



USER GUIDE INSTALLATION

Authors Dr. Jessica Vasseur
 Medical Informatics Group
 Universitätsklinikum Frankfurt

jessica.vasseur@kgu.de

Version 2.0
 02-Jan-2020

Previous versions

- 1.1 06-Nov-2015 Dr. Marita Muscholl / Dennis Kadioglu



Gefördert durch:



aufgrund eines Beschlusses
des Deutschen Bundestages

TABLE OF CONTENTS

- Table of Contents 2
- 1 System Requirements..... 3
- 2 Download & Installation..... 4
- 3 Maintenance & Updates 6

1 SYSTEM REQUIREMENTS

The components of the OSSE registry framework are Java applications which can be accessed and used through a web browser. Therefore, the following general requirements have to be fulfilled:

Client:

A recent web browser (Firefox 42, Internet Explorer 11 and Chrome 46 have been tested)

Server:

Registry and patient list (installed from OSSE CD):

- (Virtualized) server or PC (recent hardware should be sufficient in any case but, we recommend at least 1024 MB of RAM (2048 MB of RAM for a desktop PC))

Registry and patient list (installed from OSSE package repository):

- (Virtualized) server or PC (recent hardware should be sufficient in any case but, we recommend at least 1024 MB of RAM (2048 MB of RAM for a desktop PC))
- Ubuntu 14.04 LTS (other Linux distributions or Windows may also work)
- Java 7
- Apache Tomcat 7
- Postgresql 9.3

Productive vs demo use:

For demo purposes the registry and the patient list can be hosted on the same server. In any case of productive usage two separated servers (fulfilling the requirements as stated above) are strongly recommended! Furthermore, you also should have valid certificates for both servers to ensure secure connections between them as well as with the web browsers accessing the registry. Either your IT-department/-professional or your hosting provider can support you in obtaining them.

Required Knowledge:

- Boot your server or PC from CD/ISO image (OSSE CD)
- Add a package repository and install new software in your Ubuntu based server or PC (OSSE package repository)
- Configure your server or PC appropriately to make it accessible from the internet (reachable IP address, resolvable host name)
- Edit configuration files using the shell in Ubuntu

2 DOWNLOAD & INSTALLATION

You can either download an ISO image or add our Ubuntu package repository to your package sources. In both cases you can decide if you want to set up a demo instance or a productive one.

If you cannot install OSSE on an existing Ubuntu Server 14.04 we recommend you to download the ISO image. You can find the most recent version at <http://osse-register.de>.

If you already have one (demo) or two (productive) running Ubuntu server(s) you can just add our repository as follows:

1. Open a terminal
2. Add our repository to your sources.list.d directory

For OSSE demo please run

```
echo -e '\n#OSSE Demo package repository\ndeb\nhttp://packages.osse-register.de/apt/debian/osse-demo trusty\nmain\n' >> /etc/apt/sources.list.d/osse.list
```

For OSSE productive please run

```
echo -e '\n#OSSE Productive package repository\ndeb\nhttp://packages.osse-register.de/apt/debian/osse trusty main\n'\n>> /etc/apt/sources.list.d/osse.list
```

3. Download and add the key of our repository

```
wget -O - http://packages.osse-register.de/apt/debian/osse/osserepo.gpg.key | apt-key add -
```

4. Update the package lists

```
apt-get update1
```

5. Install OSSE demo

```
apt-get install osse-demo
```

Or install OSSE productive (**Please install the ID management first, as the URL of the Mainzliste has to be entered during the installation of the registry!**)

```
apt-get install osse-idmanagement respectively apt-get install osse-datamanagement
```

6. During the installation process you will have to answer some questions. As the questions depend on the package you install, you may not be asked all of the following questions:

- a. Enter the contact data (e.g. name, phone number and email) for a person responsible for the Mainzliste (if it is installed on this machine or in case of the demo installation).
- b. Enter the URL of your Mainzliste installation or do not enter anything if you are running OSSE-demo.
- c. If necessary, enter your proxy settings in the next dialogs. If you do not know what to enter here, just leave it blank. If there is an error, your local administrator should be able to give you support.

7. When the installation is finished, you can start your web browser and open the newly installed registry by entering either the URL `https://<IPofYourServer>:<Port>` or `https://<nameOfYourServer.tld>:<Port>`. As there is only a temporary self-signed certificate

¹ If this step fails, the Ubuntu package repository servers might be updated at the moment. Please wait and retry it later.

the web browser will show a warning which has to be ignored until you install a valid certificate on the server.

If you do not have a running Ubuntu Server, you can download the ISO image and use it for the installation as follows:

1. Either burn the image on a CD and boot your server from there or mount the ISO image in a virtual machine and boot it from there, e.g. in VirtualBox
2. During the boot process you can choose the language for the installation process as well as either “Install Ubuntu Server with OSSE Registry”, “Install Ubuntu Server with OSSE ID-Management” or “Install Ubuntu Server with OSSE Demo” (**Please install the ID management first, as the URL of the Mainzliste has to be entered during the installation of the registry!**)
3. During the installation process you will have to answer several questions which should either be self-explanatory or will be explained in the next steps.
4. You can answer the following 3 to 7 questions concerning your locale settings according to your preferences.
5. The next question is about the hostname of your server. If you do not have an internet domain for the server you can accept the default value ‘ubuntu’ or change it to something else, e.g. ‘ossedatamanagement’ or ‘osseidmanagement’. If you have one, e.g. www.servername.de, you only need the domain name here and thus should enter ‘servername’.
6. In the next 4 to 5 dialogs you will have to define the first user account for your server. Just follow the instructions on your screen.
7. Usually it should be safe to accept the suggestion for your time zone settings but, we still recommend you to check and correct it, if necessary.
8. The next step will be the preparation of the hard drive in your server. If the hard drive already contains data, you will be asked if the partitions on that hard drive should be unmounted or not. We recommend you to say ‘Yes’ and choose ‘Guided – use entire disk’ in the next dialog. If you have an empty hard drive, there will not be any question about unmounting partitions. Afterwards please select the partition where OSSE should be installed on. The last question asks for your final approval to format the hard drive. **KEEP IN MIND: If you choose ‘Yes’ your hard drive will be emptied which means ALL DATA will be gone! If you need that data, you will have to cancel the installation to do a backup. Afterwards you can start the installation again.**
9. If necessary, you will have to enter your proxy settings in the next dialog. If you do not know what to enter here, just leave it blank. If there is an error, then your local administrator should be able to support you.
10. If you installed OSSE on an empty hard drive or chose to empty it during the installation, it should be safe to answer the question ‘Install the GRUB boot loader on a hard disk’ with ‘Yes’. If not you should keep in mind that already existing operating systems, e.g. Windows, may not boot anymore after this step. In that case your local administrator should be able to support you.
11. If all went well the installation should be finished now and you can reboot the system by choosing ‘Continue’.

12. After the server has booted up again the second part of the OSSE installation will begin². During that you will have to answer some more questions. Some questions depend on the package, so you may not be asked all of the following questions:
 - a. Enter contact data (e.g. name, phone number and email) for a responsible person for the Mainzliste (if it is installed on this machine or in case of the demo installation).
 - b. Enter the URL of your Mainzliste or enter nothing, if you've installed OSSE demo.
 - c. If necessary, enter your proxy settings in the next dialogs. If you do not know what to enter here, just leave it blank. If there is an error, then your local administrator should be able to support you.
13. When the installation is finished, you can start your web browser and open the newly installed registry by entering either the URL `https://<IPofYourServer>:<Port>` or `https://<nameOfYourServer.tld>:<Port>`. As there is only a temporary self-signed certificate the web browser will show a warning which has to be ignored until you install a valid certificate on the server.

3 MAINTENANCE & UPDATES

As the OSSE software components as well as the underlying operating system Ubuntu evolve you should update your system regularly. This is especially important in the light of security risks!

We have decided to use the same mechanism for the distribution of the OSSE software components as Ubuntu uses, the Debian package management system. As of that it is quite easy to keep your system up to date:

For OSSE productive you can use

- `sudo apt-get update; apt-get install osse-idmanagement` to keep the system serving the Mainzliste up to date or
- `sudo apt-get update; apt-get install osse-datamanagement` for OSSE.EDC.

For OSSE Demo you can use

- `sudo apt-get update; apt-get install osse-demo` to keep the demo system up to date.

² If this step fails, the Ubuntu servers might be updated at the moment. Please wait and retry it later beginning with step 4 of the above guide for an already running Ubuntu server.