

eduroam Webinar (27th/09/2024)

eduroam On-Campus Setup Guide

This comprehensive guide outlines the process for setting up eduroam on campus. Follow these steps carefully to ensure a successful implementation.

1. Prerequisites

Before beginning the setup process, ensure you have the following:

- A fresh installation of Ubuntu 22.04 LTS
- Ansible automation tool installed
- Git version control system
- A database system (This guide uses FreeIPA for demonstration purposes)

2. Installation Process

2.1 Clone the Repository

Clone the RENU repository containing the eduroam server installation scripts. Note that authentication is required as this is a private repository.

```
git clone https://repo.renu.ac.uk/systems/automation/ansible/eduroam_radius_server.git
```

2.2 Configure Ansible Variables

Create and configure the necessary group and host variables in the `hosts.ini` file:

```
vim hosts.ini
```

Populate the file with the required configuration to enable Ansible to execute scripts on the target machine:

```
[all]
127.0.0.1      ansible_user=your_username      ansible_pass=your_password      ansible_sudo_pass
=your_sudo_password
```

Important considerations:

- Ensure the specified user exists on the target machine
- Grant sudo privileges to the user if newly created
- Register the SSH fingerprint to prevent SSH-related errors

2.3 Add Host Fingerprint

To avoid SSH errors, manually add the host's fingerprint to the `known_hosts` file:

```
ssh user@127.0.0.1
```

2.4 Execute the Ansible Playbook

After configuring all necessary variables, run the Ansible playbook:

```
ansible-playbook playbook.yml -i hosts.ini --ask-pass
```

3. Additional Configuration

For LDAP integration, modify the FreeRADIUS LDAP configuration file:

```
sudo -u freerad vi /etc/freeradius/3.0/mods-available/ldap
```

Adjust the LDAP configuration according to your FreeIPA setup:

```
ldap {
    server = 'freeipa.your.domain.com'
    port = 389
    identity = "cn=Directory Manager"
    password = "your_directory_manager_password"
    base_dn = 'cn=users,cn=accounts,dc=your,dc=domain,dc=com'
    sasl {
    }
    update {
        control:Password-With-Header += 'userPassword'
        control:NT-Password += 'ipaNTHash'
    }
    # Additional configuration...
}
```

Replace placeholders with your actual FreeIPA server details and domain information.

4. Conclusion

Following this guide should result in a successful on-campus eduroam setup. For any issues or additional support, please contact your system administrator or the RENU support team.