

Computer erfassen (Registrierung / Inventar)

Um Computer mit FOG klonen zu können, müssen diese zunächst dem Server bekannt gemacht (bei ihm angemeldet) werden.

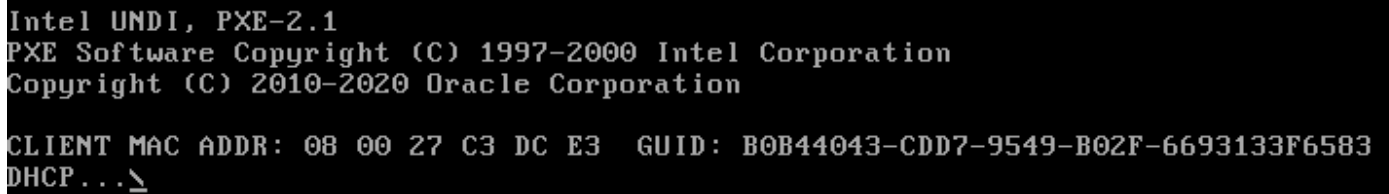
Die einfachste Möglichkeit hierfür besteht darin, den anzumeldenden Computer per Netzwerk booten zu lassen.

Hierbei unterscheidet sich die Vorgehensweise von Rechner zu Rechner, in der Regel ist aber fast allen gemein, dass im BIOS oder UEFI bzw. beim Start (meiste Taste F12 oder F8) ein Eintrag wie *PXE Boot* gewählt werden muss.

- [Schritt 1: Der Weg zum Bootmenü](#)
- [Schritt 2: manuell & umfangreich](#)
- [Schritt 2: schnell & automatisch](#)

Schritt 1: Der Weg zum Bootmenü

Zu Beginn des Boot-Vorganges versucht der Rechner mittels [DHCP](#) eine IP-Adresse zu erhalten.



```
Intel UNDI, PXE-2.1
PXE Software Copyright (C) 1997-2000 Intel Corporation
Copyright (C) 2010-2020 Oracle Corporation

CLIENT MAC ADDR: 08 00 27 C3 DC E3  GUID: B0B44043-CDD7-9549-B02F-6693133F6583
DHCP..._
```

Nach Erhalt einer IP-Adresse wird die Netzwerkverbindung entsprechend eingerichtet.
Die Abbildung hier dient nur als Beispiel und die Ausgabe (mit den genauen Daten) wird bei jedem Rechner anders aussehen.

```
Intel UNDI, PXE-2.1
PXE Software Copyright (C) 1997-2000 Intel Corporation
Copyright (C) 2010-2020 Oracle Corporation

CLIENT MAC ADDR: 08 00 27 C3 DC E3  GUID: B0B44043-CDD7-9549-B02F-6693133F6583
CLIENT IP: 192.168.1.10  MASK: 255.255.255.0  DHCP IP: 192.168.1.201
GATEWAY IP: 192.168.1.1
PXE->EB: !PXE at 9DA9:0070, entry point at 9DA9:0104
        UNDI code segment 9DA9:1A7F, data segment 9C19:1900 (624-638kB)
        UNDI device is PCI 00:03.0, type DIX+802.3
        576kB free base memory after PXE unload
iPXE initialising devices...ok

iPXE 1.21.1+ (g47159) -- Open Source Network Boot Firmware -- https://ipxe.org
Features: DNS FTP HTTP HTTPS iSCSI NFS TFTP VLAN AoE ELF MBOOT PXE bzImage Menu
PXEXT
Configuring (net0 08:00:27:c3:dc:e3)..._
```

Es folgt der Boot-Screen von FOG:

Host is NOT registered!

Boot from hard disk

Run Memtest86+

Perform Full Host Registration and Inventory

Quick Registration and Inventory

Deploy Image

Join Multicast Session

Client System Information (Compatibility)



Open Source Computer Cloning Solution

Schritt 2: manuell & umfangreich

Im Bootmenü wird mittels Pfeiltasten der Eintrag *Perform Full Host Registration and Inventory* gewählt.

Host is NOT registered!

Boot from hard disk

Run Memtest86+

Perform Full Host Registration and Inventory

Quick Registration and Inventory

Deploy Image

Join Multicast Session

Client System Information (Compatibility)



Open Source Computer Cloning Solution

Vom FOG wird daraufhin das Programm zur Registrierung geladen.

```
ata1.00: Read log 0x00 page 0x00 failed, Emask 0x1
ata1.00: Read log 0x00 page 0x00 failed, Emask 0x1
Starting syslogd: OK
Starting klogd: OK
Running sysctl: OK
Populating /dev using udev: done
Saving random seed: OK
Starting haveged: haveged: command socket is listening at fd 3
OK
-
```

Die Registrierung beginnt mit der Festlegung eines eindeutigen Hostnamens (maximal 15 Zeichen!).

Jeder Hostname darf dabei nur einmal vorkommen und kennzeichnet den jeweiligen Rechner.

Dieser Hostname lässt sich mit der Ausweisnummer einer Person vergleichen - und diese ist ebenfalls einmalig.

```
OK
* Running post init scripts.....Done
=====
===          ===          ===          ===
===  =====  ==  ==  ==  ==
===  =====  =====  ==  =====
===  =====  =====  ==  =====
===          =====  ==  =====
===  =====  =====  ==  ==  ==
===  =====  =====  ==  =====
===  =====  ==  ==  ==  ==
===  =====          =====
=====
===== Free Opensource Ghost =====
=====
===== Credits =====
= https://fogproject.org/Credits =
=====
== Released under GPL Version 3 ==
=====
Version: 1.5.10
Init Version: 20230305
* Using disk device...../dev/sda
* Starting host registration
* Enter hostname for this computer: TestRegistration_
```

Danach folgen viele weitere Abfragen, die jedoch alle später noch über die Webbrowser-GUI von FOG geändert werden könnten und daher zunächst optional sind.

Optional kann angegeben werden, wie das mit diesem Rechner(typ) verknüpfte Image heißen soll.

```
=====
===          ===          ===          ===
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
=====
===== Free Opensource Ghost =====
===== Credits =====
= https://fogproject.org/Credits =
=====
== Released under GPL Version 3 ==
=====
Version: 1.5.10
Init Version: 20230305
* Using disk device...../dev/sda
* Starting host registration
* Enter hostname for this computer: TestRegistration
! Truncated to 15 characters: TestRegistratio
  Enter the image ID to associate with computer (? for listing): TestPC
```

Optional kann der Rechner einer Gruppe zugeordnet werden.

In der Praxis bieten sich hierfür bspw. die Standorte des Unternehmens oder die Namen der Abteilungen an.

```

==== Free Opensource Ghost ====
==== Credits ====
= https://fogproject.org/Credits =
==== Released under GPL Version 3 ====
Version: 1.5.10
Init Version: 20230305
* Using disk device...../dev/sda
* Starting host registration
* Enter hostname for this computer: TestRegistration
! Truncated to 15 characters: TestRegistratio
  Enter the image ID to associate with computer (? for listing): TestPC
  Enter the image ID to associate with computer (? for listing):
  Would you like to associate this host with groups? (y/N) n_

```

Optional ist eine Verknüpfung mit [Snapins](#) möglich.

```

==== Free Opensource Ghost ====
==== Credits ====
= https://fogproject.org/Credits =
==== Released under GPL Version 3 ====
Version: 1.5.10
Init Version: 20230305
* Using disk device...../dev/sda
* Starting host registration
* Enter hostname for this computer: TestRegistration
! Truncated to 15 characters: TestRegistratio
  Enter the image ID to associate with computer (? for listing): TestPC
  Enter the image ID to associate with computer (? for listing):
  Would you like to associate this host with groups? (y/N) n
  Would you like to associate this host with snapins? (y/N) n_

```

Optional kann bei der Registrierung der beim Rechner verwendete Produktschlüssel hinterlegt werden.


```

====
====
====
====
====
====
==== Free Opensource Ghost ====
====
==== Credits ====
= https://fogproject.org/Credits =
====
== Released under GPL Version 3 ==
====
Version: 1.5.10
Init Version: 20230305
* Using disk device...../dev/sda
* Starting host registration
* Enter hostname for this computer: TestRegistration
! Truncated to 15 characters: TestRegistratio
  Enter the image ID to associate with computer (? for listing): TestPC
  Enter the image ID to associate with computer (? for listing):
  Would you like to associate this host with groups? (y/N) n
  Would you like to associate this host with snapins? (y/N) n
  Would you like to associate a product key to this host? (y/N) n_

```

Optional kann angegeben werden, welcher Domäne der zu registrierende Rechner angehört.

```

====
====
====
====
====
====
==== Free Opensource Ghost ====
====
==== Credits ====
= https://fogproject.org/Credits =
====
== Released under GPL Version 3 ==
====
Version: 1.5.10
Init Version: 20230305
* Using disk device...../dev/sda
* Starting host registration
* Enter hostname for this computer: TestRegistration
! Truncated to 15 characters: TestRegistratio
  Enter the image ID to associate with computer (? for listing): TestPC
  Enter the image ID to associate with computer (? for listing):
  Would you like to associate this host with groups? (y/N) n
  Would you like to associate this host with snapins? (y/N) n
  Would you like to associate a product key to this host? (y/N) n
  Would you like this host to join a domain, (using default settings)? (y/N) n

```

Optional kann dem Rechner ein Benutzername zugewiesen werden.

```

==== Free Opensource Ghost ====
==== Credits ====
= https://fogproject.org/Credits =
==== Released under GPL Version 3 ====

Version: 1.5.10
Init Version: 20230305
* Using disk device...../dev/sda
* Starting host registration
* Enter hostname for this computer: TestRegistration
! Truncated to 15 characters: TestRegistratio
  Enter the image ID to associate with computer (? for listing): TestPC
  Enter the image ID to associate with computer (? for listing):
  Would you like to associate this host with groups? (y/N) n
  Would you like to associate this host with snapins? (y/N) n
  Would you like to associate a product key to this host? (y/N) n
  Would you like this host to join a domain, (using default settings)? (y/N) n
* Enter the primary user for this computer: Benutzer_

```

Optional kann dem Rechner eine weitere Bezeichnung (*Tag*) zugewiesen werden.

```

==== Free Opensource Ghost ====
==== Credits ====
= https://fogproject.org/Credits =
==== Released under GPL Version 3 ====

Version: 1.5.10
Init Version: 20230305
* Using disk device...../dev/sda
* Starting host registration
* Enter hostname for this computer: TestRegistration
! Truncated to 15 characters: TestRegistratio
  Enter the image ID to associate with computer (? for listing): TestPC
  Enter the image ID to associate with computer (? for listing):
  Would you like to associate this host with groups? (y/N) n
  Would you like to associate this host with snapins? (y/N) n
  Would you like to associate a product key to this host? (y/N) n
  Would you like this host to join a domain, (using default settings)? (y/N) n
* Enter the primary user for this computer: Benutzer
* Enter the other tag #1 for this computer: ProbePC

```

Optional kann dem Rechner noch eine weitere Bezeichnung (*Tag*) zugewiesen werden.

```

==== Free Opensource Ghost ====
==== Credits ====
= https://fogproject.org/Credits =
==== Released under GPL Version 3 ====

Version: 1.5.10
Init Version: 20230305
* Using disk device...../dev/sda
* Starting host registration
* Enter hostname for this computer: TestRegistration
! Truncated to 15 characters: TestRegistratio
  Enter the image ID to associate with computer (? for listing): TestPC
  Enter the image ID to associate with computer (? for listing):
  Would you like to associate this host with groups? (y/N) n
  Would you like to associate this host with snapins? (y/N) n
  Would you like to associate a product key to this host? (y/N) n
  Would you like this host to join a domain, (using default settings)? (y/N) n
* Enter the primary user for this computer: Benutzer
* Enter the other tag #1 for this computer: ProbePC
* Enter the other tag #2 for this computer:

```

Optional kann der Rechner mit einem bereitgestellten Image bespielt werden.

```

==== Free Opensource Ghost ====
==== Credits ====
= https://fogproject.org/Credits =
==== Released under GPL Version 3 ====

Version: 1.5.10
Init Version: 20230305
* Using disk device...../dev/sda
* Starting host registration
* Enter hostname for this computer: TestRegistration
! Truncated to 15 characters: TestRegistratio
  Enter the image ID to associate with computer (? for listing): TestPC
  Enter the image ID to associate with computer (? for listing):
  Would you like to associate this host with groups? (y/N) n
  Would you like to associate this host with snapins? (y/N) n
  Would you like to associate a product key to this host? (y/N) n
  Would you like this host to join a domain, (using default settings)? (y/N) n
* Enter the primary user for this computer: Benutzer
* Enter the other tag #1 for this computer: ProbePC
* Enter the other tag #2 for this computer:
* You entered all required information,
  Would you like to deploy image to this computer now? (y/N) n

```

Es werden die Informationen des zu registrierenden Systems erfasst...

```

Would you like to associate this host with groups? (y/N) n
Would you like to associate this host with snapins? (y/N) n
Would you like to associate a product key to this host? (y/N) n
Would you like this host to join a domain, (using default settings)? (y/N) n
* Enter the primary user for this computer: Benutzer
* Enter the other tag #1 for this computer: ProbePC
* Enter the other tag #2 for this computer:
* You entered all required information,
  Would you like to deploy image to this computer now? (y/N) n
* Attempting to register host.....Done, without imaging!

```

```

+-----+
|      System Information      |
+-----+
* System Manufacturer:.....innotek GmbH
* System Product Name:.....VirtualBox
* System Version:.....1.2
* System Serial Number:.....0
* System UUID:.....b0b44043-cdd7-9549-b02f-669
3133f6583
* Computer Form Factor:.....      Type: Other

```

...wie bspw. die Details zur Hardware...

```

* System UUID:.....b0b44043-cdd7-9549-b02f-669
3133f6583
* Computer Form Factor:.....      Type: Other
+-----+
|      BIOS Information      |
+-----+
* BIOS Version:.....VirtualBox
* BIOS Vendor:.....innotek GmbH
* BIOS Date:.....12/01/2006
+-----+
|  Motherboard Information  |
+-----+
* Motherboard Manufacturer:.....Oracle Corporation
* Motherboard Product Name:.....VirtualBox
* Motherboard Product Version:.....1.2
* Motherboard Serial Number:.....0
* Motherboard Asset Tag:.....Not Specified
+-----+
|      CPU Information      |
+-----+
* CPU Manufacturer:.....
* CPU Version:.....
* CPU Current Speed:.....
* CPU Max Speed:.....

```

...und abschließend an den FOG übermittelt.

```

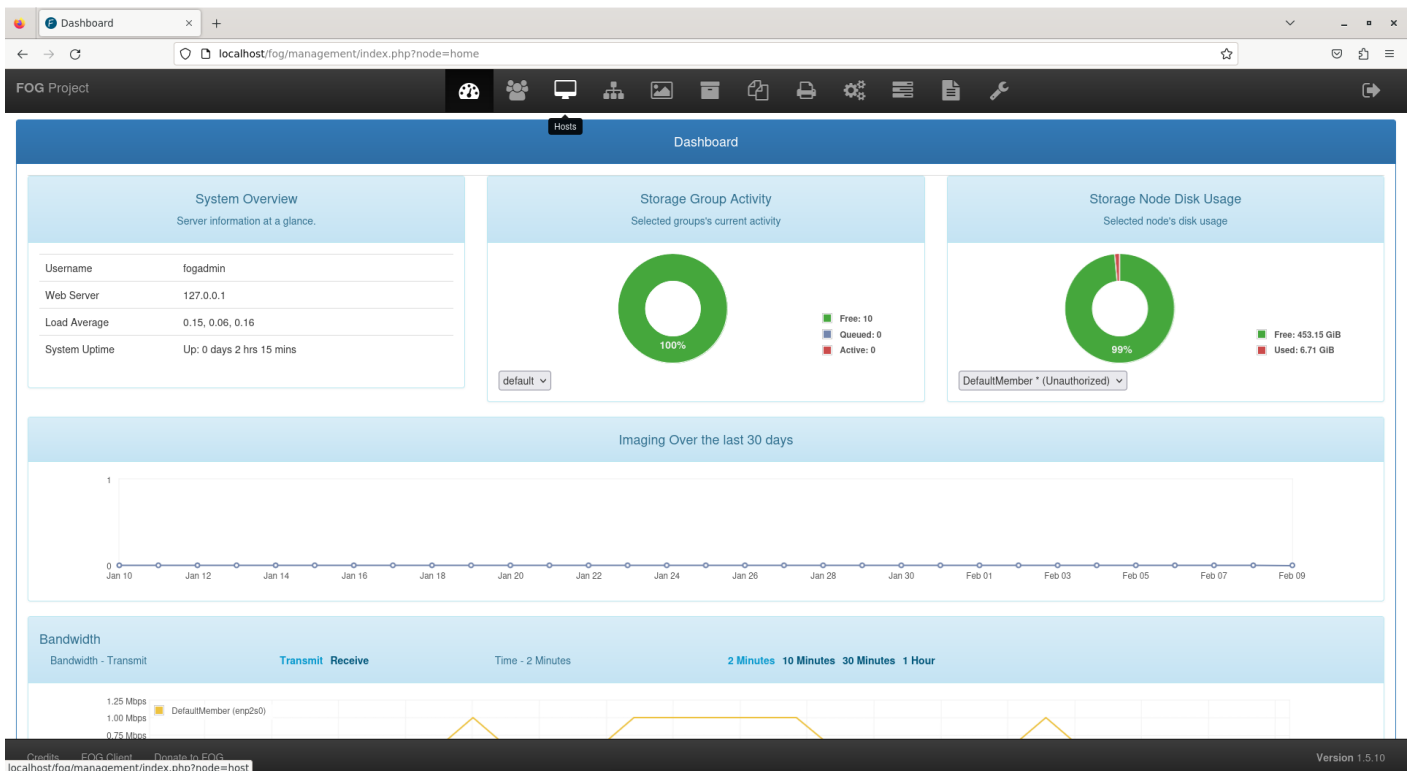
* CPU Version:.....
* CPU Current Speed:.....
* CPU Max Speed:.....
+-----+
|      Memory Information      |
+-----+
* Memory:.....MemTotal:      3055812 kB
+-----+
|      Hard Disk Information    |
+-----+
* Hard Disk:..... Model=UBOX HARDDISK, FwRev
=1.0, SerialNo=UB482a43d6-5e7b4e9b
+-----+
|      Case Information        |
+-----+
* Case Manufacturer:.....Oracle Corporation
* Case Version:.....Not Specified
* Case Serial Number:.....Not Specified
* Case Asset Number:.....Not Specified

* Attempting to send inventory.....Done

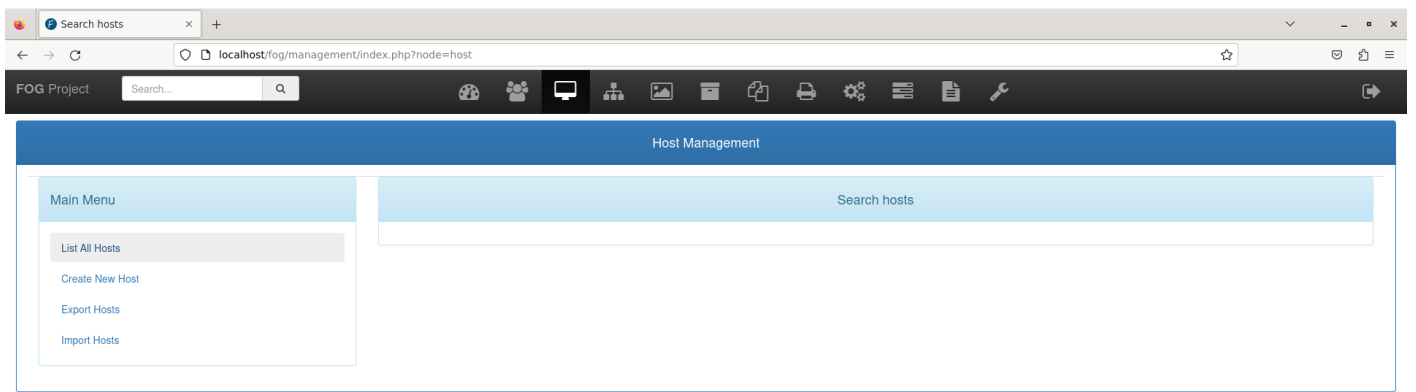
```

Der Host ist jetzt erfolgreich am FOG registriert.

Um Zugriff auf die soeben erfassten Informationen zu erlangen, wird in der GUI des FOG der Eintrag *Hosts* in der Symbolleiste gewählt.

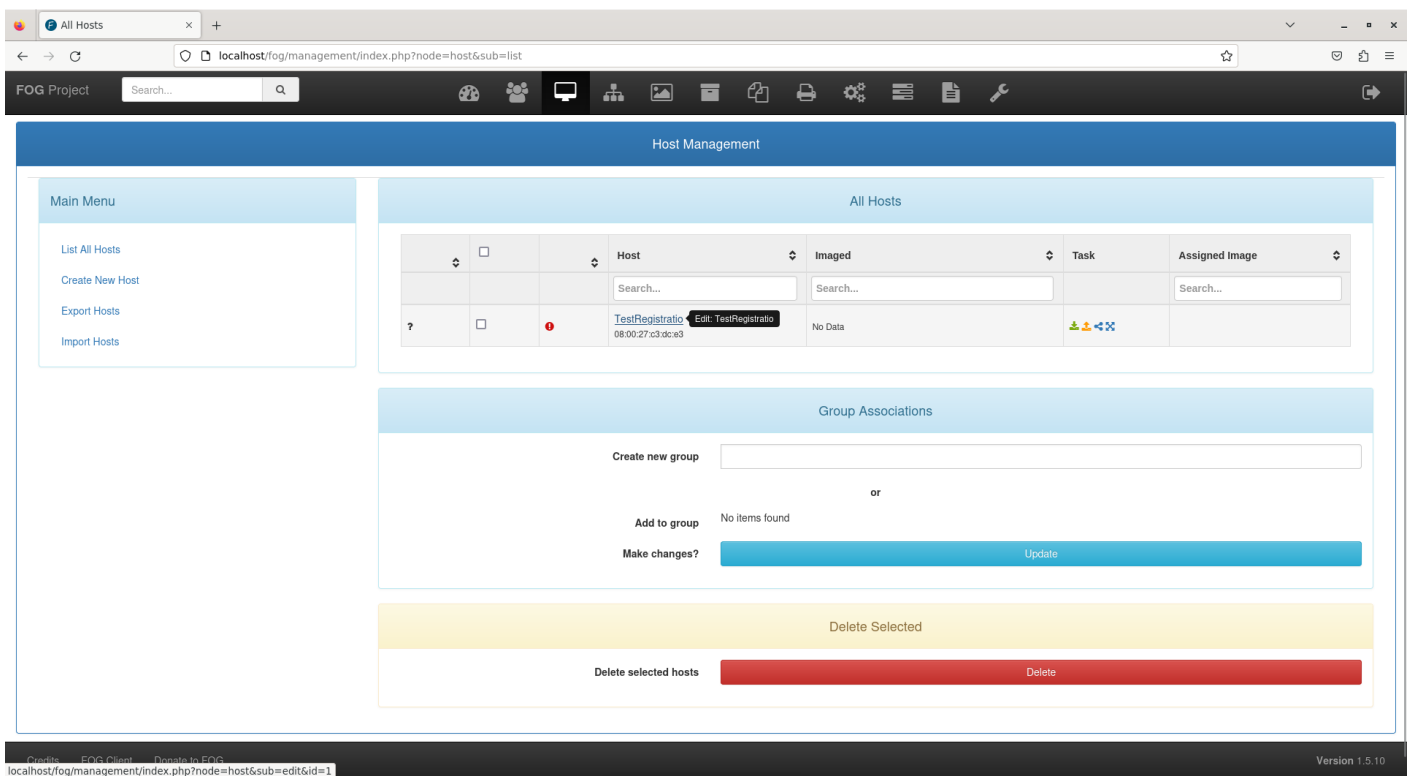


So gelangt man zum *Host Management* und in dessen *Main Menu* kann über *List All Hosts* auf die Daten aller beim FOG registrierten Rechner zugegriffen werden.



localhost/fog/management/index.php?node=host&sub=list Version 1.5.10

Über das *Host Management* kann schließlich der Eintrag des Hosts aufgerufen und bei Bedarf bearbeitet (Bestätigung mittels *Update*) werden.



Im Bereich *Host general* wird eine kurze Übersicht zum Host angezeigt.
Wenn im Menüband der Eintrag *Inventory* gewählt wird...

Host Hardware Inventory x

localhost/fog/management/index.php?node=host&sub=edit&id=1

FOG Project

Host Management Edit: TestRegistratio

InfoGeneralBasic TasksActive DirectoryPrintersSnapsService SettingsPower ManagementInventoryVirus HistoryLogin HistoryImage HistorySnapin HistoryMembershipDelete

Main Menu

[List All Hosts](#)[Create New Host](#)[Export Hosts](#)[Import Hosts](#)

Host general

Host Name

TestRegistratio

Primary MAC

Load MAC Vendors

08:00:27:c3:dc:e3

I.M.C.

I.M.I.

Host description

Created by FOG Reg on February 9, 2024, 10:23 am

Host Product Key

Host Image

No items found

Host Kernel

Host Kernel Arguments

Host Init

Host Primary Disk

Host Bios Exit Type

- Please Select an option -

Host EFI Exit Type

- Please Select an option -

Make Changes?

Update

localhost/fog/management/index.php?node=host&sub=edit&id=1#host-hardware-inventory

CreditsFOG ClientDonate to FOG

Version 1.5.10

...werden die Detailangaben zum Host ausgegeben.

Host Hardware Inventory x

localhost/fog/management/index.php?node=host&sub=edit&id=1#host-hardware-inventory

FOG Project

Host Hardware Inventory

InfoGeneralBasic TasksActive DirectoryPrintersSnapsService SettingsPower ManagementInventoryVirus HistoryLogin HistoryImage HistorySnapin HistoryMembershipDelete

Main Menu

[List All Hosts](#)[Create New Host](#)[Export Hosts](#)[Import Hosts](#)

Primary User

Benutzer

Other Tag #1

ProbaPC

Other Tag #2

System Manufacturer

innotek GmbH

System Product

VirtualBox

System Version

1.2

System Serial Number

0

System UUID

b0b4d43-cd47-9549-b02f-68931339583

System Type

Type: Other

BIOS Vendor

innotek GmbH

BIOS Version

VirtualBox

BIOS Date

12/01/2008

Motherboard Manufacturer

Oracle Corporation

Motherboard Product Name

VirtualBox

Motherboard Version

1.2

Motherboard Serial Number

0

Motherboard Asset Tag

Not Specified

CPU Manufacturer

CPU Version

CPU Normal Speed

CPU Max Speed

Memory

2.91 GB

Hard Disk Model

VBOX HARDDISK

Hard Disk Firmware

1.0

Hard Disk Serial Number

VB482a43d8-5e7b44e8

Chassis Manufacturer

Oracle Corporation

Chassis Version

Chassis Serial

Not Specified

Chassis Asset

Not Specified

Make Changes?

Update

CreditsFOG ClientDonate to FOG

Version 1.5.10

Schritt 2: schnell & automatisch

Als Alternative zur manuellen Registrierung bietet sich in den meisten Fällen die automatische Aufnahme am FOG an.

Der gesamte Vorgang dauert keine 50 Sekunden und wird hier einem Video dokumentiert:

Im Bootmenü wird der Eintrag *Quick Registration and Inventory* ausgewählt.

Host is NOT registered!

Boot from hard disk
Run Memtest86+
Perform Full Host Registration and Inventory
Quick Registration and Inventory
Deploy Image
Join Multicast Session
Client System Information (Compatibility)



Open Source Computer Cloning Solution

Vom FOG wird danach wie gewohnt das Programm zur Registrierung geladen...


```
ata1.00: Read log 0x00 page 0x00 failed, Emask 0x1
ata1.00: Read log 0x00 page 0x00 failed, Emask 0x1
Starting syslogd: OK
Starting klogd: OK
Running sysctl: OK
Populating /dev using udev: done
Saving random seed: OK
Starting haveged: haveged: command socket is listening at fd 3
OK
-
```

...nur mit dem Unterschied, dass diesmal die Daten basierend auf der ermittelten Hardware automatisch erfasst werden.

So entfällt bspw. auch der im anderen Verfahren händisch vergebene Hostname.

```
OK
* Running post init scripts.....Done
=====
===          ===          ===          ===
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
===          ==          ==          ==
=====
===== Free Opensource Ghost =====
=====
===== Credits =====
= https://fogproject.org/Credits =
=====
== Released under GPL Version 3 ==
=====
Version: 1.5.10
Init Version: 20230305
* Using disk device...../dev/sda
Starting host registration
* Attempting to register host.....
```

Es werden dann wie gewohnt die Informationen des zu registrierenden Systems erfasst...

```

Would you like to associate this host with groups? (y/N) n
Would you like to associate this host with snapins? (y/N) n
Would you like to associate a product key to this host? (y/N) n
Would you like this host to join a domain, (using default settings)? (y/N) n
* Enter the primary user for this computer: Benutzer
* Enter the other tag #1 for this computer: ProbePC
* Enter the other tag #2 for this computer:
* You entered all required information,
  Would you like to deploy image to this computer now? (y/N) n
* Attempting to register host.....Done, without imaging!

```

```

+-----+
|      System Information      |
+-----+
* System Manufacturer:.....innotek GmbH
* System Product Name:.....VirtualBox
* System Version:.....1.2
* System Serial Number:.....0
* System UUID:.....b0b44043-cdd7-9549-b02f-669
3133f6583
* Computer Form Factor:.....      Type: Other

```

...wie bspw. die Details zur Hardware...

```

* System UUID:.....b0b44043-cdd7-9549-b02f-669
3133f6583
* Computer Form Factor:.....      Type: Other
+-----+
|      BIOS Information      |
+-----+
* BIOS Version:.....VirtualBox
* BIOS Vendor:.....innotek GmbH
* BIOS Date:.....12/01/2006
+-----+
|      Motherboard Information      |
+-----+
* Motherboard Manufacturer:.....Oracle Corporation
* Motherboard Product Name:.....VirtualBox
* Motherboard Product Version:.....1.2
* Motherboard Serial Number:.....0
* Motherboard Asset Tag:.....Not Specified
+-----+
|      CPU Information      |
+-----+
* CPU Manufacturer:.....
* CPU Version:.....
* CPU Current Speed:.....
* CPU Max Speed:.....

```

...und abschließend an den FOG übermittelt:

```

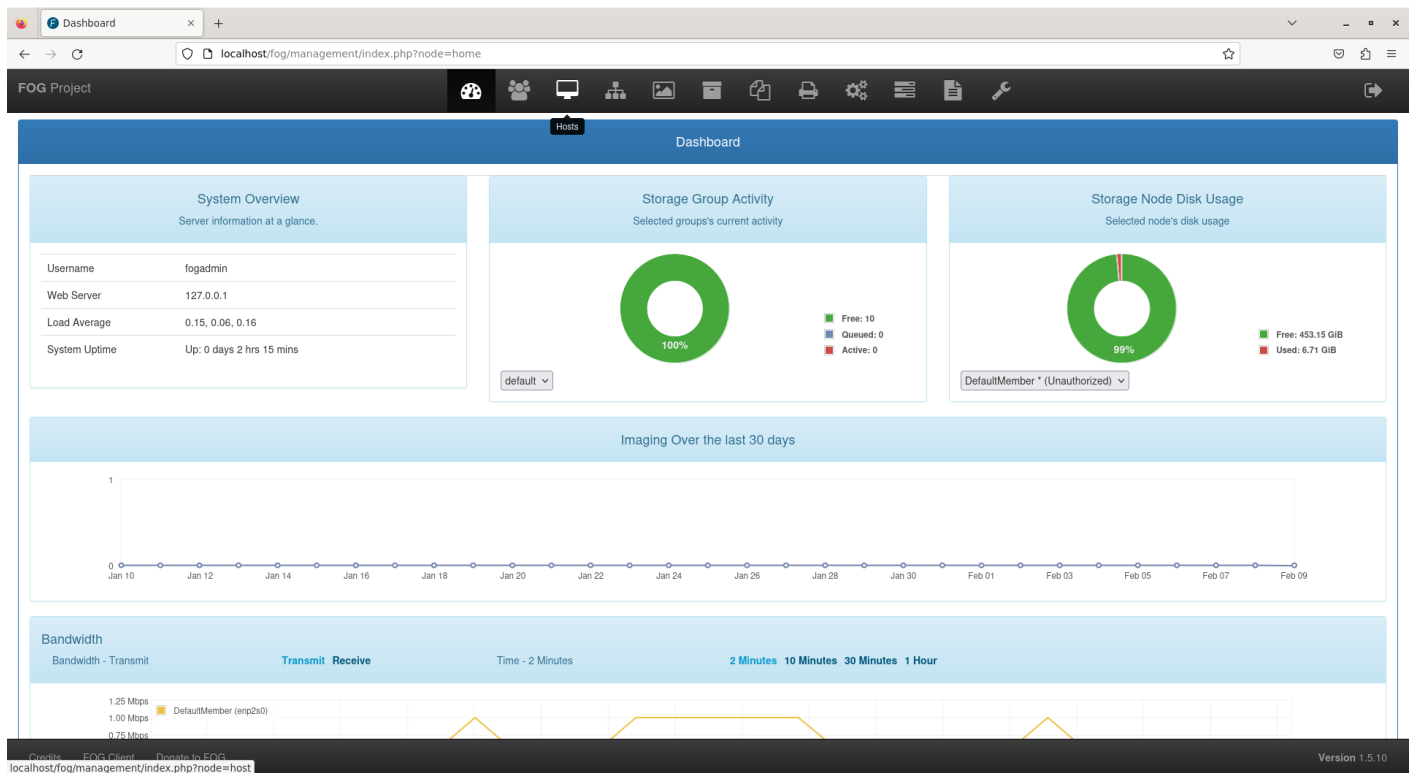
* CPU Version:.....
* CPU Current Speed:.....
* CPU Max Speed:.....
+-----+
|      Memory Information      |
+-----+
* Memory:.....MemTotal:      3055812 kB
+-----+
|      Hard Disk Information    |
+-----+
* Hard Disk:..... Model=UBOX HARDDISK, FwRev
=1.0, SerialNo=UB482a43d6-5e7b4e9b
+-----+
|      Case Information        |
+-----+
* Case Manufacturer:.....Oracle Corporation
* Case Version:.....Not Specified
* Case Serial Number:.....Not Specified
* Case Asset Number:.....Not Specified

* Attempting to send inventory.....Done

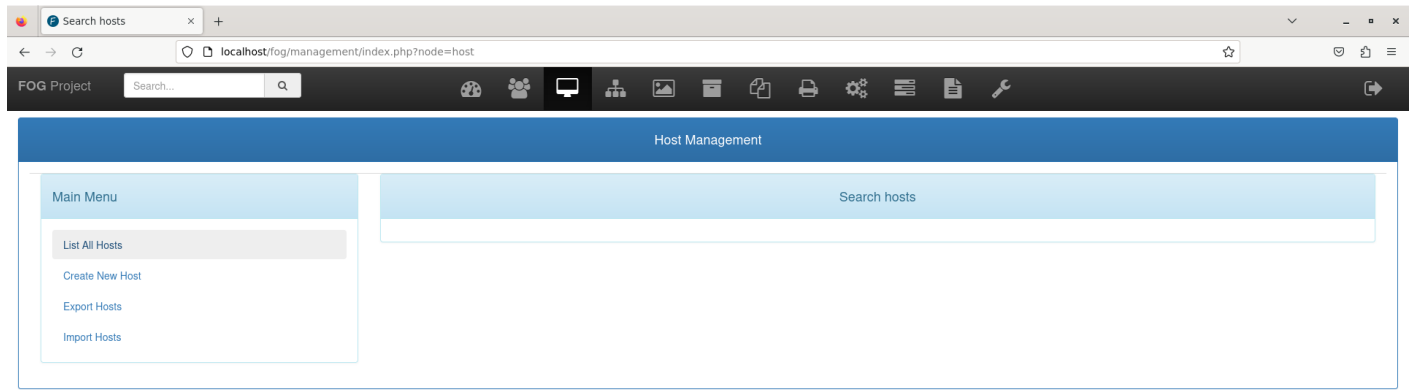
```

Es wurde kein (eigener) Hostnamen vergeben - stattdessen wurde automatisch die MAC-Adresse als Namen verwendet.

Um dem mit seiner MAC-Adresse registrierten Rechner einen verständlichen Namen zuzuweisen wird in der GUI des FOG der Eintrag *Hosts* in der Symbolleiste gewählt.



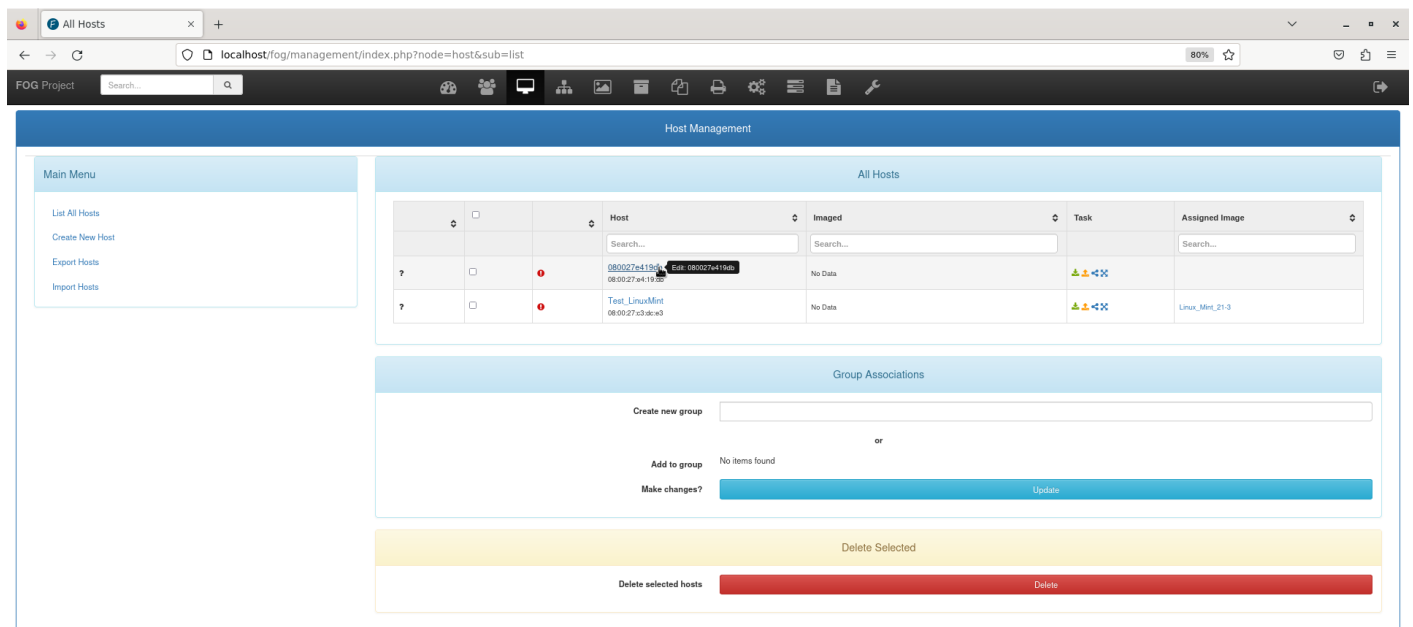
So gelangt man zum *Host Management* und in dessen *Main Menu* kann über *List All Hosts* auf die Daten aller beim FOG registrierten Rechner zugegriffen werden.



localhost/fog/management/index.php?node=host&sub=list

Version 1.5.10

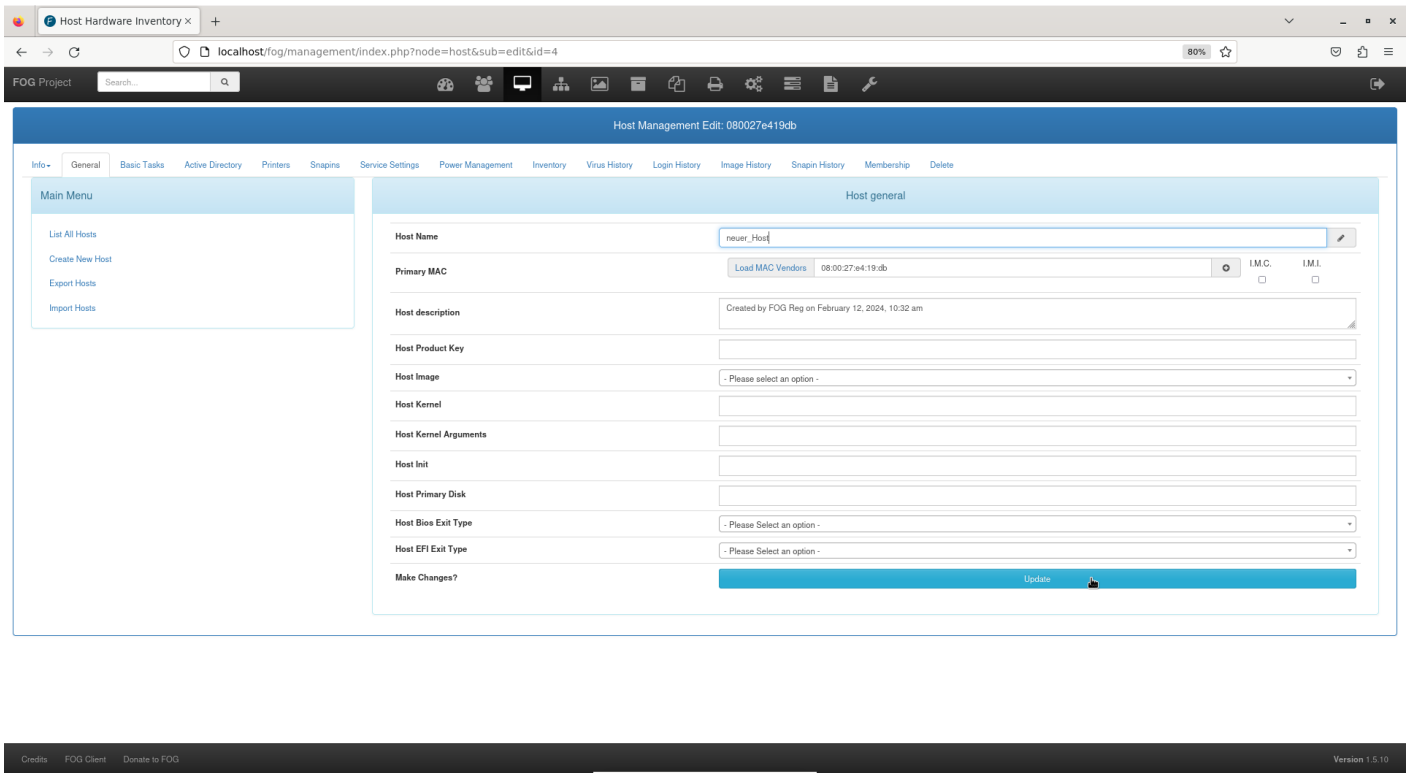
Über das "Host Management" kann schließlich der Eintrag des anzupassenden Hosts aufgerufen werden.



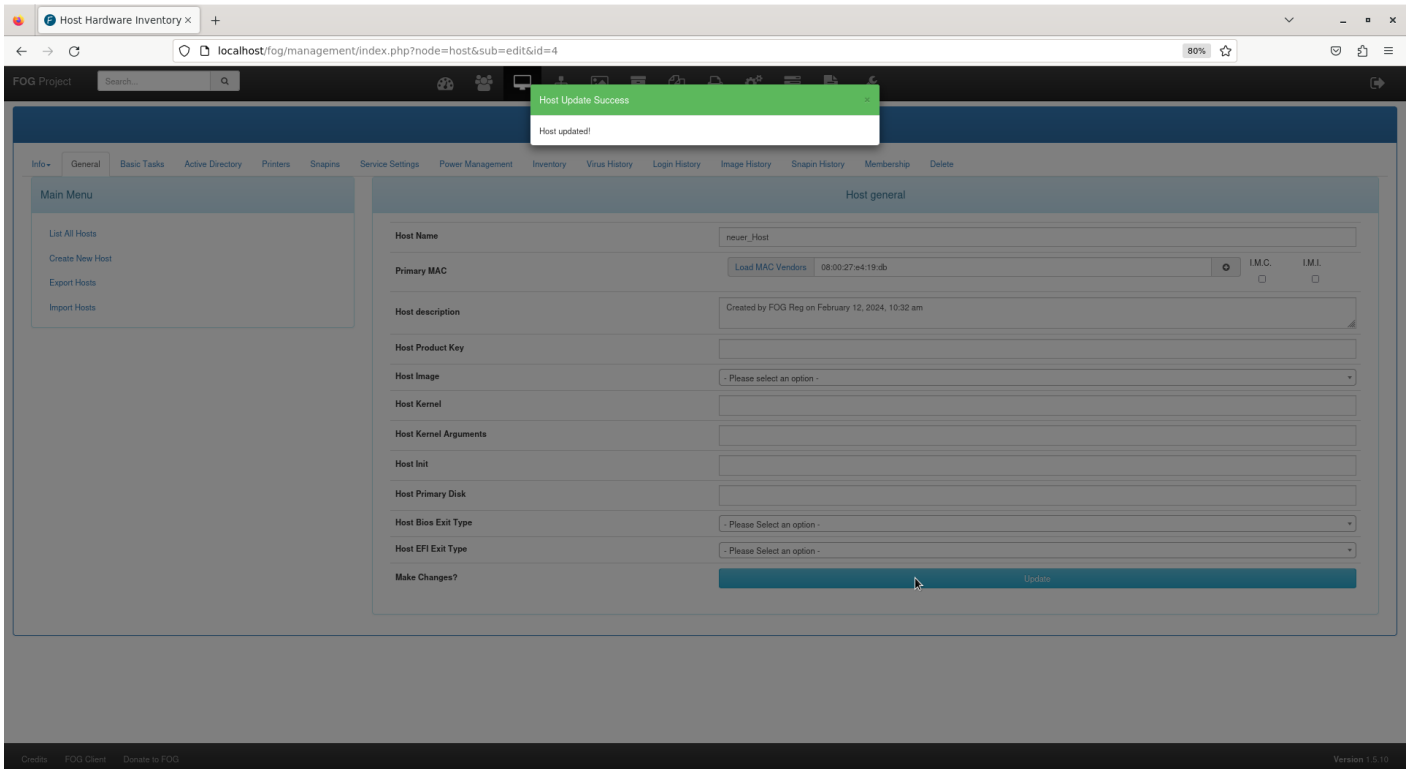
localhost/fog/management/index.php?node=host&sub=edit&id=4

Version 1.5.10

Im Bereich *Host general* kann bei *Host Name* ein neuer Name vergeben und mit einem Klick auf *Update...*



...übernommen werden:



Der Computer (Host) ist jetzt dem FOG unter einem selbst gewählten Namen (Hostnamen) bekannt.