

## Install Intergraph Licensing tool - ✓

### Get 64bit Linux Installer for Intergraph 2015 software - ✓

<https://support.hexagonsafetyinfrastructure.com/infocenter/index?page=content&id=FILE9880>

INGRTS11.13Linux64.tar.gz → This is **64bit** ELF

After unzip, untar, you will get the following files:

FlexNet.pdf  
GettingStartedUnix.pdf  
INGRLicenseService.sh  
INGRTS  
INGRTS\_libFNP.so  
Imgrd  
Imutil  
showhostid

### Documentation - ✓

<https://hexagongeospatial.fluidtopics.net/book#!book;uri=859224d5b189ab88d522520983b708c2;breadcrumb=4c46e8efdc198a363ea832a7f710af3f-ddde247439e544a1fa7f1be4ecf33558>

ERDAS APOLLO Essentials User Guide->Installation and Licensing->Setting up ERDAS APOLLO Essentials->Linux Licensing

# ERDAS APOLLO Essentials User Guide

PROPERTIES

Product ERDAS APOLLO

Portfolio Suite Provider

▶ About ERDAS APOLLO Essentials

▼ Installation and Licensing

- System Requirements
- **Setting up ERDAS APOLLO Essentials**
- Licensing
- ECW/JPEG 2000 Tools
- Performance Tuning
- JavaScript Restrictions with Pages from Different Domains

▶ Protocols and Data Formats

▶ Configuration

▶ Data Preparation

▶ Styling

▶ Statistics Generation

▶ API Reference Layered View

▶ Map Projections Supported

▶ Designing your Web Pages

▶ Sample Web Pages

## Setting up ERDAS APOLLO Essentials

7. Configure ERDAS APOLLO Essentials using the Administration Console. This requires Sun JRE 1.7; install this from <http://java.com/en/download/manual.jsp> (Linux x64 RPM).
8. After you install the JRE package, launch the Administration Console and connect to your local machine to configure the server.

### Linux Licensing

ERDAS APOLLO Essentials is available as Floating or Concurrent licenses. The LIC file is generated from the Intergraph Licensing Portal and requires a License Server to deploy, which can either be on the same Linux server or a remote Windows or Linux server. If a remote license server is already available, skip to Step 6 below.

#### Local Linux Floating License Server

1. Extract the Linux License server available at the Intergraph Licensing Portal to `/usr/local/intergraph/IngrLicenseSvr/`.
  - INGRTS
  - INGRTS\_libFNP.so
  - Lmgrd
  - Lmutil
  - Showhostid
  - StartIngrLicSvr.sh

2. Use the Showhostid feature of the Intergraph Licensing tool or the ERDAS APOLLO Essentials Administration Console to determine the COMPOSITE HostID to generate a License file. For the command line tool use the following.

```
[root@localhost IngrLicenseSvr]# ./showhostid
Host ID: COMPOSITE=4BF3127DF340
```

If the application fails due to lsb dependencies use the following command.

```
yum -y install redhat-lsb
```

3. Use the COMPOSITE HostID to generate a LIC file using the Intergraph Licensing Portal. When prompted, save the license file to `/usr/local/intergraph/INGR.lic`

4. Start the license manager, referencing the Intergraph license file.

```
[root@localhost IngrLicenseSvr]# ./lmgrd -c /usr/local/intergraph/INGR.lic -l debug_log_path
```

5. Once started, open `debug_log_path` to verify the service has started and the port that was attached.

```
[root@localhost IngrLicenseSvr]# vi debug_log_path
```

```
23:17:59 (lmqrd) The license server manager (lmqrd) running as root:
```

## Copy licensing Installer files to Ubuntu - ✓

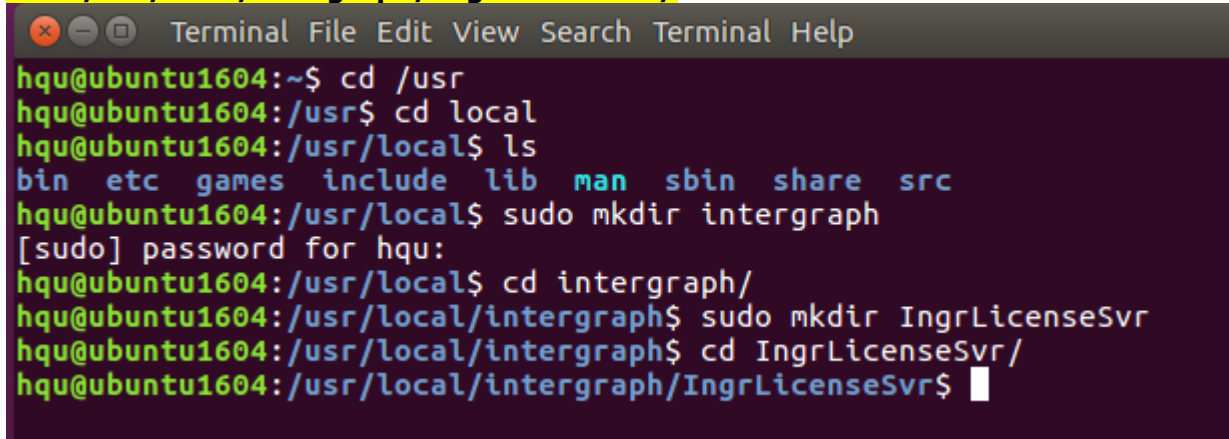
There is no GUI installer for licensing tool, user need to manually copy executable files to Ubuntu:

Extract the Linux License server available at the Intergraph Licensing Portal to /usr/local/intergraph/IngrLicenseSvr/.

- INGRTS
- INGRTS\_libFNP.so
- Lmgrd
- Lmutil
- Showhostid
- StartIngrLicSvr.sh

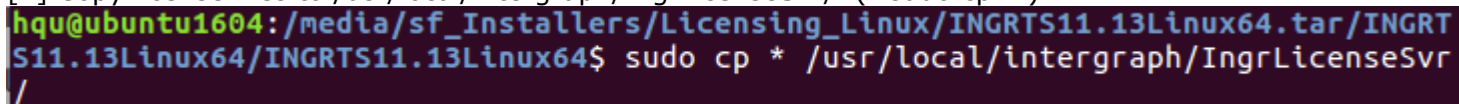
[1] Create the following folders in Linux:

**/usr/local/intergraph/IngrLicenseSvr/**

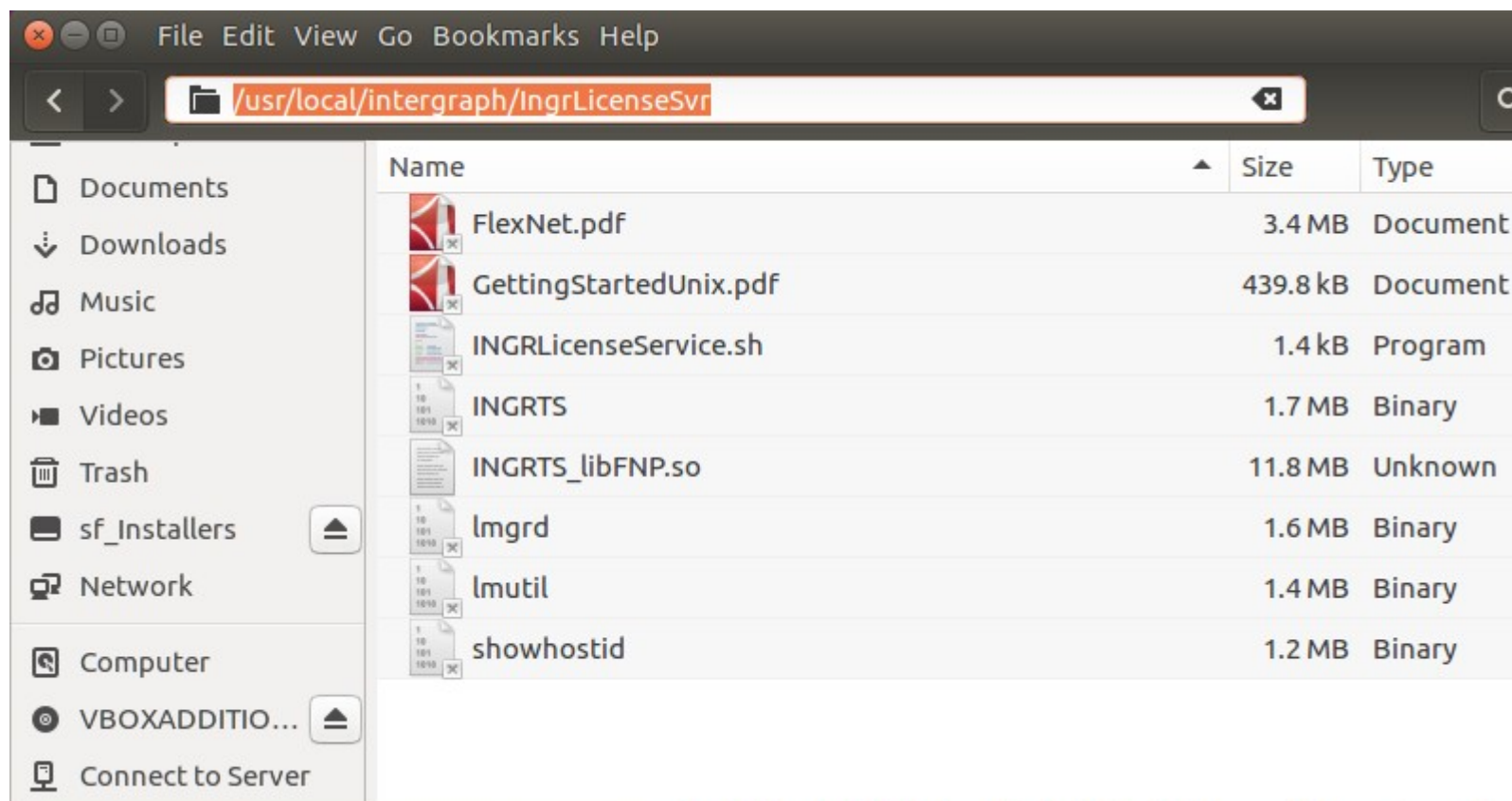


```
Terminal File Edit View Search Terminal Help
hqu@ubuntu1604:~$ cd /usr
hqu@ubuntu1604:/usr$ cd local
hqu@ubuntu1604:/usr/local$ ls
bin  etc  games  include  lib  man  sbin  share  src
hqu@ubuntu1604:/usr/local$ sudo mkdir intergraph
[sudo] password for hqu:
hqu@ubuntu1604:/usr/local$ cd intergraph/
hqu@ubuntu1604:/usr/local/intergraph$ sudo mkdir IngrLicenseSvr
hqu@ubuntu1604:/usr/local/intergraph$ cd IngrLicenseSvr/
hqu@ubuntu1604:/usr/local/intergraph/IngrLicenseSvr$
```

[2] Copy license files to /usr/local/intergraph/IngrLicenseSvr/ (>sudo cp \* )



```
hqu@ubuntu1604:/media/sf_Installers/Licensing_Linux/INGRTS11.13Linux64.tar/INGRTS11.13Linux64/INGRTS11.13Linux64$ sudo cp * /usr/local/intergraph/IngrLicenseSvr/
```



Change Mode to 775 for executable:

```
>sudo chmod 775 *
```

## Fix "No such file or directory" Error - ✓

It looks like Intergraph licensing tool is still

```
Terminal File Edit View Search Terminal Help
hqu@ubuntu1604:~/Downloads/License/INGR11.13Linux64$ file showhostid
showhostid: ELF 64-bit LSB executable, x86-64, version 1 (SYSV), dynamically lin
ked, interpreter /lib64/ld-lsb-x86-64.so.3, for GNU/Linux 2.6.18, BuildID[sha1]=
40acfdd63710fcc4006c12a81003f2ce3efd0a36, stripped
hqu@ubuntu1604:~/Downloads/License/INGR11.13Linux64$
```

But get errors

```
Terminal File Edit View Search Terminal Help
hqu@ubuntu1604:~/Downloads/License/INGR11.13Linux64$ ./showhostid
bash: ./showhostid: No such file or directory
hqu@ubuntu1604:~/Downloads/License/INGR11.13Linux64$
```

### [Solution]

The reason is there is no LSB

<https://software.intel.com/en-us/articles/flexlm-license-manager-20-may-fail-when-lsb-3-is-not-met>

If the LSB linker/loader shared library ls-lsb-x86-64.so.3 is not present, add LSB support to your operating system. As a quick

workaround you may create the LSB linker/loader library manually as a symlink to the Linux dynamic linker/loader library, for example (requires (sudo) root rights):

```
#sudo ln -s /lib64/ld-linux-x86-64.so.2 /lib64/ld-lsb-x86-64.so.3
```

Then you can run all the showhostid tool without error

### showhostid - ✓

```
INGRTS11.13Linux64>./showhostid  
Host ID: COMPOSITE=B9CFA2FD860B
```

COMPOSITE=B9CFA2FD860B

### Generate License .lic - ✓

Generate license .lic from licensing portal @ [www.intergraph.com/sgi/license](http://www.intergraph.com/sgi/license)

When you enter the host ID, only enter B9CFA2FD860B.

Then copy the .lic to

```
/usr/local/intergraph/IngrLicenseSvr/
```

### test License manager - ✓

```
>sudo ./lmgrd -c /usr/local/intergraph/IngrLicenseSvr/INGR_VM_Ubuntu_APOLLO_2015.lic -l debug_log_path
```

```
IngrLicenseSvr>pwd  
/usr/local/intergraph/IngrLicenseSvr  
IngrLicenseSvr>  
IngrLicenseSvr>sudo ./lmgrd -c /usr/local/intergraph/IngrLicenseSvr/  
FlexNet.pdf INGR_VM_Ubuntu_APOLLO_2015.lic  
GettingStartedUnix.pdf lmgrd  
INGRLicenseService.sh lutil  
INGRTS showhostid  
INGRTS libFNP.so  
IngrLicenseSvr>sudo ./lmgrd -c /usr/local/intergraph/IngrLicenseSvr/INGR_VM_Ubun  
tu_APOLLO_2015.lic -l debug_log_path
```

Then check the "debug\_log\_path" that has been generated in the same folder:  
You should see "Server started on xxxx for : **apessiws**"

```
File Edit View Search Tools Documents Help
Open Save
11:12:25 (lmgrd) (@lmgrd-SLOG@) Start-Date: Fri May 06 2016 11:12:25 EDT
11:12:25 (lmgrd) (@lmgrd-SLOG@) PID: 2859
11:12:25 (lmgrd) (@lmgrd-SLOG@) LMGRD Version: v11.13.1.2 build 173085 x64_lsb ( build 173085
(ipv6))
11:12:25 (lmgrd) (@lmgrd-SLOG@)
11:12:25 (lmgrd) (@lmgrd-SLOG@) === Network Info ===
11:12:25 (lmgrd) (@lmgrd-SLOG@) Listening port: 27000
11:12:25 (lmgrd) (@lmgrd-SLOG@)
11:12:25 (lmgrd) (@lmgrd-SLOG@) === Startup Info ===
11:12:25 (lmgrd) (@lmgrd-SLOG@) Server Configuration: Single Server
11:12:25 (lmgrd) (@lmgrd-SLOG@) Command-line options used at LS startup: -c /usr/local/intergraph/
IngrLicenseSvr/INGR_VM_Ubuntu_APOLLO_2015.lic -l debug_log_path
11:12:25 (lmgrd) (@lmgrd-SLOG@) License file(s) used: /usr/local/intergraph/IngrLicenseSvr/
INGR_VM_Ubuntu_APOLLO_2015.lic
11:12:25 (lmgrd) (@lmgrd-SLOG@) =====
11:12:25 (lmgrd) Starting vendor daemons ...
11:12:25 (lmgrd) Started INGRTS (internet tcp_port 60592 pid 2861)
11:12:25 (INGRTS) Unable to initialize access to trusted storage: 2
11:12:25 (INGRTS) FlexNet Licensing version v11.13.1.2 build 173085 x64_lsb
11:12:25 (INGRTS) SLOG: Summary LOG statistics is enabled.
11:12:25 (INGRTS) SLOG: FNPLS-INTERNAL-CKPT1
11:12:26 (INGRTS) SLOG: VM Status: 8
11:12:26 (INGRTS) SLOG: FNPLS-INTERNAL-CKPT2
11:12:26 (INGRTS) Server started on ubuntu1604 for: apeciws
11:12:26 (INGRTS) approf Spatial_Model_Job apadvan
11:12:26 (INGRTS) EXTERNAL FILTERS are OFF
11:12:26 (lmgrd) INGRTS using TCP-port 60592
11:12:26 (INGRTS) SLOG: Statistics Log Frequency is 240 minute(s).
11:12:26 (INGRTS) SLOG: TS update poll interval is 600 seconds.
11:12:26 (INGRTS) SLOG: Activation borrow reclaim percentage is 0.
11:12:26 (INGRTS) (@INGRTS-SLOG@) =====
11:12:26 (INGRTS) (@INGRTS-SLOG@) === Vendor Daemon ===
11:12:26 (INGRTS) (@INGRTS-SLOG@) =====
Plain Text Tab Width: 8 Ln 58, Col 19 INS
```

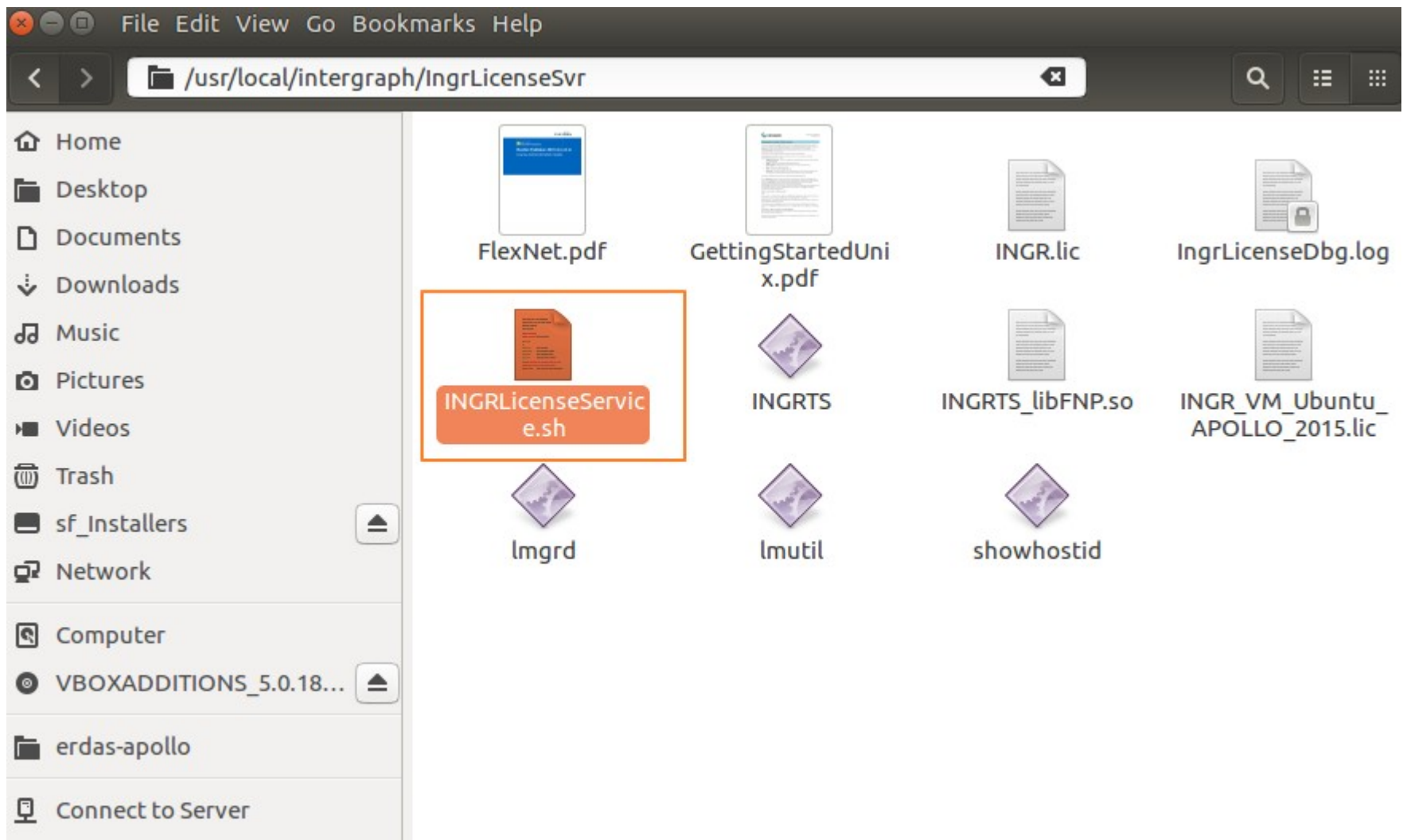
### Start Licensing as service - ✓

Modify INGRLicenseService.sh, and change the path to the installation folder. Comment the original path (INGR\_LICENSE\_SVR=/opt/INGRLicenseService)

**INGR\_LICENSE\_SVR=/usr/local/intergraph/IngrLicenseSvr**

```
File Edit View Search Tools Documents Help
Open [icon] Save

#!/bin/bash
#
# This example script will allow you to start and stop the Intergraph License Service using the
provided files.
# This script may be modified and added to the boot files for automated startup.
# Syntax:  ./INGRLicenseService start  -- to start the service
#         ./INGRLicenseService stop   -- to stop the service
#
# If lmgrd is already executing, don't re-execute it.
#
PATH=/usr/bin:/bin
# #####
# This variable can be modified based on where the files that make up the service are located.
# INGR_LICENSE_SVR=/opt/INGRLicenseService
INGR_LICENSE_SVR=/usr/local/intergraph/IngrLicenseSvr
# These variables can be modified to reflect the name of the license file (default is INGR.lic),
# and the debug logfile.
LICFILE=$INGR_LICENSE_SVR/INGR.lic
LOGFILE=$INGR_LICENSE_SVR/IngrLicenseDbg.log
# #####
# lmgrd/lmutil should be located in the same directory with the other files and this should not be
modified.
# #####
LMGRD=$INGR_LICENSE_SVR/lmgrd
LMUTIL=$INGR_LICENSE_SVR/lmutil
# #####
case $1 in
'start')
    rm -f $LOGFILE
    if [ -x $LMGRD ]
    then
        if [ -f $LICFILE ]
        then
            echo "Starting INGR License Service..."
            $LMGRD -c $LICFILE -l $LOGFILE
```



Now you can start the service:

```
IngrLicenseSvr>sudo ./INGRLicenseService.sh start
Starting INGR License Service...
IngrLicenseSvr>
```

Check the log file: **IngrLicenseDbg.log**

```
8:37:33 (lmgrd) -----
8:37:33 (lmgrd) Please Note:
8:37:33 (lmgrd)
8:37:33 (lmgrd) This log is intended for debug purposes only.
8:37:33 (lmgrd) In order to capture accurate license
8:37:33 (lmgrd) usage data into an organized repository,
8:37:33 (lmgrd) please enable report logging. Use Flexera Software LLC's
8:37:33 (lmgrd) software license administration solution,
8:37:33 (lmgrd) FlexNet Manager, to readily gain visibility
8:37:33 (lmgrd) into license usage data and to create
8:37:33 (lmgrd) insightful reports on critical information like
8:37:33 (lmgrd) license availability and usage. FlexNet Manager
8:37:33 (lmgrd) can be fully automated to run these reports on
8:37:33 (lmgrd) schedule and can be used to track license
8:37:33 (lmgrd) servers and usage across a heterogeneous
8:37:33 (lmgrd) network of servers including Windows NT, Linux
8:37:33 (lmgrd) and UNIX. Contact Flexera Software LLC at
8:37:33 (lmgrd) www.flexerasoftware.com for more details on how to
8:37:33 (lmgrd) obtain an evaluation copy of FlexNet Manager
```



```
8:37:33 (lmgrd) for your enterprise.
8:37:33 (lmgrd)
8:37:33 (lmgrd) -----
8:37:33 (lmgrd)
8:37:33 (lmgrd)
8:37:33 (lmgrd) Server's System Date and Time: Tue May 10 2016 08:37:33 EDT
8:37:33 (lmgrd) SLOG: Summary LOG statistics is enabled.
8:37:33 (lmgrd) The license server manager (lmgrd) running as root:
8:37:33 (lmgrd)     This is a potential security problem
8:37:33 (lmgrd)     and is not recommended.
8:37:33 (lmgrd) Can't make directory /usr/tmp/.flexlm, errno: 2(No such file or directory)
8:37:33 (lmgrd) FlexNet Licensing (v11.13.1.2 build 173085 x64_lsb) started on ubuntu1604 (linux) (5/10/2016)
8:37:33 (lmgrd) Copyright (c) 1988-2015 Flexera Software LLC. All Rights Reserved.
8:37:33 (lmgrd) World Wide Web: http://www.flexerasoftware.com
8:37:33 (lmgrd) License file(s): /usr/local/intergraph/IngrLicenseSvr/INGR.lic
8:37:33 (lmgrd) lmgrd tcp-port 27000
8:37:33 (lmgrd) (@lmgrd-SLOG@) =====
8:37:33 (lmgrd) (@lmgrd-SLOG@) ==== LMGRD ====
8:37:33 (lmgrd) (@lmgrd-SLOG@) Start-Date: Tue May 10 2016 08:37:33 EDT
8:37:33 (lmgrd) (@lmgrd-SLOG@) PID: 3339
8:37:33 (lmgrd) (@lmgrd-SLOG@) LMGRD Version: v11.13.1.2 build 173085 x64_lsb ( build 173085 (ipv6))
8:37:33 (lmgrd) (@lmgrd-SLOG@)
8:37:33 (lmgrd) (@lmgrd-SLOG@) ==== Network Info ====
8:37:33 (lmgrd) (@lmgrd-SLOG@) Listening port: 27000
8:37:33 (lmgrd) (@lmgrd-SLOG@)
8:37:33 (lmgrd) (@lmgrd-SLOG@) ==== Startup Info ====
8:37:33 (lmgrd) (@lmgrd-SLOG@) Server Configuration: Single Server
8:37:33 (lmgrd) (@lmgrd-SLOG@) Command-line options used at LS startup: -c /usr/local/intergraph/IngrLicenseSvr/INGR.lic -l
/usr/local/intergraph/IngrLicenseSvr/IngrLicenseDbg.log
8:37:33 (lmgrd) (@lmgrd-SLOG@) License file(s) used: /usr/local/intergraph/IngrLicenseSvr/INGR.lic
8:37:33 (lmgrd) (@lmgrd-SLOG@) =====
8:37:33 (lmgrd) Starting vendor daemons ...
8:37:33 (lmgrd) Started INGRTS (internet tcp_port 59367 pid 3340)
8:37:33 (INGRTS) Unable to initialize access to trusted storage: 2
8:37:33 (INGRTS) FlexNet Licensing version v11.13.1.2 build 173085 x64_lsb
8:37:34 (INGRTS) SLOG: Summary LOG statistics is enabled.
8:37:34 (INGRTS) SLOG: FNPLS-INTERNAL-CKPT1
8:37:34 (INGRTS) SLOG: VM Status: 8
8:37:34 (INGRTS) SLOG: FNPLS-INTERNAL-CKPT2
8:37:34 (INGRTS) Server started on ubuntu1604 for: apessiws
8:37:34 (INGRTS) approf Spatial_Model_Job apadvan
8:37:34 (INGRTS) EXTERNAL FILTERS are OFF
8:37:34 (lmgrd) INGRTS using TCP-port 59367
8:37:34 (INGRTS) SLOG: Statistics Log Frequency is 240 minute(s).
8:37:34 (INGRTS) SLOG: TS update poll interval is 600 seconds.
8:37:34 (INGRTS) SLOG: Activation borrow reclaim percentage is 0.
8:37:34 (INGRTS) (@INGRTS-SLOG@) =====
8:37:34 (INGRTS) (@INGRTS-SLOG@) ==== Vendor Daemon ====
8:37:34 (INGRTS) (@INGRTS-SLOG@) Vendor daemon: INGRTS
8:37:34 (INGRTS) (@INGRTS-SLOG@) Start-Date: Tue May 10 2016 08:37:34 EDT
8:37:34 (INGRTS) (@INGRTS-SLOG@) PID: 3340
8:37:34 (INGRTS) (@INGRTS-SLOG@) VD Version: v11.13.1.2 build 173085 x64_lsb ( build 173085 (ipv6))
8:37:34 (INGRTS) (@INGRTS-SLOG@)
8:37:34 (INGRTS) (@INGRTS-SLOG@) ==== Startup/Restart Info ====
8:37:34 (INGRTS) (@INGRTS-SLOG@) Options file used: None
8:37:34 (INGRTS) (@INGRTS-SLOG@) Is vendor daemon a CVD: No
8:37:34 (INGRTS) (@INGRTS-SLOG@) Is TS accessed: No
8:37:34 (INGRTS) (@INGRTS-SLOG@) TS accessed for feature load: -NA-
8:37:34 (INGRTS) (@INGRTS-SLOG@) Number of VD restarts since LS startup: 0
8:37:34 (INGRTS) (@INGRTS-SLOG@)
8:37:34 (INGRTS) (@INGRTS-SLOG@) ==== Network Info ====
```

8:37:34 (INGRTS) (@INGRTS-SLOG@) Listening port: 59367  
8:37:34 (INGRTS) (@INGRTS-SLOG@) Daemon select timeout (in seconds): 1  
8:37:34 (INGRTS) (@INGRTS-SLOG@)  
8:37:34 (INGRTS) (@INGRTS-SLOG@) === Host Info ===  
8:37:34 (INGRTS) (@INGRTS-SLOG@) Host used in license file: ubuntu1604  
8:37:34 (INGRTS) (@INGRTS-SLOG@) Running on Hypervisor: VirtualBox  
8:37:34 (INGRTS) (@INGRTS-SLOG@) LMBIND needed: No  
8:37:34 (INGRTS) (@INGRTS-SLOG@) LMBIND port: -NA-  
8:37:34 (INGRTS) (@INGRTS-SLOG@) =====  
8:37:34 (INGRTS) Can't make directory /usr/tmp/.flexlm, errno: 2(No such file or directory)  
8:38:34 (INGRTS) Can't make directory /usr/tmp/.flexlm, errno: 2(No such file or directory)  
8:39:34 (INGRTS) Can't make directory /usr/tmp/.flexlm, errno: 2(No such file or directory)  
8:40:35 (INGRTS) Can't make directory /usr/tmp/.flexlm, errno: 2(No such file or directory)  
8:41:35 (INGRTS) Can't make directory /usr/tmp/.flexlm, errno: 2(No such file or directory)  
8:42:35 (INGRTS) Can't make directory /usr/tmp/.flexlm, errno: 2(No such file or directory)  
8:43:35 (INGRTS) Can't make directory /usr/tmp/.flexlm, errno: 2(No such file or directory)