	No distribut	ion has been performed	1		
llse	er identity						

### CRL configuration (continued)

STORMSHIELD

#### Click on **Revocation controller** and click on the button highlighted below

		_					
Icon	in configuration panel		Not visible				
	Do not control the revocation state	✓	Cannot be modified by the user				
CRL	s default validity period (days) 7		Cannot be modified by the user				
Pro	tocols: Activate revocation lists downloads with the following protocols:						
	HTTP (web)	$\checkmark$	Cannot be modified by the user				
	✓ HTTP secured by SSL	$\checkmark$	Cannot be modified by the user				
	✓ LDAP (directory access)	<ul> <li>Cannot be modified by the user</li> </ul>					
	✓ LDAP secured by SSL	✓	Cannot be modified by the user				
	✓ FILE (file copy)	✓	Cannot be modified by the user				
suers							
			<b></b>				
Roo	ICA						
			✓ Prohibit adding issuers				

### CRL configuration (continued)

Add an external CRL distribution point: http://%IP\_SDAM:port/rootcrl/rootca.crl



# Creating SDS user accounts

#### Creating an account from a template

Click on Main menu  $\rightarrow$  Users management  $\rightarrow$  User template and select Template1, then click on Operation  $\rightarrow$  Create a user from this template

This operation allows you to create a user manually on the SDAM but if you want to create a user from your Active Directory, please see the next slide.

Stormshield D Authority Manage	ata Security		₩ RootCA	💐 Main administrator 🛛 🗞 Close nanagement > Templates > Te	session emplate1
🕵 Main menu	Se Properties	🚔 Template management	🚓 Components	Operations	
Template				Create a user from this template	Ŷ
🙈 Template					- <b>_</b>
C Identifier		Townlate1			

#### Creating users via LDAP

#### Click on Main menu → Users → LDAP and select LDAP Synchronization

Stormshield Dat	Stormshield Data Security														otCA	💐 Ma	ain adn	ninistra	tor 🍾	<mark>,</mark> Close	session	Ó	
Authority Manager		÷.											Home > Users management > Users										5
😹 Main menu	🚓 Specia	I users		🔱 Us	ers crea	ation			Users n	nanageme	ent	1	Certifica	tes mana	agement	କ	LDAP						
																LD	AP Syno	chronizat	tion				
Users list																							
The database or	ontains Oux	or of wh	ich () is	cnoci	al																		1
ine database co		Set Of Wil		speci	αι																		
6			6								0		0		6	-						-	
<b>*</b> \$ A B (		E F	G	н	1		<u>к</u>		M	N	<u> </u>	P	Q		5					X	¥	2	
Search criteria																						2	
																							_
																							/
																						/	

#### Creating users via LDAP (continued)

#### Click on To associate or use to create users

Stormshield Data Security RootCA R Main administrator R %HOSTNAME_LDAP:389 Close se Authority Manager RootCA R Main administrator R %HOSTNAME_LDAP:389 Close se	ession ization
😹 Main menu	
Synchronization with the LDAP directory	
Search LDAP entries 😰	
To associate or use to create users	
TO associate to users not yet associated	
Import certificates from the LDAP directory	
Important Second	
For users with at least one non-certified key	
Caution, this operation may take several minutes.	
Publish users certificates on the LDAP directory	
All certificates	
Certificates which are not yet published	
Caution, this operation may take several minutes.	

		-
la De	escription	
<u>}</u>	This action lists all entrie which has the same ema If such a user is found, t If not, the function sugg	es of the LDAP directory. For each entry not yet associated to a user, it searches for a user ail address, same common name, same identifier, or same name and last name. then the function suggests associating it with the entry. lests creating a new user.
	archena	C
$\sim$	Search base	CN=users,DC=stotrmshiedl,dc=corp
	Filter	(Objectclass=person)
		Searching:

#### Creating users via LDAP (continued)

The SDAM interface will show you the first user found in the AD and will let you choose whether to create the same user in the SDAM.

Storm	nshield Data Security	🚆 RootCA 🕱 Main administrator 🦙 192.168.69.3:389 🔧	Close session	A P	ublication	
Authori	ity Manager	Home > Users management > Users > LDAP Synchronization > Users cre	eation > Creation			
8			-	ų,	LDAP publication	✓ Publish generated certificate in the LDAP directory
Confi	rm user creation		-	^		О Кеер
					Certificates already published	O Delete
🙈 Rep	oort of previous operation					Replace certificates that have the same usages and the same issuer
2	User was not created: User creat	tion canceled.		<u>a</u> U	ser account configuration	CP CP
-	No user was created nom entry t	ch-kibigi, ch-oseis, bc-delilo, bc-lab.				
🙈 Do y	you wish to create a user fron	n the following LDAP entry?			Use as template	Template1 V
				@ V	alidation	
2	DN	CN=test1,CN=Users,DC=demo,DC=lab				LT L9
	_				The following operations will be	performed:
M Use	r				creation of test1 in the databa key generation for test1:	se;
					<ul> <li>certificate generation for test1</li> </ul>	;
	Identifier	test1			account creation for test1 with	a copy of the template Template1.
	Description					
👝 Use	r identity					Do you confirm user creation? Yes All No Cancel
0.00	· · · · · · · · · · · · · · · · · · ·					
	Name			Storm	shield Data Authority Manager 9,13,93	1 - Copyright © 1996-2017 Stormshield
S	Given name	test1				
	Common name	test1		+		
	Email address	test1@stormshield.com				
	Effidit duuless	test ligstom she com				

# Deploying SDS user accounts

#### File distribution

After you have created the user, you can download/send the file relating to this user so that he will be able to install it on his workstation

From the Home menu, click on Users management  $\rightarrow$  Users  $\rightarrow$  select the user (in this example "test1")  $\rightarrow$  then User management  $\rightarrow$  Distribute account

Main menu	🚓 Special	lusers		🤱 Us	ers cre	ation			合 Use	ers mar	nageme	ent		👔 Ce	ertificate	es man	agemer	nt		
<sup>LDAP</sup> Users list																				
The database con	tains <mark>3</mark> us	ers of whi	ch 2 a	ire spe	ecial															
🛠 A В С	DE	FG	H I	[ ]	к	L	М	N	0	Р	Q	R	s	т	U	v	w	x	Y	z
Search criteria																				2
Users 1 - 3 of 3 fou	nd	3 select	ted us	ers																☑
Policy Signatory	<b>2</b>																			~
Recovery Account	2																			•
▶ test1		test1@st	ormsh	ield.co	m															-
	nd																			

Storm	shield Data	Security			Sector Root	CA 🚊 Main administrator	🍇 Close session
Authorit	ty Manager				<u> </u>	lome > Users manageme 	ent > Users > test1
😹 Main men	u	Properties	_	峇 User management	Keys and certificates		
				Distribute account			
User			Associate a smart card				
				Administrate database			
M Oser				Delete			
	Identifier		test1				
	Template		Templa	ate1			
🙈 Iden	tity						
	Name		Test1				
	Given name		test1				
	Common nan	ne	test1				
	Organization		Storms	shield			
	Organization	unit	Storms	shieldPOC			
	City		Milan				
	State or prov	ince	Lomba	rdia			
	Country		IT				
	Email addres	S	test1@	stormshield.com			

#### File distribution (continued)

Check the option **Generate setup file(\*.usi)** then click on **Distribute account** (you can download the file from the SDAM server to C:\SBMData\rootca\Users\test1)

Storms Authority	shield Data Security y Manager	😹 RootCA 🤶 Main administrator 🔌 Close sess A Home > Users management > Users > test1 > Selection of the distribution m
Select	tion of the distrib	ution mode
	Distribution type	<ul> <li>Full (account file, address book file, lists)</li> <li>Generate setup file (*.usi)</li> <li>Update (*.usx)</li> <li>Include user certificates in order to update his key-holder</li> </ul>
	Transmission by email	Send the file by email   Template file (*.sbp):   Subject:   Text:

Confirm operation: Distribute account

You can also choose to send the file by e-mail (optional) but you need to configure an e-mail server under Home  $\rightarrow$  Settings  $\rightarrow$  Outgoing mail server

# Installing the client workstation

#### Installing the client workstation

In this step you will create a custom setup file. From the **Home** menu, click on **Setup customization**.

In our case, we use only accounts protected by passwords with two keys. We will therefore block the ability to create any local accounts other than these.

Stormshield Data Security	📓 RootCA 🕱 Main administrator 🔌 Close session	Stormshield Authority Manag	Data Security	
Authority Manager	🔝 Home	😹 Main menu	Operations	
🚴 Main menu				
Home		Customize	Stormshield Data	Security Suite setup
Seri management		Generative Generative	or all types of accounts Il settings d" accounts settings	
<ul> <li>Administrators</li> <li>Settings</li> <li>External certificates</li> </ul>		Genera     Accour     Accour     Accour     Key res	I settings It creation with a single key It creation with two keys newal	
Stormshield Data Security		"Card or I Generative Account Account Key rest	<b>USB key" accounts settings</b> al settings at creation with a single key at creation with two keys newal	
Stormshield Data Authority Manager 9.13.931 - Copyright © 1996-2017	Stormshield	Stormshield Data Au	uthority Manager 9.13.931 - Copy	yright © 1996-2017 Stormshield

### Configuring the setup

# Allow only the use of password mode but not card mode

Storm Author Main me	nshield Data Security ity Manager	Sector RootCA Real Main administrator Close	session settings
Storr Ose	nshield Data Secur er connection	ity Suite: General settings	•
~	Authorize a connection	<ul> <li>In password mode</li> <li>In card mode</li> </ul>	
	Shutting down Windows	Refused if a user is connected	
	Main folder	If you wish that Stormshield Data Security <b>creates and searches for users</b> accounts in a specific main folder (on a server for example), please indicate the full path to this folder:	
	Backup folder	You may define a backup folder on which Stormshield Data Security will look for the user account in case it cannot be found in the main folder:	
	Backup folder	In the Stormshield Data Security connection window: <ul> <li>Do not display the pathname of the second users accounts search folder</li> </ul>	2
	Contextual menu	Do not display the contextual menu	2
	"Browse" item	In the connection window, a right click on the "Identifier" field displays a menu in which the "Browse" item allows to directly select the user account:  Do not display the "Browse" item	1
	Command line utility	In the SBCMD.EXE command line utility: Ignore a secret code supplied on the command line. User must enter his/her secret code.	

### Configuring the setup (continued)

Check the option **Prohibit account creation** 

Storr Autho	nshield Data Security	RootCA Transition > General sett
👷 Main m	enu	
Ac	count creation	<b>1</b>
8	New accounts	✓ Prohibit account creation
	Self-certified certificates	<ul> <li>Validity length of self-certified certificates generated by Stormshield Data Security:</li> <li>when creating an account:</li> <li>when renewing a key:</li> <li>20 years</li> </ul>
	Certificate request by email	When the user makes a certificate request, he/she may send it by email. Enter <b>the</b> <b>authority's email address</b> , and optionally the body of the message created by Stormshield Data Security, according to the 'mailto:' link syntax: <email>[?subject=<objet>[&amp;body=<texte>]]</texte></objet></email>
🙈 Ad	dress book	
<b>R</b>	LDAP search	<ul> <li>In an LDAP search launched from the address book:</li> <li>Do not append '*' to the search criteria</li> <li>Do not include the search filter "usercertificate:binary"</li> </ul>

### Configuring the setup (continued)

Go to the end of the Stormshield Data Security Suite: General settings configuration page. Check Do not show license key and then click on Apply modifications

Revocation controll	er	
CRL download	Maximum time limit for a CRL download in LDAP:120secondsMaximum time limit for a CRL download via HTTP:120secondes	
Aiscellaneous		
License key	In the "About" window: Do not show license key	
Adding settings to t	he SBox.ini file	
File containing	Select a file:	Drawee
the settings to add or merge	Reminder about the merge: the values of the settings present in this file repla already present in the SBox.ini file, as well as the values configured in the page customization".	ce those les of "Setup
	Confirm operation: Apply m	odifications

#### Generating the installation file

Key renewal

# You will now create the customized *.msi* file by selecting **Operation** $\rightarrow$ **Generate setup procedure**



#### Generating the installation file (continued)

From MyStormshield, download the *.msi* file (for example Stormshield\_Data\_Security\_Suite\_9.1.30931\_ENU\_Release\_x64.msi) and copy it to the Windows server on which you have installed the SDAM (in this example, under C:\SBMData\rootca)

Setup procedure	Original (*.msi) setup procedure: C:\SBMDatavootca\Stormshield_Data_Security_Suite_9.1.30931_ENU_Release_x64 msi	
Target folder	Target folder in which the setup procedure will be generated: C:SBMDatavoolcalWSITarget	
nents installed		
	Enter the license key which will be pre-filled in the setup procedure:	
License key	DSDFSFDF - EEFGDFGF Checking	
	Select the Stormshield Data Security Suite components:	
	Stormshield Data Mail - Microsoft® Outlook edition	
	Stormshield Data Mail - Lotus® Notes edition	
	Stormshield Data File	
Components	Stormshield Data - Connector	
	Stormshield Data Shredder	
	Stormshield Data Sign	
	Stormshield Data Disk	
	Stormshield Data Team	
	Stormshield Data Card extension	
	Default setup folder on user's computer:	
Setup folder		
ating setup procedure		

Confirm operation: Generate setup procedure

#### Downloading the .msi file

Once it has been generated, you will get this page from the SDAM, and you will then be able to download the customized *.msi* file from the folder C:\SBMData\rootca\MSITarget\MSITarget

			MSITarget			
				atalyootca\MSITarget\MSITarget	Search MSITarget	2
Storn	nshield Data Security	🚆 RootCA 📮 Main administrator 🔌 Close session	Organize 🔻 🛜 Open	Include in library   Share with   New folder	:==	- 🔳 🔞
Author	ity Manager	A Home > Setup customization > Generating setup procedure > Report	🜟 Favorites	Name ^	Date modified	Туре
🚴 Main me	nu		🧾 Desktop	길 Masters		File folder
			Downloads	B Stormshield_Data_Security_Suite_9.1.30931_ENU_Release_x64.m	si 2/26/2018 10:38 AM	Windows Installe
The	setup procedure h	has been generated	Documents     Becent Places			
		as seen generated.	necche haces			
🙈 Rep	ort		詞 Libraries			-
_			Documents			
12	Created file	C:\SBMData\rootca\MSITarget\MSITarget\Stormshield_Data_Security_Sui	J Music			
	License key		Videos			
		Stormshield Data Mail - Microsoft® Outlook edition				
		Stormshield Data Mail - Lotus® Notes edition	I Computer			
		Stormshield Data File	🚢 Local Disk (C:)			
	Preselected components	Stormshield Data Sign	💼 Network			
		Stormshield Data <b>Disk</b>	Thethold			
		Stormshield Data Team				
		Stormshield Data Card extension				
Ch						
Stormshi	eid Data Authority Manager 9.13	5.931 - Copyright © 1996-2017 Stormsnield		4		
			Masters Da	te modified: 2/26/2018 10:38 AM		<u> </u>
			File folder	te mouneu. 2/20/2010 10:30 AM		

You can rename the customized setup file if you wish to, for example Custom\_SDS\_file.msi

#### Installing the *.msi* file

In order to install the *.msi* file on a workstation, you can enter this command in a command prompt with administration privileges *Msiexec /I "C:\Custom\_SDS\_file.msi" /qb+* 

### Installing the SDS account

#### Installing the SDS account

# Retrieve the user file from the server in the following folder: C:\SBMData\rootca\Users\test1

😸 Stormshield Data Security	• test1	Stormshield Data Security - test1	×
	Stormshield Data Security User	User(s) to install and destination folder.	
	test1	If you want to change the destination folder, click on Browse.	
6	Welcome in the installation program of the user: test1 To continue, click Next	·······	
Stormshield Data Security		Install to: C:\ProgramData\Arkoon\Security BOX\Users\ Browse	
	< Back Next > Cancel	< Back Next > Cancel	

test1.usi

### Installing the SDS account (continued)

😸 Stormshield Data Security - test1
The installation can start All the informations needed by the installation program has been collected.
Click Install to begin the installation.
If you want to review or change any settings, click Back.
< Back Install Cancel



# Initial connection

#### Initial connection

The user icon displayed on the left indicates that the account exists on the workstation. Enter the user's initial password. After the initial connection, the user will be asked to change his initial password.

Stormshield Data Security - Connection				
STORMSHIELD		Stormshield Data Security		
\$	Please enter your user iden or insert your card in the re Enter your secret code:	tifier ader: test1		
		Validate Cancel		

In order to get the initial password, you need to go to the SDAM, search for the "test1" user, and click on

Properties → Password and see the Initial password field.

test1's secret code change				
STORMSHIELD Stormshield Data Security				
You MUST change your secret code now.				
New secret code: 🔍				
Confirmation:				
Secret code analysis:				
Validate Cancel				

Set the new password

### Use case - Demonstration

#### Mail module

- Sending an encrypted e-mail internally
- Receiving an encrypted e-mail internally
- How to send an encrypted e-mail outside the network
  - %USERNAME\_CLIENT1 sends a signed e-mail to %USERNAME\_CLIENT2
  - %USERNAME\_CLIENT2 receives a signed e-mail and imports the certificates into the directory
  - %USERNAME\_CLIENT2 sends an encrypted e-mail to %USERNAME\_CLIENT1

#### Disk module

- Manually creating a disk volume on the computer %HOSTNAME\_CLIENT1 with an automatic mount
- **%USERNAME\_CLIENT1** manually creating a disk volume on a USB drive shared with **%USERNAME\_CLIENT2** with manual editing



- Creating a local rule for yourself in a confidential directory on %HOSTNAME\_CLIENT1's workstation
- %USERNAME\_CLIENT1 creating a shared rule in a confidential directory on the file server with %USERNAME\_CLIENT2 from the workstation %HOSTNAME\_CLIENT1
## File module

- %USERNAME\_CLIENT2 encrypting a document with a password for external use
- Sharing the password-protected document with someone who does not have the SDS solution
- Going to the Mystormshield.eu website to download the SDS SmartFILE Reader software
- <u>https://www.stormshield.com/wpcontent/uploads/2016/09/SmartFile\_Re</u> ader.zip

# Support

STORMSHIELD

### Contacts

- For assistance on the ongoing POC:
- If you are a partner and have an EVALUATION license:
  You can contact your local Stormshield pre-sales engineer directly
- If you are a partner and have an NFR license (Not For Resale):
  - You can contact Stormshield Support directly
- If you are a customer (solution with permanent license under a valid maintenance contract):
  - You already have access to your integrator's support department
  - You already have access to Stormshield Support

## Starting up the SDAM server database

## How to start up the database if I shut down the SDAM server



- In the command line with administrator privileges, run this command in order to start the DB C:\Program Files (x86)\Arkoon\Security BOX Authority Manager\Tools> SBMSTART.exe /o
- Run SBMSTART.exe /? to get all the options of this command



# STORMSHIELD

#### COLLABORATIVE SECURITY

Network Security

Endpoint Security

Data Security