Hanthana 21 Installation Guide

Introduction

This guide helps you to get started with installing Hanthana Linux 21.

System requirements

Following minimum requirements should be full filled to install Hanthana Linux 21.

- CD or DVD drive
- 1 GHz processor
- 1GB RAM
- 20GB free hard disk space

Getting a Hanthana Linux 21 copy

You can either download a copy from <u>www.hanthana.org</u> or can get a copy from a volunteer distributor for free by visiting <u>http://www.hanthana.org/get-dvd.php</u>.

Data backup

Before the installation, please backup your data.

Configure your computer to boot from wither CD/DVD drive or from a bootable USB drive.

Enter to your computer's BIOS settings and from the Boot Device, choose the CD/DVD drive or USB Drive (depending on the media you use to install Hanthana Linux) as the First Boot Device.

Now you are ready to install Hanthana Linux 21 (Sinharaja).

Since the installation is from a DVD, it will take some time (time taken to read the DVD and based on the performance of the computer) to proceed from one step to the other. Please be patient until the next step loads so that you will be able to continue with the installation without any issues.

Booting the computer

Boot your computer with the Hanthana Linux DVD. You will get a screen similar to the following.



Select "Start Hanthana 21" and press Enter.

If you refrain from entering any key, Hanthana Linux will be started automatically after 8 seconds.

Once you select to start Hanthana Linux, a screen with a loading progress will be displayed.



Entering to Hanthana Linux desktop or installation



In this step, you can enter to Hanthana Linux by selecting "Try Hanthana".

You can use Hanthana Linux without installing it on your computer. If

you are new to Linux operating systems, it is recommended that first you try the operating system in live CD.

If you wish to install the system, select "Install to Hard Drive".

Let's select "Try Hanthana" and enter to the desktop.

Next you will be presented with the icon you can use to install Hanthana Linux from your desktop. Close this window and you can enter to Hanthana Linux desktop.



Entering Hanthana Linux

By entering to Hanthana Linux desktop, you have the opportunity to use the operating system.

In order to install, click on "Activities" and from there select "Install to Hard Drive". Please refer the screen capture below.



Installing Hanthana Linux

Let's enter the installation be clicking on the "Install to Hard Drive" icon as shown in the screen above.



Selecting the installation language

Select the installation language from the menu and click on "continue".

Installation summary

INSTALLATION SUMM	ARY			HANTHANA 21 🖽 us	INSTALLATION Help!
LOCALIZA	TION				
0	DATE & TIME Americas/New York timezone		KEYBOARD English (US)		
SYSTEM					
5	INSTALLATION DESTINATION Automatic partitioning selected	÷	NETWORK & HOSTNAM Wired (ens3) connected	E	
				Quit	Begin Installation
			We won't touch yo	ur disks until you clic	k 'Begin Installation'.
Please complete items m	arked with this icon before continuing to the next	t step.			

You can change the date and time by selecting "DATE & TIME".



Choose your time zone, you can do so by clicking on your country in the map.

Click on "Done".

INSTALLATION SUMM	ARY			HANTHANA 🖽 us	A 21 INSTALLATION Help!
LOCALIZA	TION				
\odot	DATE & TIME Americas/New York timezone	::::	KEYBOARD English (US)		
SYSTEM					
<u>S</u>	INSTALLATION DESTINATION Automatic partitioning selected	÷	NETWORK & HOS Wired (ens3) conn	STNAME ected	
				Quit	Begin Installation
			We won't i	touch your disks until yo	u click 'Begin Installation'.
A Please complete items ma	arked with this icon before continuing to the next step				

You can configure the hard disk by selecting "INSTALLATION DESTINATION".

INSTALLATION DESTINATION	HANTHANA 21	
Done	us	Help!
Device Selection		
Select the device(s) you'd like to install to. They will be left untouched until you click on the main menu's "Begin Installation" button.		
Local Standard Disks		
40 GiB		
ATA QEMU HARDDISK		
sda / 40 GiB free		
	Disks left unselected here	will not be touched.
Specialized & Network Disks		
Add a disk		
	Disks left unselected here	will not be touched.
Other Storage Options		
Partitioning		
Automatically configure partitioning. I will configure partitioning.		
I would like to make additional space available.		
Encryption		
Encrypt my data. You'll set a passphrase next.		
Full disk summary and bootloader	1 disk selected; 40 GiB c	apacity; 40 GiB free

Select the hard disk that you intent to install Hanthana Linux.

In "Other storage Options" section, you can select the way you want the disk to be partitioned.

- •Automatically configure partition
- •I will configure partition

Automatically configure partition

In "Automatically configure partition" option, if there is no free space in your hard disk, you will be presented with a screen similar to the following.

		HANTHANA 21 INSTALLATION
Device Selection Select the device(s) you'd like to install to. T Local Standard Disks 40 GiB ATA GEMU HARDDISK sda / 2016.5 KiB free Specialized & Network Disks	hey will be left untouched until you click on the main menu's "Begin Installation" button. INSTALLATION OPTIONS Your current Hanthana software selection requires 8978,41 MiB of available space, including 8978,41 MiB for software and 0 B for swap space. The disks you've selected have the following amounts of free space: 2016.5 KiB Free space available for use. 29.36 GiB Free space unavailable but reclaimable from existing partitions. You don't have enough space available to install Hanthana. You can shrink or remove existing partitions via our guided reclaim space tool, or you can adjust your partitions on your own in the custom partitioning interface.	Disks left unselected here will not be touched. Disks left unselected here will not be touched.
Other Storage Options Partitioning Automatically configure partitioning. I will o would like to make additional space available. Encryption Encrypt my data. You'll set a passphrase next. Full disk summary and bootloader	Cancel & add more disks Reclaim space	1 disk selected: 40 GiB capacity; 2016.5 KiB free
$\underline{\mathbb{A}}$. Error checking storage configuration. Click for de	tails.	

Click on "Reclaim space".

	INSTALLATION DESTINATIO	N				HANTHANA 21 INSTALLATION	
	RECLAIM DISK SPACE You can remove existing filesystems you no longer need to free up space for this installation. Removing a filesystem will permanently delete all of the data it contains.						
	Disk	Name	Filesystem	Reclaimable Space	Action		
	▼ 40 GIB ATA QEMU HARDDISK	sda		29.78 688 6056	Preserve		
	ntfs	sda 3	ntfs	22.3 GiB of 22.4 GiB	Preserve		
	ntfs	sda2	ntfs	7125 MiB of 17.2 GiB	Preserve		
	System_Reserved	sda1	ntfs	88 MiB of 350 MiB	Preserve		
	Preserve Delete Shrink					Delete all	
	1 disk; 29.36 GiB reclaimable space	(in files	ystems)		Installation requires a to	Total selected space to reclaim: O stal of 8978.41 MiB for system data. Cancel Reclaim space	
E	ull disk summary and bootloader				1 disk selec	ted; 40 GiB capacity; 2016.5 KiB free	
4	12 Error checking storage configuration. Click for details.						

From the list of partitions, select the one you intend to install Hanthana Linux and click on "Delete"

Next, click on "Reclaim space".

I will configure partition

When you select "I will configure partition" and click on "Done" you will be presented with a screen similar to the following.



If you have not allocated space to install Hanthana Linux, click on "Unknown" (Partitions on which Windows is installed).

MANUAL PARTITIONING Done			HANTHANA 21 INSTALLATION
 New Hanthana 21 Installation You haven't created any mount points for your Hanthana 21 installation yet. You can: Click here to create them automatically. Create new mount points by clicking the '+' button. Or, assign new mount points to existing partitions after selecting them below. New mount points will use the following partitioning scheme: LVM Unknown ntfs 350 MiB 	sda3 Mount Point: Desired Capacity: 22.42 GiB Device Type: Standard Partition Charlen Encrypt File System: ntrs Reformat	Device(s): ATA QEMU HARDDISK (sda) Modify	
add 1 ntfs sda2 17.24 GiB add 3 22.42 GiB > remove the selected mount point(s). 2016.5 KiB 40 GiB	Label:	Name: sda3	Update Settings Note: The settings you make on this screen will not be applied until you click on the main menu's 'Begin Installation' button.
1 storage device selected			Reset All

Then, select the partition you wish to install Hanthana and click on "Delete".



From the next window, click on "Delete It".

MANUAL PARTITIONING Done	HANTHANA 21 INST	ALLATION Help!
 New Hanthana 21 Installation You haven't created any mount points for your Hanthana 21 installation yet. You can: Click here to create them automatically. Create new mount points by clicking the '+' button. Or, assign new mount points to existing partitions after selecting them below. New mount points will use the following partitioning scheme: LVM Unknown Total sPace 40 GiB 	When you create mount points for your Hanthana 21 installation, you'll be able to view their details here.	
1 storage device selected		Reset All

If you select "Click here to create them automatically", your hard disk will be automatically partitioned.

Else, you can click on "+" and you can partition the disk as you wish as described below.

A description of the partitions you want to have when installing Hanthana Linux.

Mount point	File System Type	Size	Description
/	ext4	About 15GB	This partition is compulsory. It is required to have at least a space of 15GB but recommended to have 16GB.
/boot	ext4	500MB	This is not compulsory. The actual space required for this partition is about 30MB. But in a system upgrade, having a larger space will enable you to proceed with the upgrade without any issues. However it is unnecessary to allocation more that 500MB for this partition. The free space here cannot be utilized for your data.
Not applicable	swap	1GB	The intention of this partition is to use part of your hard disk as the RAM when your RAM is not sufficient enough. If your RAM is less than 1GB, the recommendation is to allocate double the RAM capacity to this partition. But if you have 2GB or RAM, make this partition to be 2GB. Any free space on this partition cannot be utilized for your data.
/home	ext4	As you wish	This is not compulsory. This is used to store user's (or users') data. Therefore you can allocate

	any amount as you wish. By
	creating a separate partition for
	/home you can preserve the user's
	(or users') data and user
	preferences (in most cases) when
	you are changing the system to
	another or in a system upgrade. If
	you have large number of private
	documents, mp3 files, movies,
	graphics etc, allocate space
	sufficient to all those.

Note: If your computer use "BIOS Boot (UEFI)" technology, for that you need to create a "BIOS Boot" as well.

Your hard disk will be automatically partitioned when you click on "Click here to create them automatically". If "BIOS Boot" is required, that will also be created automatically.

You will get a window similar to the below when you click on '+'. Select "Mount Point" and provide with the required capacity in the "Desired Capacity" field.

Ex:- Mount Point - / Desired Capacity - 15GB



MANUAL PARTITIONING		HANTHANA 21 INST	ALLATION
Done		us	Help!
Vew Hanthana 21 Installation You haven't created any mount points for your Hanthana 21 installation yet. You can: Citick here to create them automatically. Create new mount points by clicking the 's' button. New mount points will use the following partitioning scheme: LVM	ADD A NEW MOUNT POINT More customization options are available after creating the mount point below. Mount Point: / Desired Capacity: 15GB Cancel Add mount point	us to view their details here.	Heipi
+ - C			
AVAILABLE SPACE 40 GiB 40 GiB			
<u>1 storage device selected</u>			Reset All

Click on "Add Mount Point".

Repeat the same steps to create the other partitions as well.

MANUAL PARTITIONING		HANTHANA 21 INSTALLATION
× New Hanthana 21 Installation SYSTEM / hanthana-root 13,97 GIB >	hanthana-root Mount Point: Device(s): / ATA GEMU HARDDISK (sda) Desired Capacity: Modify 13.97 GiB	
	ADD A NEW MOUNT POINT More customization options are available after creating the mount point below. Mount Point: //boot v Desired Capacity: 500MB Cancel Add mount point	
+ - C AVAILABLE SPACE 26.02 GIB 1 storage device selected	Note: not be	Update Settings The settings you make on this screen will applied until you click on the main menu's 'Begin Installation' button. Reset All



MANUAL PARTITIONING		HANTHANA 21 INSTALLATION US Help!
► New Hanthana 21 Installation SYSTEM / boot stol / 13.97 GIB hanthana-root J 13.97 GIB Swap 1907.35 MIB > + - + -	hanthana-swap Mount Point: Desired Capacity: 1907.35 MIB	(4096 KiB free) ▼ Update Settings Note: The settings you make on this screen will not be applied until you click on the main menu's
AVAILABLE SPACE TOTAL SPACE 23.69 GiB 40 GiB 1 storage device selected		Reset All

MANUAL PARTITIONING				HANTHANA 21 INSTALLATION us Help!
New Hanthana 21 Installation DATA /nome hanthana-home SYSTEM /boot	22.06 GIB >	hanthana-home Mount Point: /home Desired Capacity:	Device(s): ATA QEMU HARDDISK (sda) Modify	
sdal / hanthana-root swap hanthana-swap	13.97 GIB 1907.35 MiB	Device Type: LVM File System: ext4 Reformat	Volume Group hanthana Modify	(4096 KiB free) 🔻
		Label:	Name: home	Update Settings
+ - C* AVAILABLE SPACE 1663.97 MiB TOTAL SPACE 1 storage device selected				Note: The settings you make on this screen will not be applied until you click on the main menu's 'Begin Installation' button. Reset All

Once you finish creating partitions, click on "Done".

Click on "Accept Changes" on the next window.

MANUAL PARTITIONING									HANTHANA 21 II us	NSTALLATION Help!
New Hanthana 21 Installatio DATA /home	'n	22.05 (21R \	hanthana- Mount Point	-home		Device(s):			
hanthana-home SYSTEM /boot	SUMMARY O	OF CHANGE	S result in t	he following ch	anges taking) effect after you re	eturn to the main mer	nick (eds) nu and begin installatio	on:	
sdil / hanthana-root swap hanthana-swap	Order Act 3 Cre 4 Cre 5 Cre 6 Cre 7 Cre 8 Cre 9 Cre 10 Cre 11 Cre 12 Cre 13 Cre	ate Device ate Format ate Device ate Format ate Device ate Device ate Format ate Device ate Format ate Device ate Format	Type partition ext4 partition physical lvmvg lvmlv ext4 lvmlv swap lvmlv ext4	volume (LVM)	Device Na sda1 sda1 sda2 sda2 hanthana hanthana-h hanthana-h hanthana-s hanthana-r hanthana-r hanthana-r	me Mountpoint /boot nome /home wap oot oot / /	uctom Partitioning	Accept Chapters	Tree) •	
+ - C AVAILABLE SPACE TOTAL SPACE 1663.97 MiB 40 GiB 1 storage device selected					Ca			Note: not b	The settings you make on to applied until you click on th 'Begin Instal	his screen will e main menu's lation' button. Reset All

Next, you will be presented again with the installation summary.

INSTALLATION SUMM	ARY			HANTHANA 21 IN 🖽 us	Help!
LOCALIZA	TION				
\odot	DATE & TIME Asia/Colombo timezone		KEYBOARD English (US)		
SYSTEM					
2	INSTALLATION DESTINATION Custom partitioning selected	÷	NETWORK & HOSTNAME Wired (ens3) connected	E	
			We won't touch you	Auit Be	gin Installation Begin Installation'.

Click on "Begin install" to proceed.

User settings

Next you will be presented with the user settings window.

CONFIGURATION	HANTHANA 21 INSTALLATION
USER SETTINGS	
ROOT PASSWORD USE	R CREATION Iser will be created
C Creating ext4 on /dev/mapper/hanthana-root	
$\hat{\Delta}$. Please complete items marked with this icon before continuing to the next step.	

You can set the administrator password by clicking on "ROOT PASSWORD".

ROOT PASSWORD			HANTHANA 21 IN	NSTALLATION Help!
The	root account is used for administe	ring the system. Enter a password for the root user.		
Root	Password:	•••••		
	G	Good		
Conf	irm:	•••••••		

When using the system, for some of the operations you will need to grant special permission. This special user account is needed for operations such as adding, deleting and editing a user account or configuring network settings etc.

This window allows you to set a password for that special user account, root. Enter the same password in both the text boxes provided. Please keep the password in mind.

Once you enter the password, click on "Done".

If the password is weak, please enter a strong password and try again, If you wish to continue with the same password, click on "Done" twice.

CONFIGURATION			HANTHANA 21 INST	LLATION
USER SETTINGS ROOT PASSWORD Root password is not set		USER CREATION No user will be created	ing us	new
C Creating ext4 on /dev/mapper/hanthana-root				5
Please complete items marked with this icon before continuing to	the next step.			

You can create a new user account by clicking on "USER CREATION". Create a new user here.

CREATE USER		HANTHANA 21 INSTALLATION us Help!
Full name	Hanthana	
Username	hanthana	
	Tip: Keep your username shorter than 32 characters and do not use spaces.	
	Make this user administrator	
	Require a password to use this account	
Password	•••••	
	Weak	
Confirm password	•••••	
	Advanced	
$\bar{\Delta}$ $$ You have provided a weak password: The password contains the user name	e in some form. Press Done again to use anyway.	

This window allows you to create a new user. It will be easy to avoid capital letters in user name. Please enter the same password in both the text boxes provided. Please keep the password in mind.

Refer the following example for a new user account.

Username: sirimal

Full Name: Sirimal Ahinsaka

Password: In places like institutions or public places, refrain from using the user name as the password.

Once you provide the required information, click on "Done".

If the password is weak, please enter a strong password and try again, If you wish to continue with the same password, click on "Done" twice.

CONFIGURATION	HANTHANA 21 INSTALLATION
USER SETTINGS	
ROOT PASSWORD Root password is set	will be created
Installing software 10%	

Next you will be presented with the progress of the Hanthana Linux installation. This may take some time (this time depends on the performance of your computer). Therefore please be patient. In most cases this will take 30 minutes or less.

CONFIGURATION	HANTHANA 21 INSTALLATION B us Helpi
USER SETTINGS	
ROOT PASSWORD Root password is set	USER CREATION Administrator hanthana will be created
Complete!	
	Hanthana is now successfully installed and ready for you to use! Go ahead and reboot to start using it!
	Quit

Once Hanthana Linux is successfully installed, click on "Quit".

Congratulations!

You have successfully installed Hanthana Linux in your computer.

Restarting the computer

Remove the media used for the installation and restart the computer.



When the computer is restarted, you will be prompted with a screen similar to the below to log into the computer.



Before you log into the system, if you want you can choose one of the desktop environments from the list below.

- GNOME
- GNOME Classic
- •GNOME on Weyland

Sat 10:56	ଡେ ଟ 🗆 ୩୦େଟ
Hanthana	
Password:	
Cancel Sign In • GNOME	
GNOME Classic GNOME on Wayland	

Enter your password and log in.

승규가 그는 것이 같은 것이 있는 것이 같아요.	Sat 10:56		Ø -	□ • ∪ •
명령 중 경험 중심 것이다. 이 경영 방법을				
the state of the s				
. 1912 - 2013 - 2016 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 201 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017 - 2017				
헤그는 이 것 같은 것 같은 것이 없는 것				
한 학생님께서는 사람을 얻었는 것을 했다.				
	Hanthana			
이 집에 잘 넣었는 것이 많은 것 수가	Password:			
친구는 여행을 만났던 것을 하는 것이 같이 많이 많이 다.	•••••			
	Cancel	🌣 Sign In		
3. 분들이 맞추었어? 이 이 가격 듯?				
승규는 방법에 가격을 가져야 했다.				
이 이 이 같은 것 같은 것 같아요.				
삶 것, 걸 좀 찾았지 못 잘 가지 않				
2 중 2 5 6 4 4 1 5 2 5 4 4 4				
선물을 물고 있는 것이 많은 것이 없는 것이 없는 것이 없다.				

Activities Gnome-initial-setup -		Thu 16:22	
		Welcome	
	W	/elcome!	
	Deutsch	Deutschland	
	English 🖌	United States	
	Español	España	
	français	France	
	русский	Российская Федерация	
	العربية	مصر	
	日本語	日本	
	汉语	中国	
		:	

Click on "Next".

Activities	Gnome-initial-setup 🔻	Thu 16:22		2 W C -	
Previous]	Typing		Next	
Typing Select your keyboard layout or an input method.					
		Cameroon Multilingual (Dvorak)	Preview		
		Cameroon Multilingual (qwerty)	Preview		
		English (Cameroon)	Preview		
		English (Canada)	Preview		
		English (Colemak)	Preview		
		English (US)	✓ Preview		
		:			

Click on "Next".

Activities	Gnome-initial-setup Thu 16:22	2 40 47 -
Previous	Online Accounts	Skip
	Connect Your Online Accounts Connecting your accounts will allow you to easily access your email, online calendar, contacts, documents and photos.	
	Google	
	Windows Live	
	Facebook	
	You can review your online accounts (and add others) after setup	

Click on "Skip".



Click on "Start using Hanthana".



Welcome to Hanthana Linux !

You can refer the frequently asked questions (FAQ) of Hanthana Linux from the H21-FAQ-English document in Desktop-Guide-and-FAQ. Gnome3-Desktop-Guide documentation is a guide for the GNOME desktop environment. Keyboard layouts for sayura, wijesekara and tamil keyboards are also included.

Please be kind enough to send your valuable comments and suggestions on Hanthana Linux to info@hanthana.org.

You can get your questions about Hanthana Linux answered by joining to **Hanthana Linux user group** <u>http://groups.google.com/group/hanthana-community</u>. Please join the group before you post. To send mails, please use <u>hanthana-</u> community@googlegroups.com.