

IMPROVING KDE SERVER MANAGEMENT

Nicolás Alvarez

nalvarez@kde.org

EXAMPLE

- Make identity.kde.org/register redirect to registration page

WHAT SERVER IS IT?

FINDING THE SERVER

- Look at the internal documentation?

```
~/kdesysadmin/kdeadmin/servers$ cat saba/identity.kde.org
```

```
IP-Address: 46.4.96.250
```

```
OS:          Debian 6.0.8 Squeeze
```

```
root ssh access: dfaure, toma, ben, nalvarez, sgclark, kcoyle
```

```
ssh host key fingerprints:
```

```
- 1024 7d:d7:c7:61:c8:ba:19:77:f0:8a:3f:cf:1f:74:07:c0 (DSA)
```

```
- 2048 3b:0a:6e:bb:22:db:88:0d:ca:2d:42:ad:da:fc:57:d0 (RSA)
```

```
** Details:
```

```
Virtual server hosted at saba.kde.org
```

```
HDD: 50Gb
```

```
** System Services
```

```
rsync
```

```
fail2ban
```

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This server doesn't exist

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** Details:

Virtual server hosted at saba.kde.org
HDD: 50Gb

This server doesn't exist
since August 2018

** System Services
rsync
fail2ban

FINDING THE SERVER

- Docs are outdated:

```
~/kdesysadmin/kdeadmin/servers$ git log saba/identity.kde.org
```

```
commit e3e79c112b5347768a1b0b061375b51d19034068
```

```
Author: Nicolás Alvarez <nicolas.alvarez@gmail.com>
```

```
Date:    Sun Jun 5 20:14:45 2016 -0300
```

```
identity docs: Update IP address and root ssh access list.
```

FINDING THE SERVER

```
$ host identity.kde.org
identity.kde.org is an alias for orbi.kde.org.
orbi.kde.org has address 46.43.15.41
orbi.kde.org has IPv6 address 2001:41c9:1:424::41
orbi.kde.org mail is handled by 10 letterbox.kde.org.
```


MAKING THE CHANGE

```
$ ssh root@orbi.kde.org  
root@orbi ~ #
```

MAKING THE CHANGE

```
$ ssh root@orbi.kde.org
root@orbi ~ # cd /etc/apache2/sites-available/
root@orbi /etc/apache2/sites-available # vim identity.kde.org.conf
```

MAKING THE CHANGE

```
<VirtualHost *:443>
  ServerAdmin  webmaster@kde.org
  ServerName   identity.kde.org
  DocumentRoot /srv/www/identity.kde.org/

  ErrorLog  ${APACHE_LOG_DIR}/identity.kde.org-error.log
  CustomLog ${APACHE_LOG_DIR}/identity.kde.org.log combined

  # Enable SSL
  Include /etc/apache2/common/ssl.conf
  Include /etc/apache2/common/ssl-star-kde-org.conf

</VirtualHost>
```

MAKING THE CHANGE

```
<VirtualHost *:443>
  ServerAdmin  webmaster@kde.org
  ServerName   identity.kde.org
  DocumentRoot /srv/www/identity.kde.org/

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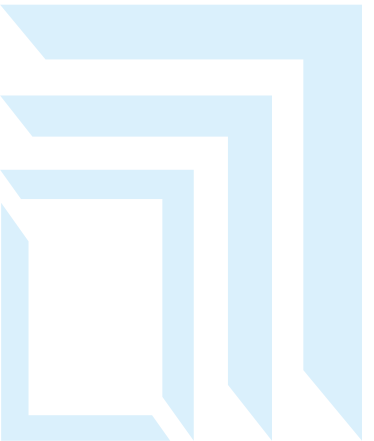
  # Enable SSL
  Include /etc/apache2/common/ssl.conf
  Include /etc/apache2/common/ssl-star-kde-org.conf

  Redirect /register /index.php?r=registration
</VirtualHost>
```

WE COULD DO BETTER

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- Documentation is outdated



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- Documentation is outdated
- Configuration not in version control

WE COULD DO BETTER

- Documentation is outdated
- Configuration not in version control
- Changes directly in production servers

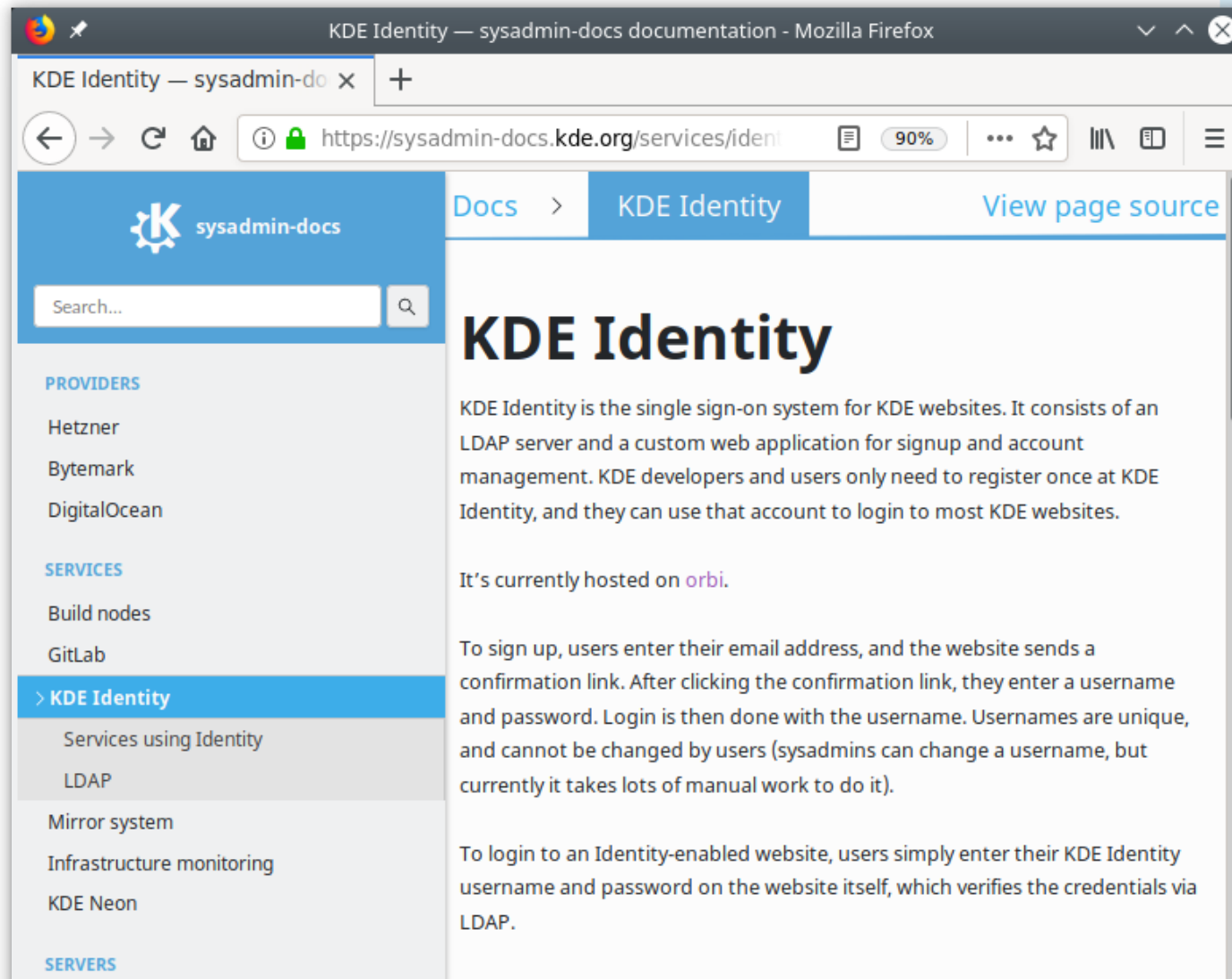


WE COULD DO BETTER

- Documentation is outdated
- Configuration not in version control
- Changes directly in production servers
- Can't test before applying change



NEW DOCUMENTATION



The screenshot shows a Mozilla Firefox browser window displaying the KDE Identity documentation page. The browser's address bar shows the URL `https://sysadmin-docs.kde.org/services/identity`. The page features a blue header with the KDE logo and the text "sysadmin-docs". Below the header is a search bar and a navigation menu with "Docs" and "KDE Identity" tabs. The main content area is titled "KDE Identity" and contains the following text:

KDE Identity is the single sign-on system for KDE websites. It consists of an LDAP server and a custom web application for signup and account management. KDE developers and users only need to register once at KDE Identity, and they can use that account to login to most KDE websites.

It's currently hosted on [orbi](#).

To sign up, users enter their email address, and the website sends a confirmation link. After clicking the confirmation link, they enter a username and password. Login is then done with the username. Usernames are unique, and cannot be changed by users (sysadmins can change a username, but currently it takes lots of manual work to do it).

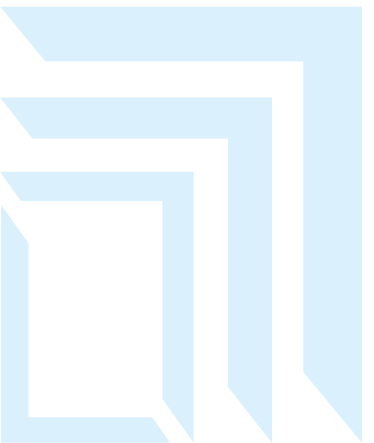
To login to an Identity-enabled website, users simply enter their KDE Identity username and password on the website itself, which verifies the credentials via LDAP.

The left sidebar contains a navigation menu with the following sections:

- PROVIDERS
 - Hetzner
 - Bytemark
 - DigitalOcean
- SERVICES
 - Build nodes
 - GitLab
 - > KDE Identity**
 - Services using Identity
 - LDAP
 - Mirror system
 - Infrastructure monitoring
 - KDE Neon
- SERVERS

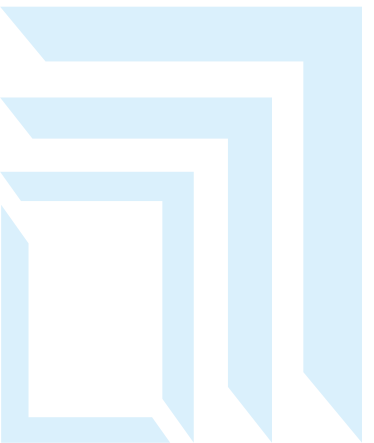
NEW DOCUMENTATION

- Sphinx/reST formatted, not plaintext



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- More explanations, not just raw facts



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- Work in progress (lots to do)
- Public!

sysadmin-docs.kde.org

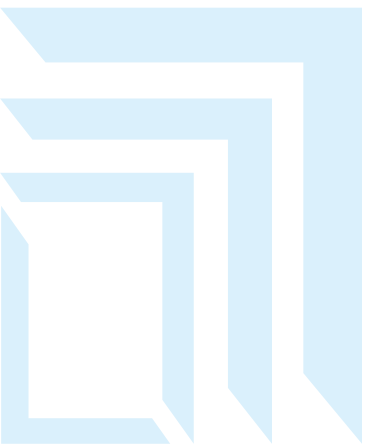
MANAGING CONFIGURATION

- We want it in version control



MANAGING CONFIGURATION

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- More than just config files



MANAGING CONFIGURATION

- We want it in version control
- More than just config files
 - Where the files go

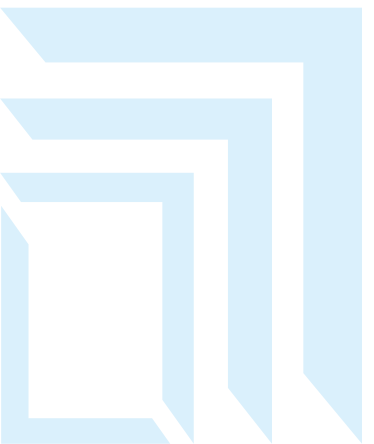
MANAGING CONFIGURATION

- We want it in version control
- More than just config files
 - Where the files go
 - Services to restart

MANAGING CONFIGURATION

- We want it in version control
- More than just config files
 - Where the files go
 - Services to restart
 - Permissions
 - Packages installed
 - User accounts
 - ...

CONFIGURATION MANAGER





ANSIBLE

ANSIBLE

```
- name: install Apache
  apt:
    name: apache2
    state: present

- name: enable SSL module
  apache2_module:
    name: ssl
    state: present

- name: install Identity virtualhost config
  file:
    src: identity-vhost.conf
    dest: /etc/apache2/sites-enabled/identity.kde.org.conf
    mode: 0644
  notify: restart Apache
```

ANSIBLE





identity: Add a /register redirect ⋮

Nicolás Alvarez authored 39 minutes ago

89a8fa2f



Name	Last commit	Last update
 identity-vhost.conf	identity: Add a /register redirect	39 minutes ago
 identity.yml	Make sure Apache gets restarted if the conf file cha...	1 day ago

DEV VIRTUAL MACHINE

```
ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
nicolas@ubuntu:/srv/www/identity.kde.org$ cat /etc/apache2/sites-enabled/identity.kde.org.conf
<VirtualHost *:80>
    ServerAdmin webmaster@kde.org
    ServerName localhost:8080
    DocumentRoot /srv/www/identity.kde.org/

    ErrorLog ${APACHE_LOG_DIR}/localhost:8080-error.log
    CustomLog ${APACHE_LOG_DIR}/localhost:8080.log combined

    # Keep old GOsa Urls working
    Redirect permanent /register.php https://identity.kde.org/index.php?r=registration
    Redirect permanent /passwordreset.php https://identity.kde.org/index.php?r=site/passwordReset
</VirtualHost>
nicolas@ubuntu:/srv/www/identity.kde.org$ ls
assets COPYING css framework img index.php js protected todo-list
nicolas@ubuntu:/srv/www/identity.kde.org$ _
```


VAGRANT



VAGRANT

```
~/src/identity-kde-org$ vagrant up  
Bringing machine 'default' up with 'virtualbox' provider...  
==> default: Importing base box 'ubuntu/xenial64'...  
==> default: Preparing network interfaces based on configuration...  
default: 22 (guest) => 2222 (host) (adapter 1)  
==> default: Booting VM...  
==> default: Waiting for machine to boot. This may take a few minutes...  
  
==> default: Machine booted and ready!
```

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==> default: Machine booted and ready!

==> default: Running provisioner: ansible...
    default: Running ansible-playbook...
```

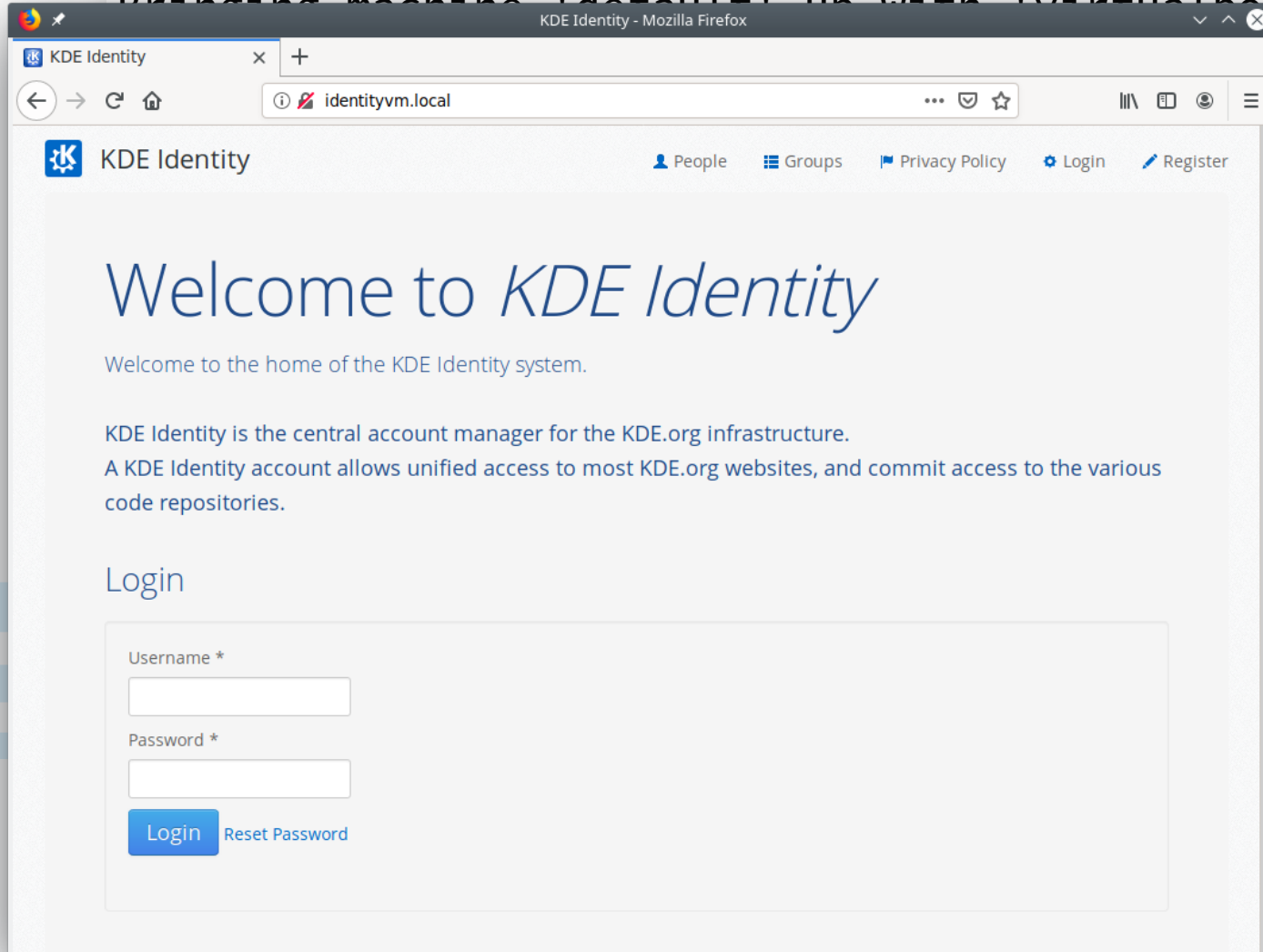
```
TASK [apache : install Apache] *****
changed: [default]
```

```
TASK [apache : enable Headers Apache module] *****
changed: [default]
```

```
TASK [apache : install common Apache config files] *****
```

VAGRANT

```
~/src/identity-kde-org$ vagrant up
```



```
Bringing machine 'default' up with 'virtualbox' provider...
64'...
ed on configuration...
er 1)
s may take a few minutes...

*****

*****

[les] *****
```

RESULTS

- Config is in version control
- We can experiment locally
- You can help without server access



THANKS!

- sysadmin@kde.org
- [irc.freenode.net #kde-sysadmin](irc://freenode.net/#kde-sysadmin)
- <https://t.me/KDESysadminDiscuss>