

# Authentication

- BookStack auth on Lemonldap::NG (using SAML)

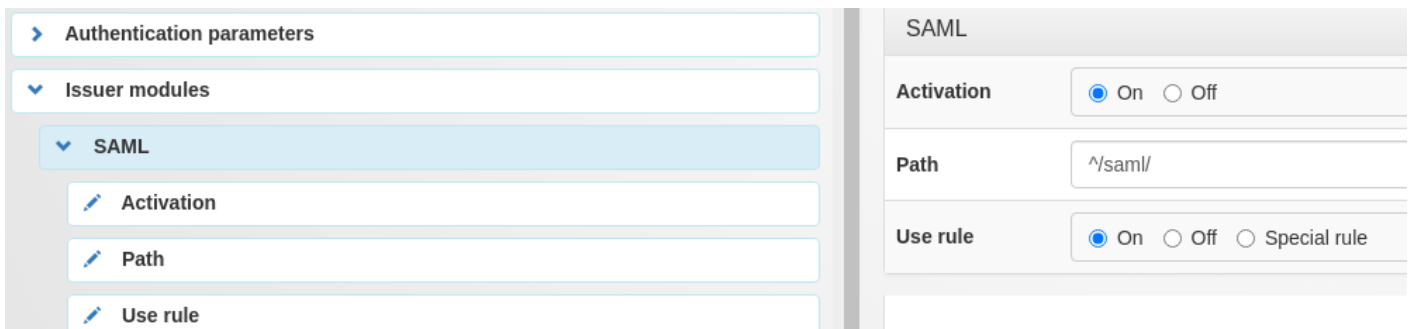
# BookStack auth on Lemonldap::NG (using SAML)

BookStack can use an SAML2 IDP to authenticate users. And Lemonldap::NG can be used as such, but there are a few things to configure to have this working.

In this example, Lemonldap::NG portal is <https://auth.example.org> and BookStack is <https://bookstack.example.org>

## Enable SAML2 service on Lemonldap::NG

In the manager, the SAML issuer module must be enabled



The screenshot shows the Lemonldap::NG manager interface. On the left, a sidebar menu is expanded to 'Authentication parameters', then 'Issuer modules', and finally 'SAML'. The 'SAML' section is highlighted in blue. Below it, three configuration items are listed: 'Activation', 'Path', and 'Use rule', each with a pencil icon for editing. On the right, the 'SAML' configuration panel is shown. It has a header 'SAML' and three rows of configuration: 'Activation' with radio buttons for 'On' (selected) and 'Off'; 'Path' with a text input field containing '^/saml/'; and 'Use rule' with radio buttons for 'On' (selected), 'Off', and 'Special rule'.

## Configure SAML2 on Lemonldap::NG

Now, you have to configure SAML2 service on Lemonldap::NG

Go in SAML2 Service in the manager, then Security -> Signature and create a new certificate

Do the same for encryption

There are a few other things you can configure here, like your organization display name, name and URL.

# Check Lemonldap::NG is correctly configured

You can open <https://auth.example.org/saml/metadata> and you should see an XML document. With lots of informations, among which the public key of your IDP

```
<ds:X509Certificate>
MIICpjCCAY6gAwIBAgIECcr3fjANBgkqhkiG9w0BAQsFADAVMRMwEQYDVQQDDApz
c28uZndzLmZyMB4XDTEwMDMxNzE2NDcwMVowXDTQxMDMxMjE2NDcwMVowFTETMBEG
A1UEAwvKc3NvLmZ3cy5mcjCCASlWdQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEB
ALM8ujG19hs9KBLb1Ct6lkipvmjrnHsd17kZCXhJwUEYzMDqT/3FiEOgl9B/o6
MHCgxvHZBJ7MhKEz1qrTD1xdhyCkIGTg1vhNYfh7HmubJ5lIQkUwmOykP+dM2Y3Y
vFMpCKfsA38IT7u7EikGrDtul2xzc7BJAu6feCbu54h61OHTZhgPtgnfZ0GXMaAw
urdh2dRhXdOHa+6HqlopUwDfwK4iRMIBkaPPpN32cpYNoLbw8n7ImHazobF6Ycbc
psS2nx/a9jA051DLhmBDzQx8nIK3BwNz8P0tkre4jHIVA0Geeuc4kHqdahJWkGqp
/eZcfxkH9mZOIZl8lhnx1tECAwEAATANBgkqhkiG9w0BAQsFAAOCAQEAJ12/WQmw
3SBdEuPgYQoe90219hiCMRf12Y+SLCTy7atou9yLF+A6LcMH1Xe2sZPIOhNXATI3
usUhCBaV3eRTz7Wo2lTxaioavq11Q0HJVuZCzMiueafPG5mTUBjJOo/Ntq94Z28k
bTrNPPOpC8NDNq0bv15t2ujCHrXxKoCG5VYg9cDNv3X9frtIQmCqxahVZcrlv8zc
M7qA2E6qrKCG4p7jpv24Qxyy+VLDEY34/vce5ztzwfrk3vEXCQCMOW08RE3ouz1c
Ttxjwd1oSmD+lpdAFcGh4eENSf4AjD9gU9EbsEsZFYY9s6vkb3Plv/2FGFaM1ArL
sldSKR5JcHXQHw==
</ds:X509Certificate>
```

# Configure BookStack to use SAML2 auth

In your .env configuration for BookStack, add the following lines :

```
AUTH_METHOD="saml2"

# The name of the auth displayed on the login page
SAML2_NAME="Lapiole"

# The attribute which will be used for the displayname
SAML2_DISPLAY_NAME_ATTRIBUTES="cn"

# The attribute which will be used as identifier to link your LL::NG user with your BookStack user
# can be uid, or here, I user principal as LL::NG is using a samba4 directory
SAML2_EXTERNAL_ID_ATTRIBUTE="principal"

SAML2_IDP_ENTITYID="https://auth.example.org/saml/metadata"

# Note : BookStack has a buggy SLO support. So we disable metadata fetching
# this way we can configure single sign on, but leave single sign out disabled
SAML2_AUTOLOAD_METADATA="false"

# This is the URL for the Single Sign On
SAML2_IDP_SSO="https://auth.example.org/saml/singleSignOn"

# This is the public key you got earlier. Just remove the spaces and carriage returns
SAML2_IDP_x509="MIICpjCCAY6gAwIBAgIECcR3fjANBgkqhkiG9w0BAQsFADAVMRMwEQYDVQQDDApzc28uZndzLmZyMB4XDTIxMDMxNzE2NDcwMVoxMDMxMjE2NDcwMVowFTETMBEGA1UEAwKc3NvLmZ3cy5mcjCCASlwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBALM8ujG19hs9KBLb1Ct6lKpivmyjrnHsdl7kZCXhJwUEYzMDqT/3FiNEOgl9B/o6MHCgxvHZBJ7MhKEz1qrTD1xdhyCkIGTg1vhNYfh7HmubJ5lIQkUwmOykP+dM2Y3YvFMpCKfsA38IT7u7EikGrDtul2xzc7BJAu6feCbu54h61OHTZhgPtgnfZ0GXMaAwurdh2dRhXdOHa+6HqlopUwDfwK4iRMIBkaPPpN32cpYNoLbw8n7lmHazobF6YcbcpsS2nx/a9jA051DLhmBDzQx8nlK3BwNz8P0tkre4jHIVA0Geeuc4kHqdahJWkGqp/eZcfxkH9mZOIZI8lhnX1tECAwEAATANBgkqhkiG9w0BAQsFAAOCAQEAJ12/WQmw3SBdEuPgYQoe9O219hiCMRf12Y+SLCTy7atou9yLF+A6LcMH1Xe2sZPIOhNXATI3usUhCBaV3eRTz7Wo2ITxaoiavq11Q0HJVuCzMiuheafPG5mTUBjJOo/Ntq94Z28kbTrNPROpC8NDNq0bvl5t2ujCHrXxKoCG5VYg9cDNv3X9frtIQmCqxahVZcrlv8zcM7qA2E6qrKCG4p7jpv24Qxyy+VLDEY34/vce5ztzwfrk3vEXCQCMOW08RE3ouz1cTtxJwd1oSmD+lpdAFcGh4eENsf4AJd9gU9EbsEsZFY9s6vkb3Plv/2FGFaM1ArLsldSKR5JcHXQHw=="

# You can omit the last 3 param if you don't want to MAP your groups from LL::NG to roles on BookStack
SAML2_USER_TO_GROUPS="true"

SAML2_GROUP_ATTRIBUTE="groups"

SAML2_REMOVE_FROM_GROUPS="true"
```

# Create a SP for BookStack on Lemonldap::NG

Now, you have to create a new SP on Lemonldap::NG for BookStack. In your manager, go in SAML Service Providers -> Add SAML SP and name it bookstack (or whatever you want)

Then, in Metadata, put the content your can get when you open

<https://bookstack.example.org/saml2/metadata>

It should looks like

```
<md:EntityDescriptor xmlns:md="urn:oasis:names:tc:SAML:2.0:metadata" validUntil="2021-03-19T17:03:25Z"
cacheDuration="PT604800S" entityID="https://example.example.org/saml2/metadata">
<md:SPSSODescriptor AuthnRequestsSigned="false" WantAssertionsSigned="false"
protocolSupportEnumeration="urn:oasis:names:tc:SAML:2.0:protocol">
<md:SingleLogoutService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-Redirect"
Location="https://example.example.org/saml2/sls"/>
<md:NameIDFormat>urn:oasis:names:tc:SAML:1.1:nameid-format:emailAddress</md:NameIDFormat>
<md:AssertionConsumerService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"
Location="https://example.example.org/saml2/acs" index="1"/>
</md:SPSSODescriptor>
</md:EntityDescriptor>
```

In Exported attributes, add the attributes you want to send. In our case, we want to use cn, groups and principal, so lets add them :

Exported attributes			
Variable name	Attribute name	Friendly name	Mandatory
cn	cn		<input type="radio"/> On <input checked="" type="radio"/> Off
groups	groups		<input type="radio"/> On <input checked="" type="radio"/> Off
principal	principal		<input type="radio"/> On <input checked="" type="radio"/> Off

There's still some things to configure, in Options -> Signature, disable **Check SSO message signature** and **Check SLO message signature** (this is needed because BookStack doesn't sign outgoing messages)

Last, in **Options -> Security -> Access rule** you can add a rule to limit which users can login to BookStack, eg

```
inGroup('Role_Infra_Admin') or inGroup('Tech') or inGroup('Equipe')
```

# Add group mapping to BookStack database

You should be ready to go. Or nearly. The last thing is that you might want to setup mapping between your LDAP groups (well, groups from LL::NG, they will most of the time be coming from an LDAP server) and your BookStack group.

Say you want member of your LDAP group Role\_Infra\_Admin to be Admin in BookStack. Just set it like this

```
update roles set external_auth_id='Role_Infra_Admin' where display_name='Admin';
```

For the other mappings, you can configure them from BookStack interface once you've logged in with an admin account