

EJBCA Certificate Driver

SKy PRØ

for Novell Identity Manager

Installation and Configuration Manual



Version:	1.2
last updated: issue date:	Nov 23, 2015 Nov 23, 2015
filename:	EJBCA Driver Installation & Configuration v1.2

SKYPRO AG, Gewerbestrasse 7, CH-6330 Cham, Tel. 041 741 47 70, Fax 041 741 50 71, www.skypro.ch



Version: 1.1

EJBCA Driver for Novell IDM

Page 2 von 30

Table of Contents

1	ABSTRACT				
2	INST	ALLATION	4		
2.1	EXTRAC	۲ DOWNLOADED ZIP FILE	4		
2.2	EXTEND	EDIRECTORY SCHEMA	4		
	2.2.1 2.2.2 2.2.3	extend eDirectory schema using iManager extend eDirectory schema user Designer Check schema extension	4 7 9		
2.3	REPLACE	E EXISTING JAVA CLASSES	10		
	2.3.1 2.3.2	BCPROV CLASS JAVA CRYPTOGRAPHY EXTENSION (JCE)	10 11		
2.4	INSTALL	. NEW JAVA CLASSES	11		
2.5	Genera	TE JAVA KEYSTORE	11		
	2.5.1	CREATE END ENTITY	12		
	2.5.2 2.5.3	EXPORT CERTIFICATECREATE JAVA KEYSTORE	12 13		
2.6	CONFIG	URATION PARAMETERS	15		
	2.6.1	SOAP driver parameters	15		
	2.6.2	LOOPBACK DRIVER PARAMETERS	16		
2.7	IMPORT	AND CONFIGURE DRIVER	17		
	2.7.1	Designer	1/ 21		
2.8	EJBCA	Administration Overview	25		



Version: 1.1

EJBCA Driver for Novell IDM

Page 3 von 30

1 Abstract

Based on the open source Certificate Authority (CA) EJBCA (ejbca.sourceforce.net), the EJB-CA driver is able to create certificates for any eDirectory object (e.g. users, workstations, devices like VoIP phones, printers and much more). Based on J2EE technology EJBCA constitutes a robust, high performance and component based CA. Actually EJBCA is an enterprise class PKI you can use to build a complete PKI infrastructure for your organization.

The EJBCA driver for Novell Identity Manager consists of two drivers.

- 1. a SOAP driver, that communicates with the EJBCA infrastructure
- 2. a loopback driver, which exports and renews certificates



The SOAP driver synchronizes objects from eDirectory to the EJBCA PKI infrastructure. It creates, modifies and deletes "end entities" in the EJBCA PKI infrastructure. EJBCA itself generates the specified certificates for the entities. The certificates, including public and private key material, are stored in eDirectory by the SOAP driver. Since all eDirectory object classes can by synchronized with EJBCA, you can create certificate for any eDirectory object.

The loopback driver exports the certificate into a PFX, CER, DER or PEM file for further distribution. In case of a PFX file you can define a standard password, which is exported in a separate password file. The loopback driver automatically renews certificates before they expire.



Version: 1.1

2 Installation

The installation of the EJBCA driver is done in the steps listed below:

- 1. extract downloaded zip
- 2. extend the eDirectory schema
- 3. replace existing java classes
- 4. copy new java classes
- 5. generate java keystore file
- 6. import the driver (either with iManager or Designer)
- 7. start the drivers

2.1 extract downloaded zip file

Please extract the EJBCA ZIP or RAR file, you have downloaded, in a working directory. The driver package contains the following files:

- this manual (EJBCA Driver Installation & Configuration)
- MakeKeystore.bat
- Drivers\EJBCA_LB.xml
- Drivers\EJBCA_Soap.xml
- Drivers\ejbcaSchema.sch
- Libraries\bcprov-jdk14-137.jar
- Libraries\SKyPRO-EJBCASoapUtils.jar
- Licenses\SKyPRO-EJBCASoap.jar
- sun\jce_policy-1_4_2.zip
- sun\jce_policy-1_5_0.zip

Please verify, that you have received all files before continuing.

2.2 extend eDirectory schema

The EJBCA driver uses an auxiliary class which is linked to any object, which is synchronized with EJBCA. To extend the eDirectory schema you can either use Novell's iManager or Designer for Identity Manager.

2.2.1 extend eDirectory schema using iManager

iManager uses the ICE wizard to extend the eDirectory schema. Start iManager and expand "Schema" under "Roles and Tasks".



Version: 1.1

Date: 23.11.2015

EJBCA Driver for Novell IDM

Page 5 von 30

Novell _® iManager		Select "extend schema" and choose "Add
ADMIN Collection Owner Access		schema from a file".
Roles and Tasks	ICE Witzerd	
[Al Categories]		
Auditing and Logging	Welcome to the ICE Wizard	
Credential Provisioning		Press Next"
Directory Administration		
eDirectory Encryption	The ice wizard will step you through the import, export, migration of data or schema update and	
eDirectory Maintenance	compare operations.	
Groups	Select the tack you would like to perform	
Help Desk		
Identity Manager	O Import data from file on disk	
Identity Manager Utilities	Export data to a file on disk	
E LDAP	Migrate data between servers Add schema from a file	
I NMAS	Add schema from a server	
Novell Certificate Access	O Compare schema files	
<u>Novell Certificate Server</u>	O Compare schema between server and file	
Novell Secure Workstation	Under File	
Partition and Replicas	Advanced Settings	
Passwords	Run in verbase mode	
H PBX	Log failed records	
Provisioning Request	Disable schema pre-check while import	
Configuration	Schema rules:	
The second secon	Placement rules:	
<u>Role-Based Entitlements</u>	Creation rules:	
Add Attribute	Durchsuchen	
Attribute Information		
Class Information Create Attribute		
Create Class		
Delete Attribute		
Extend Schema	<< Back Next >> Cancel	
-		
ICE Wizard	?	Choose Schema File" as file type Click
		"search" to look for the schema file.
B		
Select the schema File		Choose file "ejbcaSchema.sch" from the
		driver nack
File type:		
Schema File 💌		
File to import:		(R) FIRCA LD and
D:\Eigene Dateien\iFolder\SK	yPRC Durchsuchen	EJBCA LB.XM
		EIBCA Soan xml
12,000 000 000000		
Advanced Settings		🔤 ejbcaSchema.sch
Exit on error		
Run in verbose mode		
Add records without	change type	
Schema options		
		Press Onen"
Do not add but com	npare schema	
_ sone add sur con		
		Press "Next"
<< Back Next	>> Cancel	
1		



Version: 1.1

Page 6 von 30

Date: 23.11.2015

EJBCA Driver for Novell IDM

Select the Server Server DNS name/IP address: 172.16.2.91 Port: 389 DER file: Durchsuchen (Needed if a secure port is used.)	Select DNS name or IP address of serv- er, which is going to process the import. Provide port 389 for standard LDAP op- eration
O Anonymous login	
Authenticated login	
User DN: (ex: cn=admin,o=novell) Password:	Provide userID and password of the ad- min account or any other user, who has
	sufficient rights to expand the edirectory
<< Back Next >> Cancel	-
The following message(s) were returned from the ice engine.	The ICE will process your request and expand the schema accordingly.
Novell Import Convert Export utility for Novell eDirectory version: 20112.68 Copyright 2000-2005 Novell, Inc. All rights reserved. U.S. Par Source Handler: ICE SCH Data handler for Novell eDirectory (ver Destination Handler: ICE LDAP handler for Novell eDirectory (ver Getting source schemadone. Summary : Total Records Parsed = 6 Attributes Parsed = 5 ObjectClasses Parsed = 1 Getting destination schemadone. Starting schema update	



Version: 1.1

EJBCA Driver for Novell IDM

Page 7 von 30

2.2.2 extend eDirectory schema user Designer

Instead of using the iManager to expand the eDirectory schema you can use Novell's Designer for Identity Manager.

Before you start expanding the schema in Designer, make sure you have the current schema of your eDirectory imported into your designer project. To import the schema into your designer project select *live/schema/import* on your identity vault.

Please start Designer and right click on the identity vault you're going to extend.

1		Select Import schema from File " from
ОТО [0]		the context menu.
000		
	New	
	Straighten Connections	
14-	Select Connected Applications	
	Distribute •	
	Align	
No	Change to eDirectory Tree	
	Change to Identity Vault / Meta-Directory	
	Add to Group	
	😿 Manage Vault Sche <u>m</u> a	
	Document Selection	
	🤄 Import Schema from File	
	Export to File	
	E-Mail Templates	
	Live	
	💢 <u>D</u> elete	
	Properties	
Schema Evo	ort Wizard	
Select Source	e for Import	Select the schema file <i>ejbcaSchema.sch</i>
Select the location	on to import the schema	the schema file in the subdirectory /driv-
Import from <u>f</u>	le	ers in the directory, where you unpacked the downloaded file
D:\ejbca	Schema.sch	
⊙. <u>s</u> ch f ○. <u>I</u> dif fi	ormat	Press <i>Next</i> and <i>Finish</i> .
0	< Back Next > Einish Cancel	



	Installation and Configuration	n Version: 1.1
23.11.2015	EJBCA Driver for Novell IDM	Page 9 von 30
Schema Deploy Wizard Select Classes and Attri Select Deploy all associations" t that might already exist in the d Classes: P ejbcaAuxClass Select All Deselect All Include base schema	buttes for Deploy Image: Constraint of the selected attributes with classes Image: Constraint of the selected attributes with classes Attributes: Deploy all associations Image: Constraint of the selected attributes: Deploy all associations Image: Constraint of the selected attributes: Deploy all associations Image: Constraint of the selected attributes: Deploy all associations Image: Constraint of the select	Only select "ejbcaAuxClass" and its appropriate attributes to deploy to your dentity vault.
Schema Deploy Wizard Export Summary The following classes and attribu Classes: ejbcaAuxClass Attributes: ejbcaCertificateDER ejbcaCertificatePKCS12 ejbcaCertificateValidTo ejbcaCortificateValidTo ejbcaCommand	ttes will be exported to eDirectory.	/iew summary and press <i>"Finish</i> ".

2.2.3 Check schema extension

Before you continue installing the EJBCA driver, check the schema extension you've made. Logout of iManager and login again. From *"Roles and Tasks*" expand *"Schema*" and select *"Class Information*".



Version: 1.1

Date: 23.11.2015

EJBCA Driver for Novell IDM

Page 10 von 30

Relar and Tarkr		
	a Class Information	Soarch for aibcaAuxClace" and coloct
[All Categories]		Search for "EjocaAux class and select
Auditing and Logging	Select the class that you want information on.	"View"
<u>Credential Provisioning</u>	Available classes:	<i>"vieiv</i>
Directory Administration	dynamicGroup	
eDirectory Encryption	dynamicGroupAux edirSchemaVersion	
eDirectory Maintenance	ejocaAuxClass	
E Groups	External Entity	
E Help Desk	View	
Itentity Manager		
E Identity Manager Utilities	Close	
E LDAP		
I NMAS		
Novell Certificate Access		
T Novell Certificate Server		
T Novell Secure Workstation		
T Partition and Replicas		
T Dasswords		
- Passwords		
Devidencies Device		
Configuration		
Role-Based Entitlements		
Schema		
Add Attribute		
Attribute Information		
Class Information		
Roles and Tasks	attribute Information	Make sure you see all attributes as listed
Roles and Tasks [Al Categories]	Attribute Information	Make sure you see all attributes as listed
Roles and Tasks [Al Categories] Auditing and Logging	Select the attribute information (2)	Make sure you see all attributes as listed aside:
Roles and Tasks [Al Categories]	Attribute Information Z Select the attribute that you want information on. Available attributes:	Make sure you see all attributes as listed aside:
Roles and Tasks Al Categories Auditing and Logging Credential Provisioning Directory Administration	Attribute Information	Make sure you see all attributes as listed aside:
Roles and Tasks [Al Categories] Categories] Categories Credential Provisioning Directory Administration eDirectory Encryption	Attribute Information Select the attribute that you want information on. Available attributes: ebocArticeadDER ebocArticeadDER EbocArticeadDER EBocArticeadDER	Make sure you see all attributes as listed aside:
Roles and Tasks [Al Categores] V Auditing and Logging Directory Administration Directory Administration eDirectory Maintenance	Attribute Information Z Select the attribute that you want information on. Available attributes: add/domenBagVersion opboCenfic.ceBCBR opboCenfic	Make sure you see all attributes as listed aside:
Roles and Tasks Auditing and Logging Credential Provisioning Directory Administration eDirectory Encryption eDirectory Maintenance Groups	Attribute Information Select the attribute that you want information on. Available attributes: #dischameBagVerien ebocCentricaeDER	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i>
Roles and Tasks Additing and Logging Credential Provisioning Directory Administration eDirectory Encryption eDirectory Maintenance Groups Help Desk	Attribute Information ? Select the attribute that you want information on. Available attributes: edocSchemaRagVerson ebocScheftodsDER ebocScheftodsDER ebocScheftodsDermetaro ebocScheftodsValdTo ebocScheftodsValdTo ebocScheftodsValdTo	Make sure you see all attributes as listed aside:
Roles and Tasks [Al Categories] V Categories] Credential Provisioning Directory Administration eblirectory Maintenance Groups Help Desk Identity Manager	Attribute Information 2 Select the attribute that you want information on. Available attributes: edis-Centra-DER 12 E edis-Centra-DER 12 E edis-Centra-DER 12 E edis-Centra-Vial To E	Make sure you see all attributes as listed aside: ejbcaCertificateDER ejbcaCommand
Roles and Tasks [Al Categores] V Auditing and Logging Credential Provisioning Directory Administration eliverctory Carcyption eliverctory Maintenance Groups Help Desk Identity Manager Identity Manager	& Attribute Information ? Select the attributes: select of the attributes: selectoficate/CS12 * eboceficate/CS12 * ebocefication * View *	Make sure you see all attributes as listed aside: ejbcaCertificateDER ejbcaCommand eibcaCertificateTimestamp
Roles and Tasks Auditing and Logging Auditing and Logging Credential Provisioning Directory Administration eDirectory Maintenance Groups Help Deak Identity Manager Identity Manager Identity Manager Identity Manager	Attribute Information ? Select the attribute that you want information on. Available attributes: schoolenticate DER epbo2enticate DER epbo2enticate DER epbo2enticate DER epbo2enticate Valid To View Close	Make sure you see all attributes as listed aside: ejbcaCertificateDER ejbcaCommand ejbcaCertificateTimestamp
Roles and Tasks A Categories A Categories Credential Provisioning Credential Provisioning Directory Administration eDirectory Administration eDirectory Maintenance Groups Help Deak Identity Manager Identity Manager IDAP NNAS E	& Attribute Information Select the attribute that you want information on. Available attributes: edpo-denticaeDER edpo-denticaeDER edpo-denticaeDER edpo-denticaeDER edpo-denticaeVES12 edpo-denticaeVES12 <td>Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i></td>	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i>
Roles and Tasks Auditing and Logging Credential Provisioning Directory Administration Directory Maintenance Groups Help Desk Identity Manager Identity Manager Identity Manager M	& Attribute Information 2 Select the attributes: select SchemeRayVersion select SchemeRayVersion 1 View 1 Close 1	Make sure you see all attributes as listed aside: ejbcaCertificateDER ejbcaCommand ejbcaCertificateTimestamp ejbcaCertificatePKCS12 eibcaCertificateValidTo
Roles and Tasks Auditing and Logging Credential Provisioning Directory Administration eDirectory Animistration eDirectory Maintenance Groups Help Desk Identity Manager Identity Manager Identity Manager Identity Manager Novell Certificate Access Novell Certificate Server	& Attribute Information ? Select the attributes: select of the attributes: select of th	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks Auditing and Logging Auditing and Logging Credential Provisioning Directory Administration eDirectory Administration eDirectory Maintenance Groups Help Deak Identity Manager Identity Manager Identity Manager Identity Manager Movell Certificate Access Novell Certificate Server Novell Secure Workstation	Attribute Information Select the attributes: schoolenandBayVmion schoolenandBayVmion	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks [# Categories] v Auditing and Logging Credential Provisioning Directory Administration ebirectory Maintenance Groups Help Desk Identity Manager Identity Manager Identity Manager Identity Manager Movell Certificate Access Novell Certificate Server Novell Certificate Server Novell Certificate Server Novell Certificate Access	Attribute Information ?	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks Auditing and Logging Auditing and Logging Credential Provisioning Directory Administration eDirectory Maintenance Groups Help Desk Identity Manager Identity Manager Identity Manager Movell Certificate Access Novell Certificate Server Novell Secure Workstation Partition and Replex	& Attribute Information ? Select the attributes: edischarmaRayVersion edischardserVCS1 edischardserVCS1 edischardserVid1o	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks Additing and Logging Credential Provisioning Directory Administration Directory Administration eDirectory Maintenance Groups Help Desk Identity Manager Identity Manager Identity Manager Identity Manager Novell Certificate Access Novell Certificate Server Novell Secure Workstation Partition and Replicas Passwords Page	& Attribute Information ? Select the attributes:	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks Additing and Logging Credential Provisioning Directory Administration eDirectory Maintenance Groups Help Deak Identity Manager Identity Manager Identity Manager Identity Manager Movell Certificate Access Novell Secure Workstation Novell Secure Workstation Partition an Replicas Pasymonds Pasy Dexide Secure	Attribute Information Select the attribute that you want information on. Aullable attributes: edschemaßagVerson View Close	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks [Al Categores] Auditing and Logging Credential Provisioning Directory Administration eDirectory Mainistration eDirectory Mainistration eDirectory Maintenance Groups Help Desk identity Manager iden	Sett the attribute information ? Setext the attributes: edic/dimes/BayVersion edic/dic	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks Auditing and Logging Auditing and Logging Credential Provisioning Directory Animistration eDirectory Maintenance Groups Help Desk Identity Manager Identity Manager Identity Manager Identity Manager Movell Certificate Access Novell Certificate Access Novell Certificate Server Novell Secure Workstation Partition and Replicas Passwords Pay Provisioning Request Configuration Richts	& Attribute Information Setext the attributes: educodent content on the set of the set o	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks Additing and Logging Credential Provisioning Directory Administration eDirectory Administration eDirectory Administration eDirectory Maintenance Groups Help Desk Identity Manager Identity Manager Identity Manager Identity Manager NiAAS E Novell Certificate Access Novell Certificate Server Novell Certificate Server Novell Certificate Server Partition and Replicas Parswords PBX PEX PEX Porvisioning Request Configuration Rights	& Attribute Information Setect the attributes: exploredriceseDER epbcoEnfraceBDER epbcoEnfraceBoe	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks Additing and Logging Credential Provisioning Directory Administration Burrectory Administration Burrectory Maintenance Groups Help Desk Identity Manager Identity Manager Identity Manager Identity Manager Identity Manager Identity Manager Movell Certificate Access Novell Certificate Server Novell Server Serv	& Attribute Information Select the attribute that you want information on. Author State attributes: edocedent could be attributes: edocedent could be attribute; View Close	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks Auditing and Logging Auditing and Logging Credential Provisioning Directory Administration Directory Maintenance Groups Help Denk Identity Manager Identity Manager Identity Manager Identity Manager Identity Manager Movell Certificate Access Novell Certificate Access Novell Certificate Server Novell Secure Workstation Parition and Replica Passwords Pass Pass Role Saved Entitlements Schema AdAtribute	& Attribute Information Setext the attribute: education	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks Additing and Logging Auditing and Logging Credential Provisioning Directory Administration eDirectory Concryption eDirectory Maintenance Groups Help Desk identity Manager identity Manager identity Manager identity Manager identity Manager Movell Certificate Access Novell Certificate Access Novell Certificate Server Novell Secure Workstation Partition and Replicas Pasy Orrivisioning Request Configuration Rights Role-Based Entitlements Schema Add Attribute Attribute Information	& Attribute Information Setext the attributes: spbcoefficterPCS12 obcoefficterPCS12	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>
Roles and Tasks Additing and Logging Credential Provisioning Directory Administration eDirectory Maintenance Groups definitive Manager identity	Attribute Information Sete: the attribute that you want information on. Aullable attribute: edoc-Senticose USE 12: edoc-Senticose USE 12: edoc-Senticose USE 12: edoc-Senticose USE 12: View Close	Make sure you see all attributes as listed aside: <i>ejbcaCertificateDER</i> <i>ejbcaCommand</i> <i>ejbcaCertificateTimestamp</i> <i>ejbcaCertificatePKCS12</i> <i>ejbcaCertificateValidTo</i>

2.3 replace existing java classes

The EJBCA driver needs to replace a couple of existing java classes on the server, where identity manager is installed.

- 1. bcprov-jdk14-137.jar (may not be installed already)
- 2. local_policy.jar and US_export_policy.jar (from java cryptograhpy extension jce)

2.3.1 bcprov class

This java class is needed for higher encryption than 48-bit. Please locate **all** instances of the bcprov-jdk14-137.jar file and replace them with the version provided with the driver. The correct version of the file is:

name	date	size
bcprov-jdk14-137.jar	August 20 th 2007	1,437kB



The file is located in the subdirectory *libraries* in the extracted driver packages.

If you do not find any instance of this file, copy it into the subdirectory, where all Identity Manager java classes are installed. By default this is one of the following directories:

- Windows: \novell\RemoteLoader\lib
- Linux: /opt/novell/eDirectory/lib/dirxml/classes
- NetWare: sys:\system\lib

2.3.2 java cryptography extension (jce)

To use more then 7 characters in a certificate password you need to download and install the java cryptography extension (jce). For your convenience we have provided the jce for java 1.4.2 und java 1.5 (found in subdirectory *sun*). To see which version of java you have installed, you can use the command *java -version*. If you have installed other java version, please go to <u>www.sun.com/download</u> to look for the appropriate version.

If you unzip the jce policy file, you will find two java classes:

US_export_policy_jar local_policy.jar

Please locate all instances of these files on your server and replace them with the correct versions from your jce download. Please restart java.

2.4 install new java classes

The EJBCA driver needs two additional java classes:

- 1. SKyPRO-EJBCASoapUtils.jar (found in subdirectory Libraries)
- 2. SKyPRO-EJBCASoap.jar (found in subdirectory *Licenses*)

These java classes have to be copied to the directory where you have installed your Identity Manager SOAP driver. Look for the files SOAPshim.jar and SOAPUtil.jar. These files are installed by default in the following directories:

- Windows: \novell\RemoteLoader\lib
- Linux: /opt/novell/eDirectory/lib/dirxml/classes
- NetWare: sys:\system\lib

Copy both files, SKyPRO-EJBCASoapUtil.jar and SKyPRO-EJBCASoap.jar, into this directory. Please restart java to take effect of the new installed java classes.

2.5 Generate Java keystore

The SOAP connector needs a certificate to connect to the EJBCA SOAP server. This certificate has to be importet into a java keystore file. This keystore file is used by the EJBCA driver to read the certificate and to authenticate to the EJBCA soap server. The keystore file is create in three steps:

1. create end entity



Version: 1.1

EJBCA Driver for Novell IDM

- 2. export certificate
- 3. create java keystore

2.5.1 create end entity

Contact your EJBCA administrator to provide you with an end entity within EJBCA, that has the appropriate rights to create entities and generate certificates. In this documentation we assume, that you have an end entity within EJBCA with these rights. Otherwise please refer to the EJBCA manuals.

2.5.2 export certificate

In our example we export the certificate of the end entity *superadmin*, who has all needed privileges.

EJBCA EDBCA Enternations Edit Certificate Profiles Edit Certificate Authorities	PRI Administration Version : EJBCA 3.4.3 Welcome SuperAdmin to EJBCA Administration.	Start your web browser an go to the EJB- CA administrative site. As you call the ad- ministrative web site of EJBCA you have to have installed a certificate in your web browser, that allows you to administer the EJBCA infrastructure. Please refer to the EJBCA manual. The EJBCA Administration site will open up.		
RA Functions Edit User Data Sources Edit User Data Sources Edit End Entity Profiles Add End Entity J2EE technology it constitutes a robust, high performance and component based CA. Both flexible and platform independent, EJBCA can be used standalone or integrated in any J2EE application. Supervision Functions EJBCA can be used standalone or integrated in any J2EE application. View Log Written exclusively in Java, EJBCA can be run on any platform where a J2EE server is used and it has been tested on Linux and Windows platforms. Edit Administrator Privileges Made by PrimeKey Solutions AB, 2002-2007. My Preferences Solutions AB, 2002-2007.		By default the URL of the admin web page of EJBCA is: <u>https://<server>:8443/ejbca/adminweb/</server></u> You have to use a DNS name. EJBCA does not work with ip addresse		
Find end entity with username: auge Or find end entity with Certificate S Or with status - • • • • • • • • • • • • • • • • • •	List End Entities radmin Find radmin Find W (hex) Find expiring within Days Let ommon Organization Organization - Status n Generated View End Entity View Centificates View History Select All Invert Selection	Select <i>List/Edit End Entity</i> in the left menu. In our example the end entity <i>su- peradmin</i> has the appropriate rights. List the user and select <i>Edit End Entity</i> .		



Version: 1.1

Date: 23.11.2015

EJBCA Driver for Novell IDM

Page 13 von 30

Username superadmin Password Confirm Password Batch generation (clear text pwd storage)	Set and confirm the password and activate the check box <i>batch generation</i> .
Certificate Profile ENDUSER CA AdminCA1 Tokon B125to	At the end of the form select <i>"P12 file</i> " as Token and change the status to <i>new</i> . Save
Types: Administrator	
Status New Save Close	

As you have edited the end entity, you have selected to batch generate the P12 certificate file. Now we're ready to export this certificate. (In this manual we assume you have installed EJBCA on a windows based server. Otherwise please refer to the EJBCA manual for instruction how to export the certificate.)

Go to the server console and open a command console. In the command console change to the EJBCA installation directory. Default installation directory is $c:\ensuremath{:ejbca_3_4_3}$. Change to the subdirectory *bin*. Enter the batch command to export certificates of new generated end entity:

ejbca.cmd batch

C:∖ei	ibca_3_4	4_3∖bii	n>ejbca.cmd batch				
Using	Jsing JBoss JNDI provider						
0	[main]	INFO	org.ejbca.ui.cli.batch.BatchMakeP12	 Generating keys in directory C:ejbca_3_4_3b 			
inp1Z							
0	[main]	INFO	org.ejbca.ui.cli.batch.BatchMakeP12	- Generating for all NEW.			
47	[main]	INFO	org.ejbca.ui.cli.batch.BatchMakeP12	- Batch generating 1 users.			
63	[main]	INFO	org.ejbca.ui.cli.batch.BatchMakeP12	- Generating keys for IDMDriver.			
1781	[main]	INFO	org.ejbca.ui.cli.batch.BatchMakeP12	- Created Keystore for 'IDMDriver'.			
1860	[main]	INFO	org.ejbca.ui.cli.batch.BatchMakeP12	 New user generated successfully - IDMDriver 			
1860	[main]	INFO	org.ejbca.ui.cli.batch.BatchMakeP12	 1 new users generated successfully - :IDMDr 			
iver.							
1860	[main]	INFO	org.ejbca.ui.cli.batch.BatchMakeP12	- Generating for all FAILED.			
1891	[main]	INFO	org.ejbca.ui.cli.batch.BatchMakeP12	- Batch generating O users.			
C:∖ej	،_ibca_3	4_3∖bi	n>				

This script will export the superadmin certificate to the subdirectory *p12*.

Address 🔁 C:\ejbca_3_4_3\bin\p12						
Folders	×	Name 🔺	Size	Туре	Date Modified	
🖃 🥯 Local Disk (C;)		IDMDriver.p12	3 KB	Personal Information Ex	1/8/2008 2:23 PM	
		👰 superadmin.p12	3 KB	Personal Information Ex	1/8/2008 11:38 AM	
E C Documents and Setti		🖬 tomcat.jks	4 KB	JKS File	8/18/2007 10:58 PM	
🖂 🚞 ejbca_3_4_3						
🚞 .settings						
🖃 🚞 bin						
🚞 extra						
🗀 p12						



Version: 1.1

EJBCA Driver for Novell IDM

Page 14 von 30

2.5.3 create java keystore

Copy the certificate you created to the directory, where you have extracted the EJBCA driver files. For your convenience we have provided a script *MakeKeystore.bat* to generate the java keystore file *cacertsClient the driver needs to authenticate to the soap server*.

Open the script *MakeKeystore.bat* and correct the name and the password (*superadmin.p12* and *ejbca*) with the certificate you have create.

java -cp Libraries/SKyPRO-EJBCASoapUtils.jar;Libraries/bcprov-jdk14-137.jar;Licences/SKyPRO-EJBCASoap.jar ch.skypro.idm.drivers.ejbcasoap.utils.PKCS12toJKS superadmin.p12 password cacertsClient

Start the script:



Copy the *cacertsClient* keystore file to the directory where you have copied the SKyPRO EJB-CA java classes in chapter 2.4.



Version: 1.1

EJBCA Driver for Novell IDM

2.6 configuration parameters

Before we start to import the drivers, we have a look at the configuration parameters. Both drivers have some important parameters, which you must understand to define them correctly.

2.6.1 SOAP driver parameters

As explained above the SOAP driver creates an EJBCA end entity. Since we do not want to create a certificate for all the objects in our eDirectory, we have to filter out the objects we want to pass to the EJBCA. At the moment the end entity is created, the PKI generates the certificate. To create the correct certificate, we pass some parameters over to the EJBCA, so it knows what type of certificate it has to create. As soon as the certificate is created, it is passed back to the driver. The driver stores the certificate in eDirectory, so the loopback driver can export it.

URL of remote DSML Server

The communication between the IDM server and the soap server will always be SSL secured. So you always have to use *"https*". EJBCA compares the SSL server certificate that will be used for the encryption with the name of the URL you call. If the URL you call does not match with the server name in the SSL certificate, EJBCA will refuse the connection.

You can never use an ip address as the URL!

In the log file of the soap driver you will find the error message ", *No trusted certificate found*". A valid URL could be:

https://www.ejbcatest.local:8443/ejbca/adminweb/

You can check the URL of the server certificate with your browser when you are connected to the EJBCA Administration site. Double click on the closed security lock in internet explorer or firefox and display the certificate information. There you will find the common name (cn) of the server the certificate is issued for.

keystore file

EJBCA does not use userID and password to authenticate to the web server but it request a valid certificate. The certificate is stored and passed in the keystore file, which we have created and copied to the driver directory. This parameter contains the path and filename of the keystore file.

Without a valid keystore file the driver can not establish a connection with the EJBCA web service. In the driver log file you'll find an error message *"AuthorizationDeniedException*".

If you use our *MakeKestore.bat* command file to create the keystore file the password for the keystore file will be *"changeit*".

Path to object container

The driver only processes objects residing within this container and its subcontainers. Please use the browse button to select the right context to be sure to use the correct syntax. Be aware: the syntax between importing the driver and modifying the value in iManager is different!

object class

While importing the driver with designer or iManager the import wizard will ask you for an object class to create certificates for. Certificates will only be created for this object class. If you want to create certificates for different object classes, you have to install a driver for



Version: 1.1

EJBCA Driver for Novell IDM

Page 16 von 30

each object class.

EJBCA CA Name

This parameter contains the name of your Certificate Authority (CA) issuing the certificates. You'll find the name your CA in the EJBCA Administration portal. See "EJBCA Administration".

EJBCA Certificate Profile Name

The driver needs to pass a Certificate profile name to EJBCA. EJBCA uses this profile to generate the certificates. The profile defines the key usage, available key length and much more. Be sure to use an existing Certificate profile name. Otherwise EJBCA can not generate a certificate. See "EJBCA Administration" to look for valid Certificate Profile names.

EJBCA End Entity Profile Name

An End Entity Profile works as a template for the end entity to create. EJBCA uses this profile to create the end entity. Be sure to use an existing End Entity profile name. Otherwise the EJBCA will not create the end entity. See "EJBCA Administration" to look for valid End Entity Profile names.

End Entity Password Prefix

EJBCA requires a password for each end entity. This password is only needed to pass to EJB-CA to create the end entity. Enter any password that has at least 6 characters, upper and lower letters and one special character (e.g. EjbCA.).

Certificate Key Length

Defines the key length of the certificate. The available key lengths depend on the Certificate Profile that will be used.

Certificate key algorithm

The key algorithm will always be RSA. Please do not change this field.

2.6.2 Loopback driver parameters

The loopback driver exports the certificates to PFX, DER or CER files.

Path to object container

The driver only processes objects residing within this container and its subcontainers. Please use the browse button to select the right context to be sure to use the correct syntax. The syntax between importing the driver and modifying the value in iManager is different!

object class

While importing the driver with designer or iManager the import wizard will ask you for an object class. Certificates will only be created for this object class. If you want to create certificates for different object classes you have to install a driver for each object class.

default password

If you export a certificate to a PFX file you can protect the file with a password. You can provide any password. If you define a password, the driver will create a password file containing the password. The name of the password file corresponds to the name of the object with the extension .PWD. This is very convenient if you plan to deploy and install the certificates with a resource management system. So the resource management system is able to install the certificate automatically.

automatic renewal process

You can automatically renew a certificate before it expires. This parameters defines how many days before the expiration date is reached the certificate will be renewed.

certificate file formats (PFX, DER, CER)

The driver can export the certificate in different formats. Please select the file formats (but at least one) you want the certificate be exported to. The PFX file format corresponds to the



Version: 1.1

EJBCA Driver for Novell IDM

Page 17 von 30

PKCS12 certificate format. DER is a binary coded X.509 certificate. CER is a base64 coded X.509 certificate.



Version: 1.1

EJBCA Driver for Novell IDM

Page 18 von 30

2.7 import and configure driver

Now we're ready to import the driver into your Identity Manager environment. You can do this either with iManager or Designer.

2.7.1 Designer

Start Designer and open the project where you want to import the driver.

Import SOAP Driver





Date: 23.11.2015

Installation and Configuration

Version: 1.1

EJBCA Driver for Novell IDM

Page 19 von 30

Driver name: *	
EJBCA_Soap	object class: select the object class, for which
Enter the object class, for which you will the Certificate to be made. Object class: *	the driver should create certifi- cates.
workstation	e.g. workstation
Enter the DN of the container where objects should be published (users.organization). Objects container DN: * workstation.system	Container DN: define the container containing the objects for which the certifi- cates should be created.
Enter the EJBCA Certificate Authority Name.	e.g. workstation.system
EJBCA CA Name: *	CA Name:
AdminCA1	enter the name of your CA. You
Enter the EJBCA Certificate Profile Name. EJBCA Certificate Profile Name: *	find the name of the CA under basic functions in you EJBCA Ad- ministration portal.
CA Certificate Profile	Certificate Profile Name:
Enter the EJBCA End Entity Profile Name. EJBCA End Entity Profile Name: *	define the EJBCA certificate pro-
End Entity Profile	can define certificate profiles in
Enter the EJBCA WebService URL.	the EJBCA Administration portal
EJBCA WebService URL: *	under Edit Certificate Profiles.
https://localhost:8443/ejbca/ejbcaws/ejbcaws	End Entity Profile Name:
Enter the Path to KeyStore file with client certificate and trusted root certificate. Path to KeyStore file: * cacertsClient	define the EJBCA end entity pro- file to be used by the driver. You can define end entity profiles in the EJBCA Administration portal under <i>Edit End Entity profiles</i> .
	EJBCA WebService URL: enter the URL of the EJBCA SOAP Service. You can test the URL in your web Browser. e.g. https:// <yourejbcahost>:8443/ ejbca/ejbcaws/ejbcasw</yourejbcahost>
	Path to keystore file enter the path to your keystore file you created. e.g. /opt/novell/eDirectory/lib/dirxml/ classes/cacertsClient
UTOPIASIM	The driver has been created suc- cessfully.

	Installation and Configuration	Version: 1.1
Date: 23.11.2015	EJBCA Driver for Novell IDM	Page 20 von 30
	54,270	We have provided the icons in the <i>icons</i> subdirectory. Double click the driver and select <i>iMan-ager icon</i> to replace the image.

Import Loopback Driver

UTOPIASIM UTOPIASIM UDDECATION Undo Change Location New Copy Straighten Connections Select Connected Applications Arrange Applications Distribute Align Distribute Align Document Selection Im Import from File Export to Configuration File Live Export to Configuration File Live Properties		Click right mouse bottom on your driver set and choose <i>Import</i> <i>from File</i>
Import a Driver Configuration File File: Brite: Brite:<	owse	Select <i>Browse</i> and go to the directory where you extracted the EJBCA driver. Choose the <i>EJBCA_LB.xml</i> file you find in the subdirectory <i>drivers</i> . Press <i>Ok</i> .
		The driver import wizard appears Driver name Enter any name for the driver Object class define the object class, for which the driver should export the cer- tificates Container DN enter the name of the container



Date: 23.11.2015

Installation and Configuration

Version: 1.1

EJBCA Driver for Novell IDM

Page 21 von 30







Version: 1.1

EJBCA Driver for Novell IDM

Page 23 von 30

2.7.2 iManager

Import SOAP Driver

Add Driver Delete Driver Information		Start iManager and login with ad- min rights. Go to the Identity Manager Overview. In the over- view press the <i>"Add Driver</i> " but- tom.
 Where do you want to place the new driver? In an existing driver set DriverSet.system In a new driver set 		Decide whether you want to place the new driver in an exist- ing driver set or in a new driver set. Press Next
<< Back Next >>	Cancel Finish	
Import or create a new Application Driver for this driver set. Import a driver configuration from the server (.XML file) ActiveDirectory.xml Import a driver configuration from the client (.XML file) File: Durcbsuchen Create a new driver Name: Cancel Finish		Select to import a driver from the client as XML file and press the <i>Browse</i> bottom.
Drivers		Browse to your download directo- ry where you extracted the EJB- CA driver. Select the <i>EJB-</i> <i>CA-Soap.XML</i> file in the subdirec- tory <i>Drivers</i> . Press <i>Next</i>
Driver name: *	Evicting drivers:	The driver import wizard appears
EJBCA_Soap	Select an existing driver to update> Image: Select an existing	driver name: define any driver name. e.g. <i>EJBCA-SOAP</i>



Version: 1.1

Date: 23.11.2015

EJBCA Driver for Novell IDM

Page 24 von 30

Enter the object class, for which you will the Certificate to be made. Object class: * workstation	object class: select the object class, for which the driver should create certifi- cates. e.g. <i>workstation</i>
Enter the DN of the container where objects should be published (users.organization). Objects container DN: * workstations.system	Container DN: define the container containing the objects for which the certifi- cates should be created. e.g. <i>workstation.system</i>
Enter the EJBCA Certificate Authority Name. EJBCA CA Name: * AdminCA1	CA Name: enter the name of your CA. You find the name of the CA under <i>basic functions</i> in you EJBCA Ad- ministration portal.
Enter the EJBCA Certificate Profile Name. EJBCA Certificate Profile Name: * CA Certificate Profile	Certificate Profile Name: define the EJBCA certificate pro- file to be used by the driver. You can define certificate profiles in the EJBCA Administration portal under <i>Edit Certificate Profiles</i> .
Enter the EJBCA End Entity Profile Name. EJBCA End Entity Profile Name: * End Entity Profile	End Entity Profile Name: define the EJBCA end entity pro- file to be used by the driver. You can define end entity profiles in the EJBCA Administration portal under <i>Edit End Entity profiles</i> .
Enter the EJBCA WebService URL. EJBCA WebService URL: * https://localhost:8443/ejbca/ejbcaws/ej	EJBCA WebService URL: enter the URL of the EJBCA SOAP Service. You can test the URL in your web Browser. e.g.: https:// <yourejbcahost>:8443/ ejbca/ejbcaws/ejbcasw</yourejbcahost>
Enter the Path to KeyStore file with client certificate and trusted root certificate. Path to KeyStore file: * novell/eDirectory/lib/dirxml/cacertsClient	Path to keystore file enter the path to your keystore file you created. e.g. /opt/novell/eDirectory/lib/dirxml/ classes/cacertsClient Press Next

SKy PRØ Advanced networking	Installation and Configuration	Version: 1.1
Date: 23.11.2015	EJBCA Driver for Novell IDM	Page 25 von 30
Security Equals: SEJB Identity Manager Security Equals The DirXML-Driver object is defined objects:	CA_Soap.DriverSet.system	Define an admin security equiva- lent for the driver and list every object, residing in the configured container, you want explicitly to exclude from the driver. Press <i>Next</i>
		Confirm the driver summary and press <i>Finish.</i>
Identity Vault EJBC	A_Soap	Your new driver has successfully been added.

Import Loopback Driver

Add Driver Delete Driver Information	Start iManager and login with ad- min rights. Go to the Identity Manager Overview. In the over- view press the <i>"Add Driver</i> " bot- tom.
 Where do you want to place the new driver? In an existing driver set DriverSet.system 	Decide whether you want to place the new driver in an exist- ing driver set or in a new driver set.
In a new driver set	Press <i>Next</i>
<< Back Next >> Cancel Finish	



Version: 1.1

Date: 23.11.2015

EJBCA Driver for Novell IDM

Page 26 von 30

Import or create a new Application Driver for this driver set. Import a driver configuration from the server (.XML file) Import a driver configuration from the client (.XML file) File: Durchsuchen Create a new driver Name: Cancel		Select to import a driver from the client as XML file and press the <i>Browse</i> bottom.
Drivers		Browse to your download directo- ry where you extracted the EJB- CA driver. Select the <i>EJB-</i> <i>CA-LB.XML</i> file in the subdirecto- ry <i>Drivers</i> . Press <i>Next</i>
The name of the driver co file is "EJBCA_LB". Enter to the driver. Driver name: * EJBCA_LB	entained in the driver configuration the actual name you want to use for Existing drivers: Select an existing driver to update>	driver name: define any driver name. e.g. <i>EJBCA-LB</i>
Enter the object class, for which you will the Certificate to be made. Object class: * workstation		Object class define the object class, for which the driver should export the cer- tificates
Enter the DN of the container with your objects (users.organization). Objects container DN: * workstation.system		Container DN enter the name of the container containing your objects
Enter the path where certificates should be exported. Path to certificates - Folder: * /certs		Path to certificates define the path, where the certifi- cates should be exported to. Naming depends on operating system the driver is installed on. e.g. /certs (for Linux) Press Next

SKy PRØ Advanced networking	Installation and Configuration	Version: 1.1
Date: 23.11.2015	EJBCA Driver for Novell IDM	Page 27 von 30
Security Equals: ©EJBA Identity Manager Security Equals The DirXML-Driver object is defined objects: admin.system	CA_LB.DriverSet.system	Define an admin security equiva- lent for the driver and list every object, residing in the configured container, you want explicitly to exclude from the driver. Press <i>Next</i>
		Confirm the driver summary and press <i>Finish</i> .
Identity Vault EJBC	s A_LB	Your new driver has successfully been added.

2.8 Fehler: Referenz nicht gefundenEJBCA Administration Overview

For your convinience we provide you at this place with some information about EJBCA Administration. During the configuration of the driver you have to configure some parameters with information from EJBCA. Here you see where you'll find these informations.

EJBCA Home CA Functions Basic Functions Edit Certificate Profiles Edit Certificate Authorities Edit User Data Sources Edit Lend Enuity Profiles Edit Lend Enuity Profiles Edit End End Enuity Profiles Edit End End End Edit End End End Edit End Edit End End Edit	Addiministration CA Functions Basic Functions for CA : AdminCA1 <u>View Certificate</u> <u>View Information</u> Root CA : C=SE, 0=EJBCA Sample, CN=AdminCA1 <u>Download to Internet Explore</u> <u>Download to Netscape</u> <u>Download pern file</u>	CA Name: On the home page of your EJBCA administration portal you find the name of your CA. In this example <i>AdminCA1</i>
EJBCA Home CA functions Basic Functions Basic Publishers Edit Certificate Profiles Edit Publishers Edit Certificate Authontities CA Functions Edit User Data Sources Edit User Data Sources Edit Contific Profiles Add End Entity ListEdit End Entities	Administration Edit Certificate Profiles Current Certificate Profiles CA Certificate Profile DUSSER (FIXED) OCSPSIGNER (FIXED) OCSPSIGNER (FIXED) SUBCA (FIXED)	Add Certificate Profiles Select <i>Edit Certificate Profiles</i> to create and edit EJBCA certificate profiles. Please review EJBCA documentation for more informa- tion on how to create certificate profiles.
		Add End Entity Profile



Date: 23.11.2015

Installation and Configuration

Version: 1.1

EJBCA Driver for Novell IDM

Page 28 von 30

Lone Contraction Edit End Entity Profiles Dasic Functions Edit End Entity Profiles Basic Functions Current End Entity Profiles Edit End Entity Profiles Current End Entity Profiles Cature of State Sources Edit End Entity Profiles Edit End Entity Profiles Edit End Entity Profiles			Select <i>Edit End Entity Profiles</i> to create and edit EJBCA end entity profiles. Please see EJBCA docu- mentation for further informa- tions about end entity profiles.
Web Services - Mozilia Firefox Image: Style Services - Mozilia Firefox Datai Bearbeiten Ansicht Gronk Lesszeichen Extras tillfe Image: Style Services Skyle Ro Colline* Skyle Ro Skyle Ro Isable* Coolies* Coolies* Cosies* Skyle Ro Skyle Ro Isable* Coolies* Coolies* Cosies* Skyle Ro Skyle Ro Isable* Coolies* Coolies* Cosies* Skyle Ro Skyle Ro Skyle Ro Skyle Ro Skyle Ro Utapa Skyle Ro Skyle Ro Skyle Ro Skyle Ro		refox Correction Egtras Hife Correction	Web Service URL If the web service is installed cor- rectly you can test it from your browser. e.g.
Port Name Status Information		Information	https://ejbca.local.test:8443/ejb
ejbcaws	ACTIVE	Address: https://www.ejbcatest.local:8443/ejbca/ejbcaws/ejbcaws WSDL: https://www.ejbcatest.local:8443/ejbca/ejbcaws/ejbcaws?wsdl Port QName: {http://ws.protocol.core.ejbca.org/}EjbcaWSPort Implementation class: org.ejbca.core.protocol.ws.EjbcaWS	Ca/ejucaws/ejucasw



Version: 1.1

3 Run and test the drivers

In iManager check if both drivers are up and running.	LIBCA_Soap
We create some workstation objects in eDirectory in the specified container.	Image: Novelit ConsoleOne File Edit Yiew Wizards Jools Help Image: ConsoleOne Image: ConsoleOne Image: ConsoleOne Image: ConsoleOne Image: ConsoleOne Image: ConsoleOne Image: ConsoleOne Image: ConsoleOne
All workstation objects are cre- ate as <i>end entity</i> in the EJBCA PKI infrastructure. The appropri- ate certificates are generated.	svd001 lib svd002 lib svd003 Generated View End Entity svd003 lib svd003 Generated Generated View End Entity svd003 lib svd003 Generated Generated View End Entity svd004 lib svd004 lib svd005 Generated Generated svd005 lib svd006 generated Generated Generated View End Entity svd006 lib svd006 generated Generated View End Entity Std1 End Entity svd006 lib svd006 generated Generated View End Entity svd007 lib svd007 lib svd008 Generated Generated View End Entity were End Entity Svd007 lib svd008 Generated Generated View End Entity View End Entity



Version: 1.1

Date: 23.11.2015

EJBCA Driver for Novell IDM

Page 30 von 30

