TITAN USERS GUIDE
INSTALLING TITAN

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The TITAN software is now managed by the LROSE project

The TITAN software is now managed within the Lidar Radar Open Software Environment (LROSE) project.

LROSE is a joint project between Colorado State University (CSU) and NCAR.

TITAN is provided as-is, with no warranty for any purpose.

LINUX platform specifications

LINUX is the only fully-supported platform for running TITAN. Other operating systems have been supported in the past, and TITAN should still run on these, but the latest version of TITAN has only been extensively tested under LINUX.

The following are suggestions for the specifications for your LINUX platform, along with libraries which are needed for various applications.

Hardware specifications

- CPU - 3.0+ GHz. For real-time (and especially time-series work), fast quad-core processors are recommended.
- RAM – 8+ GBytes
- Disk space: large disks are good for archiving data. At a minimum, you should have a 500 Gbyte disk for a real-time system. For data archival, 1 TByte is good.
- Graphics card: 256+ MByte memory for 1600x1200 screen resolution.
- Check for LINUX compatibility. For specific hardware devices, it is worth checking, via Google searches, that a good driver is available.

Packages

For the required packages, see:

https://github.com/NCAR/lrose-core/blob/master/docs/README_BUILD.md

TITAN user account

TITAN can be run under any account.

It is **not advisable** to run it as **root**.

For real-time systems, TITAN is normally run under the **titan5** user account. This documentation will assume this is the account name.

User account login shell

The user account should use either **csh** or **tcsh** as the login shell. On LINUX these are identical.

Downloading TITAN

Installing TITAN from scratch now involves 2 steps:

(a) Download and install a software release from the LROSE site:

https://ncar.github.io/lrose-core/releases

(b) Download and install a project template from:

https://github.com/NCAR/titan-templates/releases

An alternative to downloading a software release is to clone the software directly from the github repository:

https://ncar.github.io/lrose-core/

and build it following the instructions on the lrose-core web pages.

Building and installing TITAN

You can either download a pre-compiled binary version of TITAN, or compile it from source.

To install the software, follow the instructions on the LROSE site:

https://ncar.github.io/lrose-core/

The default location for the LROSE Titan binaries is::

```
~/lrose/bin
```

It is recommended that you use this default location.

In older Titan distributions, this used to be:

```
~/rap/bin
```

If you have an existing installation that uses ~/rap, you can just make a link to the new location:

```
cd
ln -s lrose rap
```

Setting up the scripts and parameters to run TITAN

If you are new to TITAN, it is recommended that you download and install the template for the simple single radar case.

You can find this template at:

```
https://github.com/NCAR/titan-templates/releases
```

In the install process, you either copy the TITAN configuration files and scripts into the project directory, or make a link from the home directory into the project section of the distribution.

Untar the template tar file, and then run the script:

```
INSTALL_TITAN
```

at the top level.

This will install the template files into the standard directory:

```
~/projDir
```

It will also install the shell startup file:

```
~/.cshrc
```

It is important that you set up the titan5 user to make use of the csh or tcsh shell, not the bash shell.

After completing the template install, you should be able to do:

```
cd
source .cshrc
start_all
```

and to stop the system:

```
stop_all
```

New users will use the standard templates in the TITAN distribution for this step, as a way of exploring the system and learning how it operates. However, since projects vary a great deal, this step for most users will involve installing their own configuration rather than using one of the standard templates.