

SEHR Administrator's Quickguide

*The OpenSource server project for sharing documents
and patient files in Integrated Care*



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Chapter I Preface



Chapter I Preface

Processes - The key of SEHR projects

Total **Quality Management (TQM)** and **Business Process Reengineering** encouraged businesses to look at their processes holistically. Now that **TQM** and **disease management** programs have been started to solve financial problems of healthcare by keeping the quality untouched, it has become necessary to look at new ways of **managing processes in healthcare**. A typical healthcare process today will be complex and multicentric, involving many medical and social resources in a lot of different roles. On chronic diseases like diabetic disorders it will be necessary to repeat processes of diagnostic, treatment and other procedures many times while using but also improving current standards, procedures and clinical pathways embodied in it. Crucially, any improvements identified while performing a process should be incorporated as soon as possible to let other patients partizipate.

The *SEHR Administration* is not a technical administration in the typical manner. To understand the administration of the **System for Electronic Healthdata Recording (SEHR)** some basic facts you should know as described in chapter #1.

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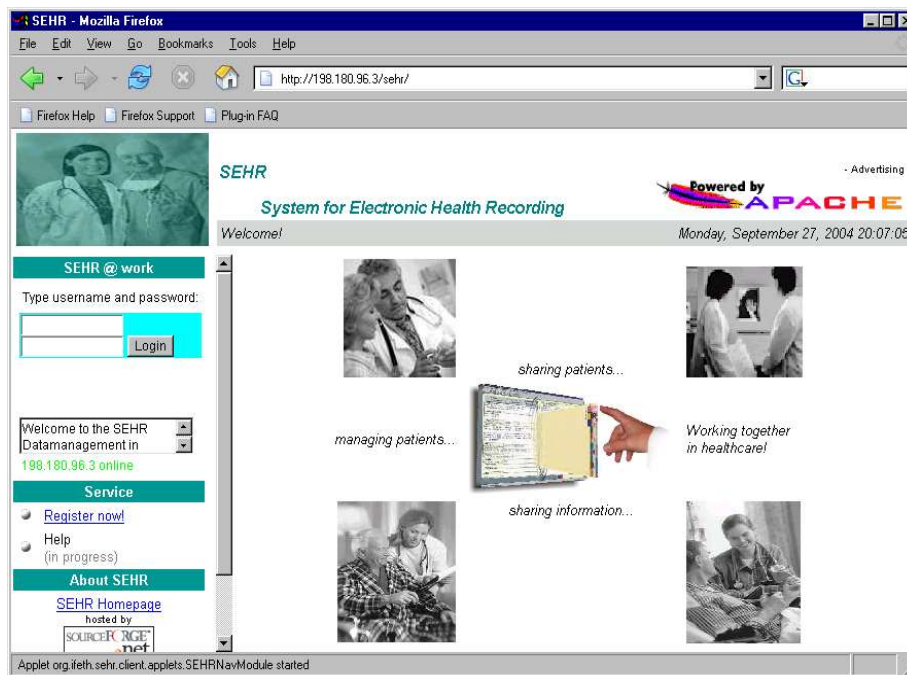
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Chapter II What is SEHR?



Chapter II What is SEHR?

Ok, some words the initial authors will tell you to understand what you are administration now. SEHR is an abbreviation for **System of Electronic Healthdata Recording**.

Historical fundamentals of the SEHR concept are present since 1994 in different applications and projects where the initiating authors have been involved. This new, growing 6th generation will be developed for an upcoming economic world in healthcare where medical information pathways become a fundamental resource to keep the costs in balance with an expected continuously improving quality of care by the patients. The goal of SEHR is to present a platform independent and open system for professionals in ambulatory centers and hospitals or other facilities in healthcare which are sharing resources and which want to improve the information availability of patient records - when they are needed – at any place and any time.



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Chapter II What is SEHR?



Basics of the SEHR History to know

The concept of SEHR is reflecting more than 10 years experience in medical dataprocessing by the authors. Since a couple of month the initiating authors are focused on consultancy services in medical informatics and integrated care i.e. resource and information management projects.

The initiating authors were

Silvia Haase, teaching dataprocessing and database management systems in medicine at the University of Applied Services Hamburg, tries „to keep the mass and rising of data retrievable and usable“.

Hans-J. Haase, working as a consultant at the Institute for Economics&Telematics in Healthcare (IFETH), U.K.

The idea was not to build central, globalistic systems of mass storages or to reform the whole data processing in healthcare – The practical concept is focused on the ongoing daily work of professionals retrieving a lot of new data about their patients locally in their facilities. The patient is moving around during a more or less chronic or intensive healthy event and the documentation should be moved with the patient. Sounds simple, but there are a lot of traps not to be covered here. In fact, the SEHR reflects the TOP 3 items defined by the authors based on their 10 year experience on projects in medical information management:

1. Informations about patients must be handled secure - the privacy is untouchable
2. If a patient is shared, the documentation must be shared too
3. The informations must be shared simple, stored simple and simple retrievable;
health professionals are no computer experts – they have their skills in diagnostic and treatment!

The ball is in your basket now to administrate the SEHR server you have setup to assign new professionals as users, maintain the databases that they are working 365 24h and keep the centers working. That's all! Ok, not really, the information processes are build by professionals and there will be a lot of „plugable“ modules reflecting the areas of interest like home care, paediatric, diabetic or surgery. As the administrator you maintain these modules within the framework by updating them frequently, but there is (should be) no development like scripting etc.

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Chapter III Administration of a SEHR Zoneserver



Chapter III Administration of a SEHR Zoneserver

The administration of SEHR reflects three parts: the management of a zone, the centers and users itself.

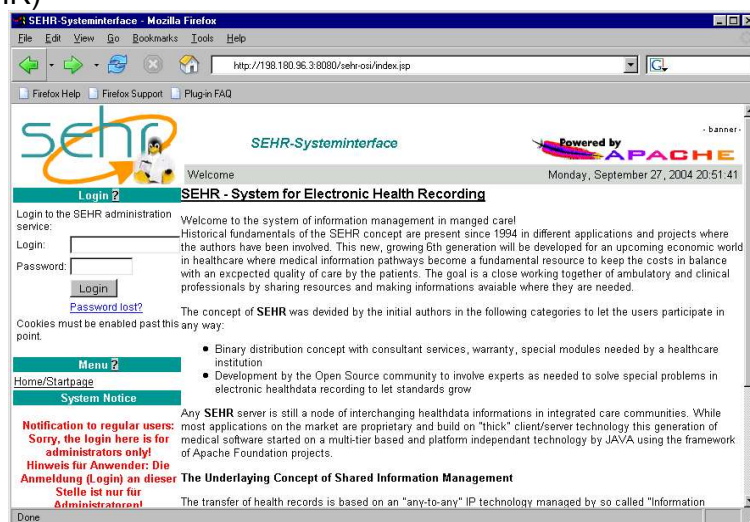
The zone is defined as the technical area of a SEHR server. The administration of a zone is divided into the more technical administration of the server and the services like mail, Apache WEB service and SEHR applications and an organizational part regarding the administration of SEHR users, centers and the assignment of SEHR services to centers and users.

Each zone may serve one or more individual working groups in healthcare. The head of such a working group is a center, which is added to a zone. Once registered the zone may serve standard and additional SEHR services. The standard services like mailservice are independent from center rules and available for all active SEHR users of a zone. The additional SEHR services are offered by the centers. Once a service is associated with a center this service can be assigned to the users.

The user administration is a more complex part due to the role and right management in conjunction to the operating system (currently only Linux is supported). The SEHR administration tool creates for new users a system. The user is now defined at the zoneserver and the zone is his 'homezone'. The user is able to use standard services of the server like mail and WEB services but he must be separately assigned to each service offered by the centers of the zone to use them.

This was the administration in theory so far. Assuming that the SEHR system was setup properly there is a login screen starting the SEHR-OSI administration tool:

Type in the name and password of the organization owner of the SEHR running environment defined at the setup procedure, by default it is the 'orgadmin'. Note: There is no hidden, magic or sth. like default, worldwide usable password due to security aspects! Only the 'root' of the server where the SEHR framework is running can (re-)define the „owner“ of SEHR system (so don't ask the authors of SEHR)



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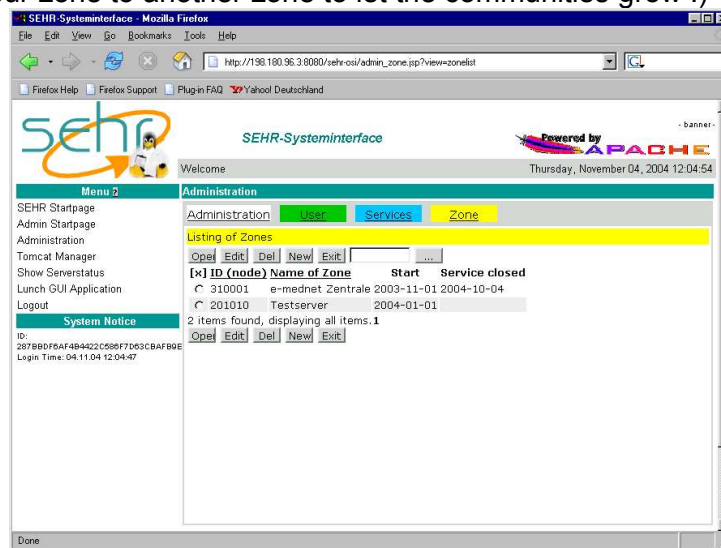
Chapter III Administration of a SEHR Zoneserver



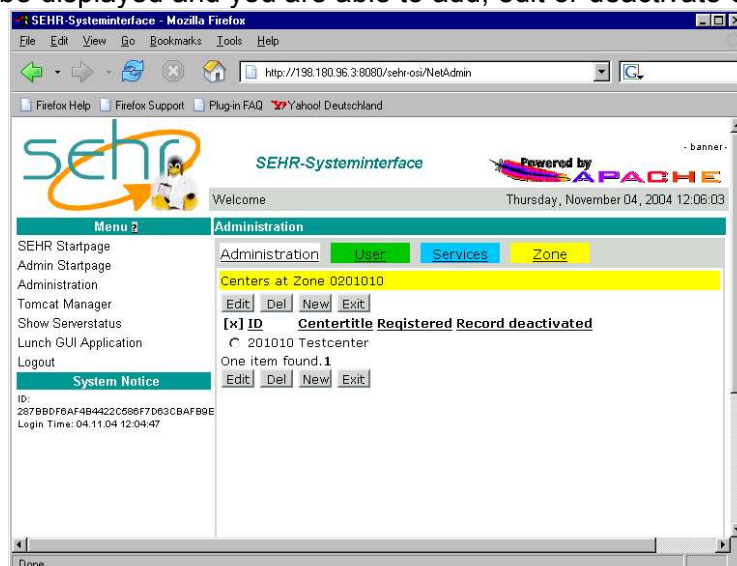
Administration of Users, Services and Centers in Practice

Maintaining Centers

Use the „Zone“ tab to maintain the centers for communities of health professionals. Select your local Zone and click the „open“ button. Don't click the „new“ button in the list of zones. This is a feature to connect your zone to another zone to let the communities grow :)



The zonerecord will be displayed and you are able to add, edit or deactivate centers:



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Chapter III Administration of a SEHR Zoneserver



To add a center click in the centeradministration on the 'new' button. A form will be displayed where you type in the name of the center and select a responsible contact. The contactlist is prepared by the user contact table. If there are no users defined yet or contacts you can assign a contact later. After you finished this small step the click the 'save'-button and the SEHR core module will do now the following things for you:

- ✓ Creating the database for sharing documentation
- ✓ Creating a center record in the zone database
- ✓ Creating a system user and group account for the center for storing files, WEB pages etc.

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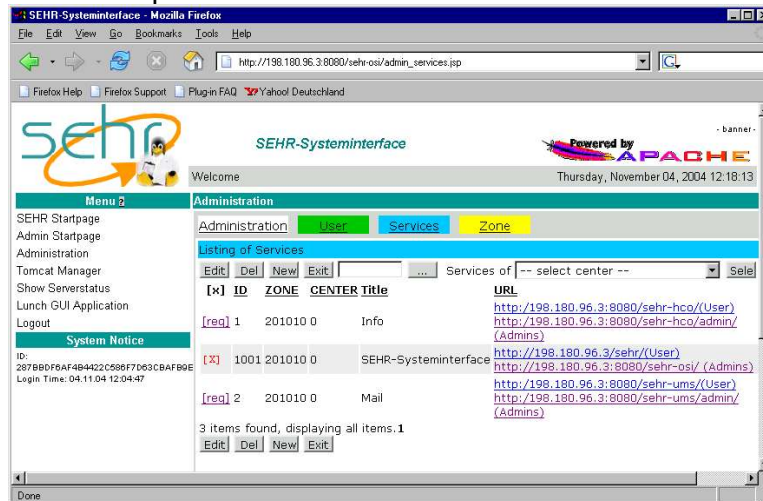
Chapter III Administration of a SEHR Zoneserver



Maintain SEHR services

The SEHR services are divided into 3 basic categories: SEHR Core Administration, SEHR basic services served by the system like mail and finally the SEHR module based services for the patient related data management itself

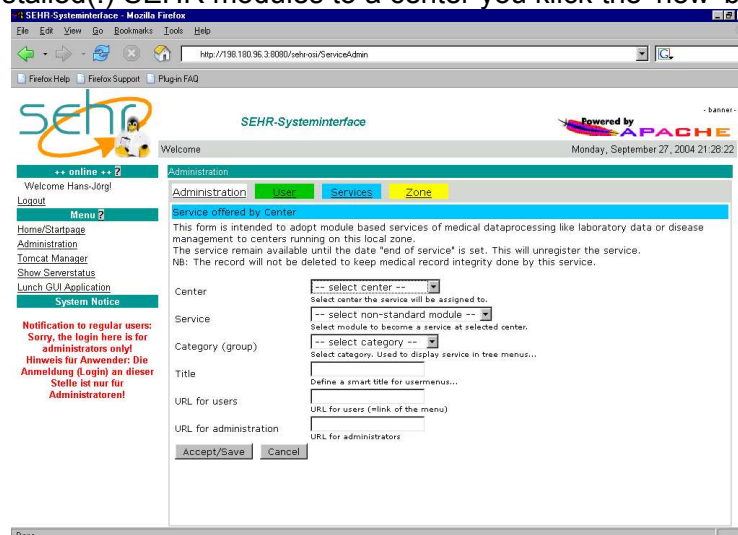
Maintaining the services takes place within the 'service' tab.



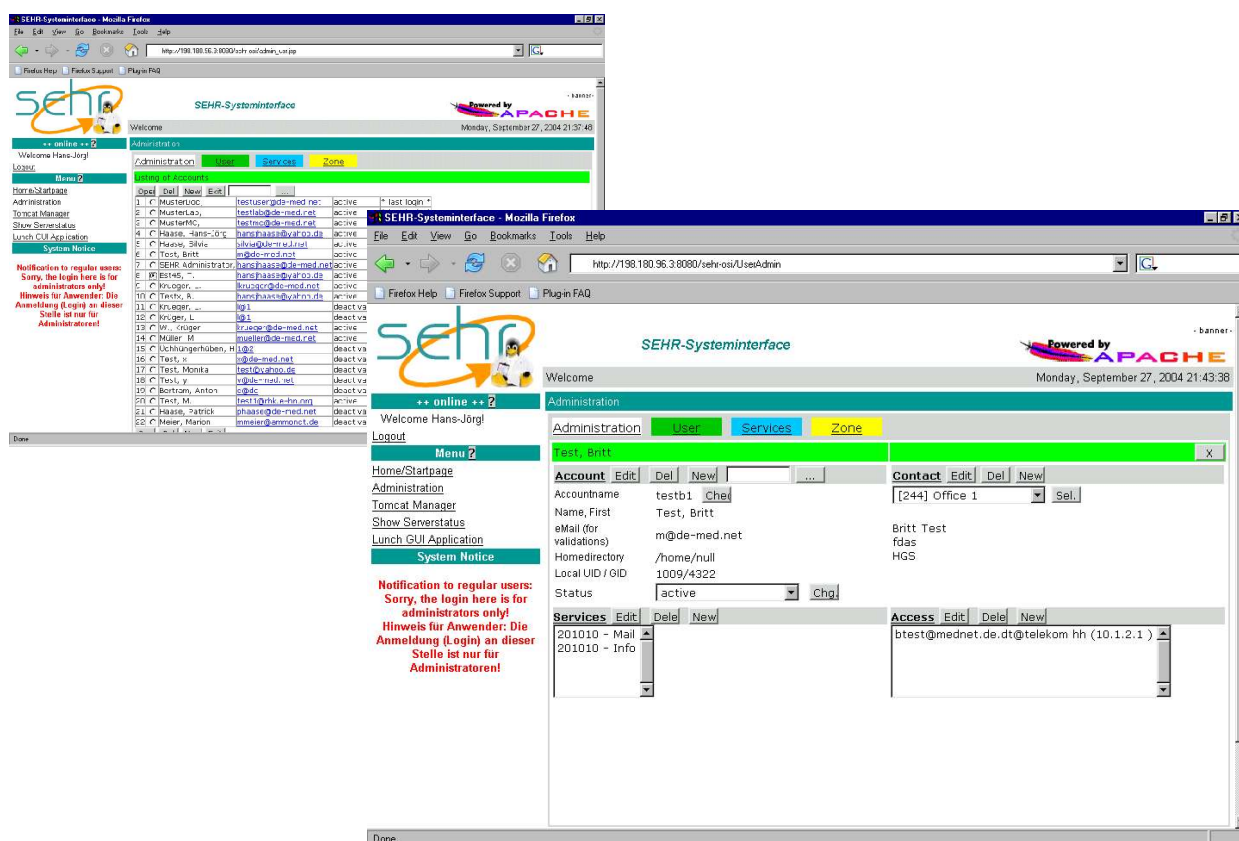
The top-level system service of SEHR is the *SEHR Administration Tool* itself. You can't do anything here and for preventing inconsistencies the select field is blocked by a 'X'.

The basic services like mail and information portals are marked by a link named 'reg'. With this link you assign the service to all active users of the zone at once. By SEHR project convention the basic services are NOT center related and should be available to all users of a zone.

To assign already installed(!) SEHR modules to a center you click the 'new' button.



The user administration is a little bit more complex than to administer centers and services. The basic view of the user tab is the list of users registered at the zone.



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Chapter IV SEHR Module Maintenance



Chapter IV SEHR Module Maintenance

Updating the SEHR Core Module

* writing on progress *

```
198.180.96.3 - PuTTY
-----[ Help ]-----
This script is intended to:
1) to setup a SEHR community(zone) server for integrated care
2) update a running SEHR server (scripts, database metadata)
3) reconfigure all or some parts of a running system

Notes before using the script:
- Beware that no users are attached!
- The SEHR kernel will be stopped
  (using command 'rcSEHRServer stop')

Usage: ./setup.pl [options]
Options: -v get some infos of the current configuration
         -r reconfigure SEHR system
         -o change owner of running system
         -h this info
           and some 'unofficial' options for development and very special
           administration purposes :-)

For any help use first the manuals, at least the README files...
or contact me by mail:

        hansjhaase@ifeth.org

Thanks for using SEHR.

hansjhaase@n0201010:/vol1/sehrroot/sbin >
```

An important screen, i.e. before calling for technical support, is the information screen:

```
198.180.96.3 - PuTTY
-----[ Info ]-----
DB Info:
- db file:      :/vol1/sehrroot/data/intrasec.gdb
- running release :19

Module Info
- PIK      : P0301010
- Version: 6.0.1
- Release: 19

For any help use first the manuals, at least the README files...
or contact the SEHR developer team by mail:

        sehr-support@lists.sourceforge.net

Thanks for using SEHR.

root@n0201010:/vol1/sehrroot/sbin >
```