

Wasta-Linux

Wasta-Linux

Contributing Authors:

Bill Martin

Brian Chapaitis

James Post

Kim Blewett

Others (wiki input)

Date: October 5, 2014

What is Wasta-Linux?

Wasta-Linux is a complete Language Development and Bible Translation environment, created by SIL Int'l (with help from PNG Branch members) to create a far less complex computer training environment than is presently possible with standard systems, like MS Windows and Mac OS. The latter OS (Operating System) environments are highly flexible but demand a lot of knowledge by the end user to really "drive" and customize. Wasta-Linux is designed to present the end user, most likely a PNGan national, with a limited set of functions, but guiding the user along in a given task related to Literacy Development, Bible Translation, or simple vernacular Dictionary creation. Audio recording might come later. The two part naming scheme "Wasta-Linux" helps with Google searches in the future.



Where does Wasta-Linux Come From?

Wasta-Linux was created by an SIL member, from an Africa Area Branch. He set up national translation teams in a central city office for language workers to progress in an environment where normal MS Windows licensing wasn't available. There were discoveries made along the way in terms of "ease of use" and reduced training requirements. Unrest in that country forced many people to evacuate. Now the work continues on but through remote workers who reside in another neighboring country. **Wästa** in that culture means "middle man" and is that person that helps you get things done.



Paratext



adapt it

an open source tool
for **related language** translations



let's grow a library
Bloom



We Say

Field Works Language Explorer (FLEX)

Wasta-Linux is a complete Language Worker environment. In its original form, or the "base-case" the environment doesn't have these programs installed, however, the program-download system can retrieve whatever program you want and install on your system within Wasta-Linux. The "pointers" to the on-line libraries on the Internet are ready to go. For remote areas where Internet access is not available, there is a method to download programs from a supplied local-level hard-disk, perhaps a USB hard-drive plugged into the computer's USB port.

However, for regional workshops and training exercises, it's possible for an Administrator to distribute a "custom" version of Wasta-Linux via a simple usb memory stick, with the desired programmes pre-installed on the mem stick used for easy installation. In this manner, a customized Wasta-Linux comes with these (and other) popular applications already installed and ready to go for the Language Worker. Programs found in Wasta-Linux could include Paratext, Adapt It, Bloom* and WeSay*. FLEx is available and any Open Source programs such as Libre Office, Audacity and Xiphos. Wasta-Linux knows where to look to install the latest Linux applications. In this manner, the Administrator can distribute Wasta-Linux with the most popular applications already there "out of the box".

* These two programs are almost ready for Linux and therefore Wasta-Linux.



The Advantages of Wasta-Linux

The Primary Advantage of Wasta-Linux are:

1. Never encounter a virus ever again (most if not all present viruses are designed for Windows and some for Mac OS. Never waste valuable CPU resources (speed hit) on low-power consuming (solar powered) notebooks due to incessant and intrusive virus scanning software that constantly runs in the background of other "normal" computers.
2. Automated, historical data file backup of language data. Our data resides in standard places, like Paratext data, and by simply plugging in a USB Thumb drive or Mem stick the user can back up incremental changes from the last time he/she did a backup. The utility pops up, automatically to do this. With a history, this means that corrupted files that were back up weeks ago (and you did not notice) can be ignored and you can go back in time to the last known "good" version of the data. It is never enough to simply make a "copy" of your files.

3. Easy software updates. Both the Wasta-Linux environment and applications like Paratext can be updated by at least two easy methods. Via the Internet in the real world; or Ukarumpa servers here at Ukarumpa, with an adequate network connection. Or via USB Memory Stick without any connectivity to any network resources, or the Internet at all. This would include everything in the environment such as WeSay, Bloom and Paratext software, and the Wasta-Linux environment itself. Language data should remain undisturbed at all times.
4. All resources are designed to be freely copyable (no royalty restrictions) and Mem Sticks used for demo and installation purposes can be copied and handed out freely without worry about software license violations of any kind. PNGans can easily obtain copies of Wasta-Linux and church members. Paratext does require a standard user registration however.
5. Wasta-Linux can live and run (execute) as a fully functioning environment on a lowly Mem Stick inserted into most notebook computers today (there might be some hardware that doesn't work, but that is rare nowadays). The user can "boot" from USB and run directly from the Mem Stick to test the environment and the applications like Paratext BEFORE an commitment to install on their typically MS Windows machine. In this way the user can "try before the buy" into the concept.
6. Wasta-Linux with a single icon launch can install itself onto the Hard Drive of the host machine. You have the option of completely running fresh from the hard drive (much faster this way) and throw away MS Windows completely, or you can co-exist with MS Windows and choose which way you want to go, at "Boot time". The choice is yours. Obviously if we want PNGans to not trash their MS Windows machines completely via the wantoks, then we might want to choose the former option and delete MS Windows, or better still, we simply do not have Windows as a live "boot" option, even though it exists on the hard drive. This will save face with the wantoks in the village later. "Sori, Windos i no i stap!"
7. Wasta-Linux can be customized (usually by a consultant) such that only the applications that the end user has been trained to use.... are in the presentation. There are no icons on the desktop or menu items that lead to applications that the user does not need to know about, or hasn't been trained yet to use. Upon "just in time" training with an application (e.g. Thunderbird for email) would allow the consultant to simply "flip a switch" and then Thunderbird is now present to use... but after suitable training. This means that the user and/or children or wantoks cannot "poke around" the system and do damage to the work in progress.
8. Wasta-Linux can easily turn off or on, resource hogs, such as video playback systems. If the wantoks are prone to place illegal movies via a mem stick into the system, Wasta-Linux can be programmed to lock out such requests and never play videos. Other kinds of applications could also be prevented from ever executing.
9. Regional Custom Versions. Wasta-Linux has a base form that comes out from time to time, and then certain custom "regional" versions can be easily made on top of the new "base". These customizations are usually performed by the technician-type (see below) running custom scripts registered in an on-line library. So, once a new Linux-base comes out, new custom versions can be generate easily. Examples of Wasta-custom versions would be Sudan; Northern India; Bougainville; Manus Island teams; Ukarumpa National Training Centre, Wewak. Any custom version normally lives on a bootable Mem Stick and can be freely copied and handed out to others. Item examples specific to a region would include: custom keyboards; specific Linux applications; settings on Linux applications (e.g. no "backup" menu item in Paratext) and various default settings in standard apps, like Firefox (no graphics by default) or LO Writer (always "save as" to .docx format)
10. Wasta can be passed on to others, "free of charge". Whenever possible, Open Source tools and Language Resources are "ready to go" and custom Wasta distributions can be duplicated and handed

out to others.



The Three Types of Wasta-Linux Users

The Language Worker

The normal, trained PNGan such as our graduating students at the NTC; Trained National Bible Translators across the Manus Island province; Various national teams in a MLI (Multi-Language Initiative) project that has reached some level of maturity.

- [Language Worker Page](#)

The Consultant/ Advisor

The one who assists the PNGan language worker. This person can be an trained expat or PNGan as well. They have extra knowledge to easily manipulate the presentation of Wasta-Linux for the end user. An example here, might be a "back translation" consultant who would need to adjust Paratext and perhaps the environment for this new task, or a better example might be the Lexicographer consultant who had taught the use of WeSay to the end user, who was doing Bible Translation before. Usually this person simply knows a handful of "special commands" and "right-click-menu" items that allow for easy manipulation of the desktop presentation, or to reveal a formerly hidden menu item.

- [Consultant Page](#)



The Technician

These are the experts in Wasta-Linux and typically have a good beginner's level understanding of Linux. They know the right places to edit control files in the file system hierarchy and they know the normal Linux tools to get the job done. They know how change permission rights of resources to get the tasks done. They know how to do "special requests" by consultants for new uses of Wasta-Linux and modify the system accordingly. We do not need many Wasta-Linux technicians, but we need far more Consultant/Advisor types in real world situations.

- [Technician Page](#)