**Nexus**

1. **Introduction**

If we are developing software without a repository manager every time we download some dependency it gets downloaded from some remote source so we are introducing some sort of inefficiencies. If everyone on your team has to hit public repositories like the Central Repository to download components, we are missing out on some simple gains in speed and efficiency. If we don't have a local place to deploy components you are forced to share binary components using half-measures and compromises such as storing binaries in source control. We should stop developing in the Dark ages and make use of private repository to remove the need of hitting some random remote repository every time we need to download some dependency

1. **Installation**

* <https://sonatype-download.global.ssl.fastly.net>
* Open your browser and go to the following link for interactive nexus UI

* + http://localhost:8081
* Sign in using the default username and password
* User Name : admin
* Password : admin123

1. **Creating our own nexus private repository**

Why create our own repository?

* npm install can take too long sometimes, so it might be a good idea to have a proxy in your own network.
* So that everyone working on the same project need not to download the dependency every time one downloaded modules and dependencies are cached and provided if asked from the local repository instead of hitting the public repository every time. Thus saving both bandwidth and time.

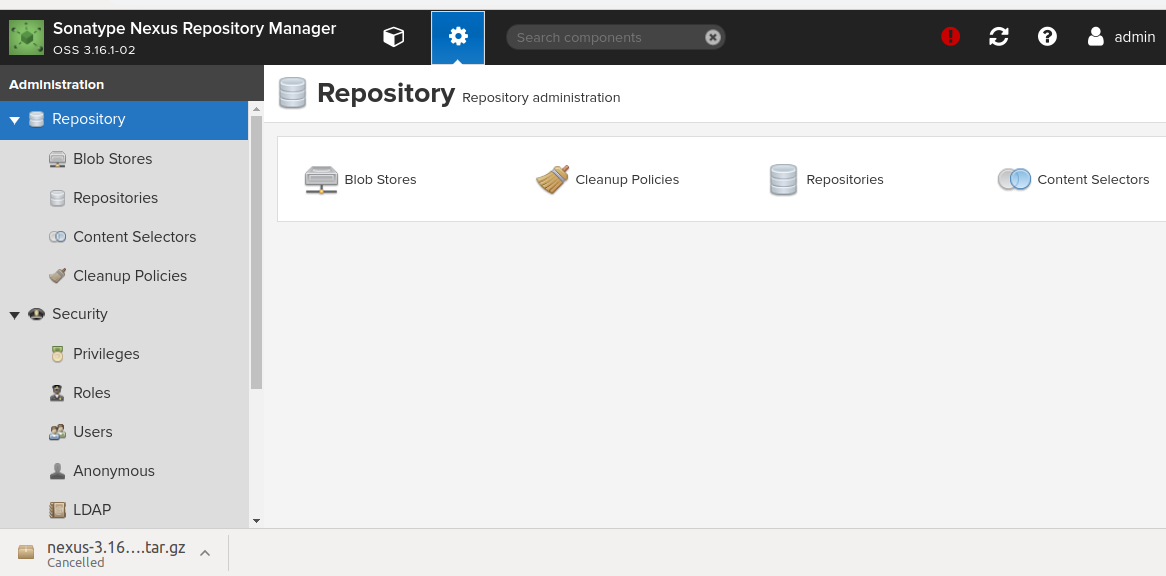
What we will do?

Create 3 different repositories as follows

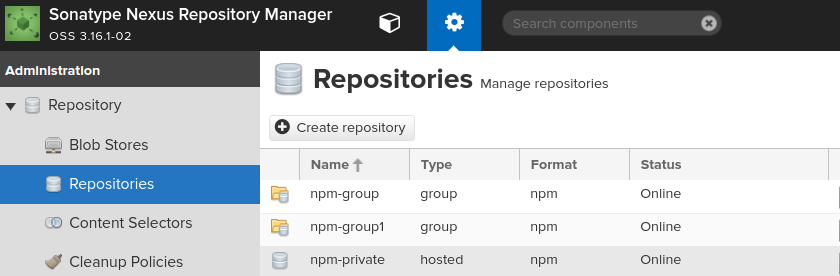
|  |  |
| --- | --- |
| Repository Type | Purpose |
| Hosted | This will be our private repository which will be controlled by us. |
| Proxy | This will be our proxy repository which will be connected to public. |
| Group | This will be the combination of both the repository (hosted and proxy) |

* 1. **Creating our npm private repository**

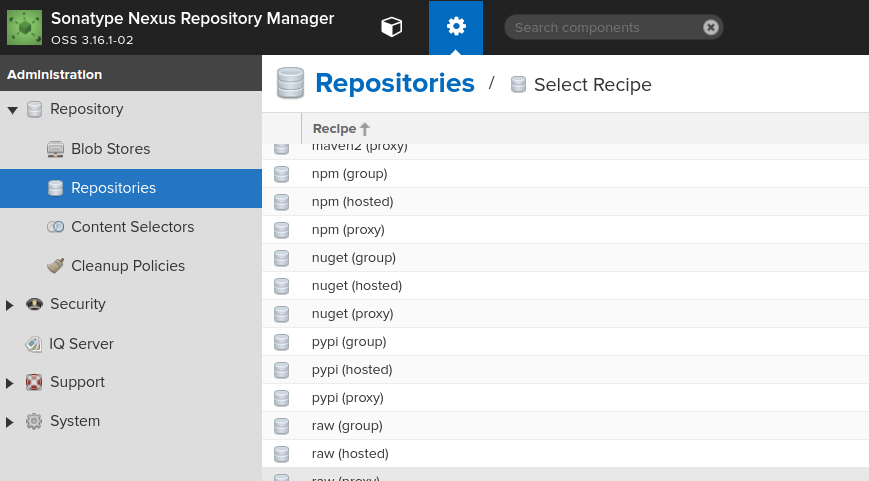
1. Click **settings icon** (present at the top) in the home page



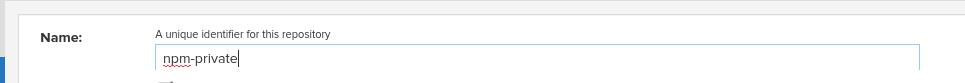
1. After clicking on the **setting** **icon** on the top we get few options like this
2. Select the **Repositories** option out of all the four options shown
3. After selecting the **Repositories** new page will be rendered with dashboard of all repositories and option of creating a new repository



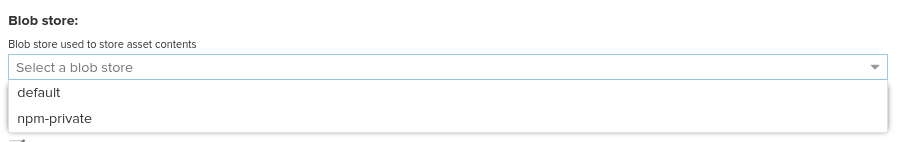
1. Click on the **Create repository** button to create a new repository



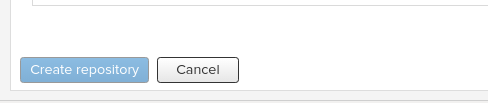
1. After clicking on the **Create Repository** Option we get many option to select the type of repository we want to make(as shown above)
2. First select the **npm hosted** option we will be redirected to a page where we need to enter few details on the repository we want to make



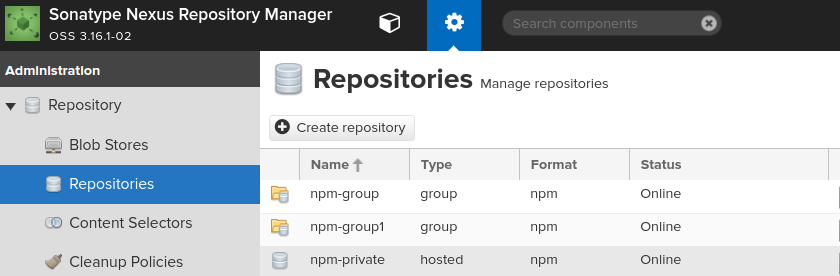
1. Enter the **name** of the repository
2. After entering the name enter other details



1. Select the blob store to **default**
2. Leave rest of the box as it is

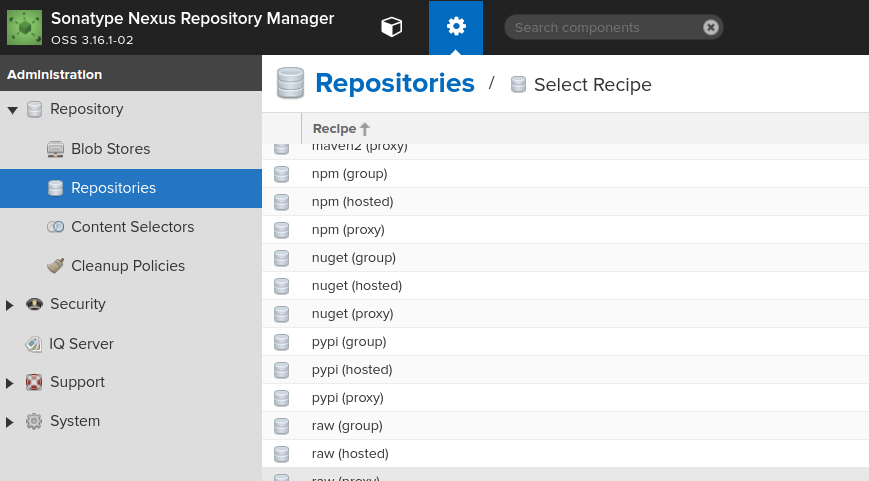


1. Select the create repository button then you should see the name of your repository in the dashboard.

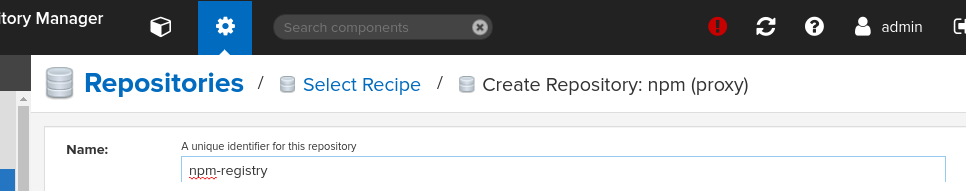


* 1. **Creating our npm proxy repository**

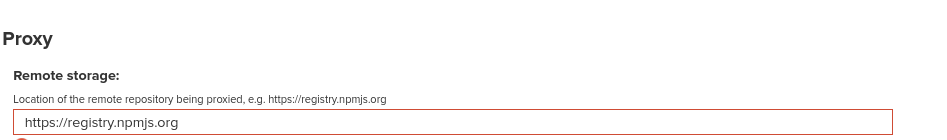
1. Now again go to the **Create repository** option and create a new repository



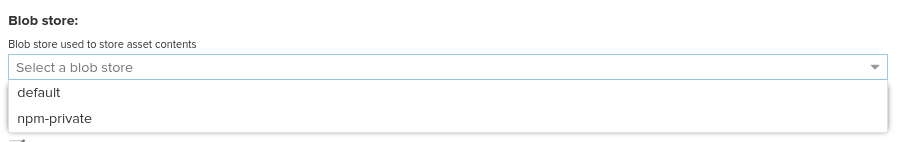
1. Select the **npm proxy** after which we will be redirected to the same form page



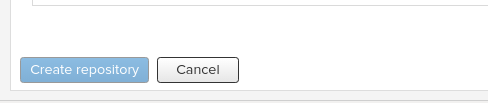
1. Enter the name of the repository any name that we wish
2. After this we fill in details of other fields like



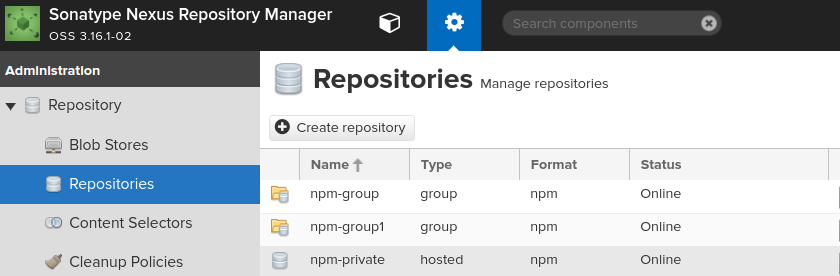
1. Enter the **url of the proxy** server according to your need
2. Then move on to other field



1. Select the default option for **Blob store**
2. Leave rest of the field as it is and select the **Create repository** button



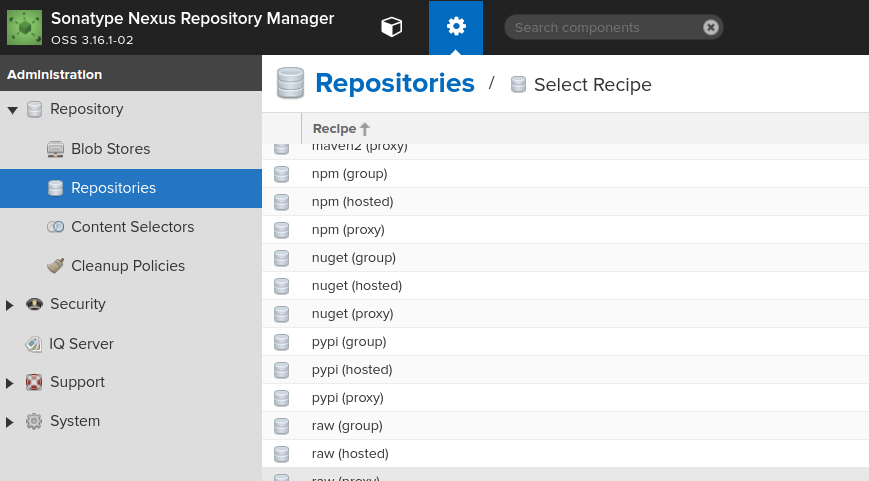
1. After selecting the **Create repository** button we can see our another repository on the dashboard



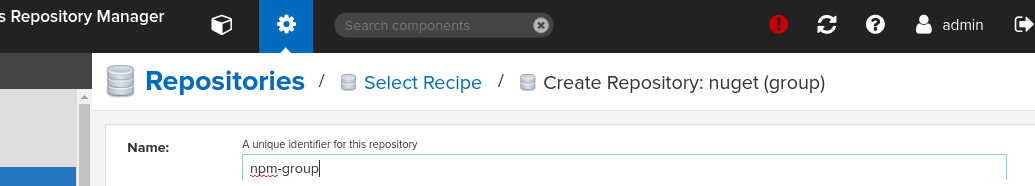
* 1. **Creating our npm group repository**

**Note : Now we can use both our repository individually and if we want to combine them and use in one repository**

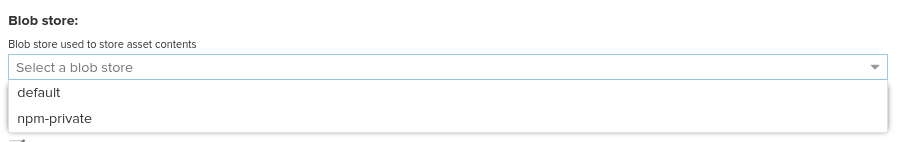
1. we will create one group repository and add both the repository in one group repository so that we can use the packages of both the repository in one repository
2. we again go to the **Repositories**



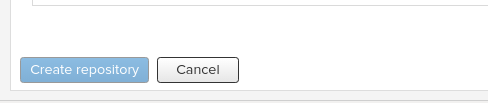
1. Select the **npm group** from the list



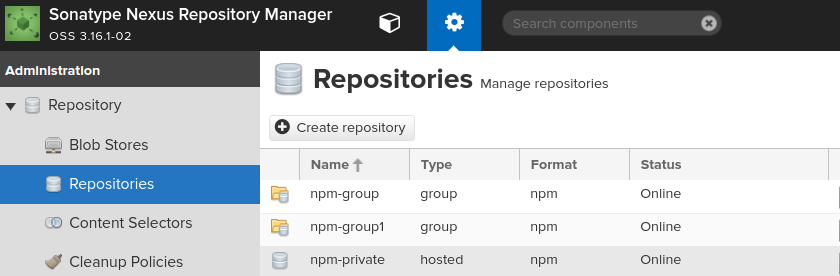
1. Give any name to the repository
2. After this fill in other fields of the same



1. Make this option to default
2. We add both the repository we want to use in this repository



1. Select on the create repository and we can see our another repository on the dash board



1. Now in order to use this repository we have to have **.npmrc** file in the root of our project
2. And paste the below line in that file

* registry=http://localhost:8081/repository/npm-group/

\_auth=YWRtaW46YWRtaW4xMjM=

**Note : auth is the encoding of our username and password**

* **echo -n 'myuser:mypassword' | openssl base64**

1. And we need to add a line in our package.json file

* "publishConfig": {

"registry": "http://localhost:8081/repository/npm-private/"

}

1. **Using the repository**
2. Now when we do **npm install** our npm will download the modules from our nexus repository rather than npm repository.

**Note : As our group repository has both proxy and private repository we can use it for both or else we will need**

**use separate repository manually for separate task that can be a problem instead we use combination of both.**

1. Even publishing any module using **npm publish** will publish it in local nexus repository rather than storing it in npm repository