

Linux Academy: Accessibility in Linux – Course Notes

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Video One – Sticky/Repeat Keys and Slow/Bounce Keys

- slow keys are used to prevent inadvertent repeat of key presses either from shaking or slow up/down depression of keys
 - timing can be set more or less sensitive by user depending on the type of user restriction
- repeat keys control the amount of time that takes place before the same key can be pressed simultaneously and accepts as input
- sticky/repeat keys are used so that shift/ctl/alt or other special keys can be pressed and will remain “stuck” until after the next character is depressed

Video Two – MouseKeys and Onscreen Keyboard

- mousekeys is a setting that will enable the number pad on a standard keyboard to function as both the pointing/directional control for the mouse cursor as well as buttons on the keypad for left and right mouse click
- the onscreen keyboard, once activated, will pop up any time a screen or field that requires keyboard input has focus
 - can be expanded to include function keys as well as numeric keypad as necessary with a mouse click on the appropriate setting button

Video Three – Screen Reader and Screen Magnifier

- embedded accessibility features across all Linux distributions
- features are typically pulled from support libraries that typically are distributed with the accessibility application Orca (see Video Six)
- screen magnifier allows a mouse controlled windows or full screen magnification of GUI and text on the screen, in varying but controllable zoom settings, for users with sight restrictions
- screen reader can be activated for extreme sight restriction (or not – some just prefer the text read to them) which will allow the system to read text from any screen, menu, button or control that has focus
 - voices are generally changeable, except Ubuntu without hacking the configuration files

Video Four – Large Print Screen and High Contrast Desktop Themes

- both of these utilities are available for users with varying degrees of sight restrictions in order to increase readability and contrast of the desktop
- large print simply replaces all of the control and window text defaults with a larger print that makes them easier to read, can be similar to what happens in Microsoft Windows if you choose to use a higher screen DPI setting than the default for the resolution used
- high contrast changes the screen, icons and common control elements to very high contrast (black on white, white on black, color to color high contrast settings) visuals that make each component and related text easily distinguishable from the background or other elements on the screen

Video Five – Braille Display and Gestures

- some of the braille management has been pulled by various distributions from the braille library typically included with Orca (see Video Six)
- Debian distributions offer the braille-console library that allows special terminal output
- braille device drivers are available for various USB braille output devices on all distributions

Video Six – Orca and GOK

- Orca – application that manages many of the now embedded accessibility features for Linux
 - magnification
 - braille output
 - screen reader
 - key bindings
 - text attributes
- GOK – gnome onscreen keyboard

- appears the same (RPM based distributions) or slightly altered (Debian) than the default onscreen keyboard from an accessibility stand point
- poorly supported and integrated across most distributions
 - state of accessibility across various distributions is inconsistent, buggy and generally poorly implemented
 - much attention and or assistance with these utilities is needed across the board
 - often distributions have one or less than one developer responsible for the maintenance of all these utilities