



Clear Ballot

ClearDesign 1.4

System Identification Guide (Vote-by-Mail Campaign 2)

ClearDesign System Identification Guide (Vote-by-Mail Campaign 2)

Clear Ballot Part Number: 100074-10012

Copyright © 2012–2018 Clear Ballot Group. All rights reserved.

ClearAccess, ClearAudit, Clear Ballot, ClearCast, ClearCount, ClearData, ClearDesign, ClearVote, DesignServer, DesignStation, Image-to-Ballot Traceability, MatchPoint, ScanServer, ScanStation, Speed Accuracy Transparency, Visualization of Voter Intent, Visual Verification, and Vote Visualization are trademarks of Clear Ballot Group.

ScandAll PRO is a trademark of Fujitsu Limited. All rights reserved. Other product and company names mentioned herein are the property of their respective owners.

Clear Ballot Group
7 Water Street, Suite 700
Boston, MA 02109
857-250-4961
clearballot.com

Document history

Date	Description	Version	Author
01/10/2017	Initial submission to EAC	1.0	Joe Srednicki
02/03/2017	Minor typographical and reference-related edits	1.0.1	Joe Srednicki
05/09/2017	Minor update based on feedback from the state of Colorado and Clear Ballot Quality Assurance	1.0.2	Joe Srednicki
06/16/2017	Minor updates for vote-by-mail campaign.	1.0.3	Joe Srednicki
06/29/2017	Added Windows 10 Pro operating system to the section "DesignStations."	1.0.4	Joe Srednicki
07/04/2017	Updated version numbers in the following sections: "Separately installed third-party files used by the DesignServer," "Third-party files used during the DesignServer build process," "Third-party files distributed with the DesignServer."	1.0.5	Joe Srednicki
07/19/2017	Updated to "Quality Assurance Standards" based on input from QA	1.0.6	Joe Srednicki
07/21/2017	Updated the version number for Colorado	1.0.7	Joe Srednicki
11/09/2017	Updated the reference to errors in "Data input/output errors," "Exception conditions," and "System failures." Added the section "Reports." Made a reference in "Programming specification details" to the zip file that accompanies this document. Added "Data quality assessment."	1.0.8	Joe Srednicki
11/10/2017	Added a cross-reference in "Software environment" to "Third-party tool used during the DesignServer build process" to address pyinstaller. Added "Process flow diagrams."	1.0.9	Joe Srednicki
01/19/2018	Vote-by-Mail campaign 2	1.0.10	Joni G. McNutt

Table of contents

Preface 5

ClearDesign files 6



Preface

This section defines the purpose of this document. It contains the following subsections.

- About this document
- Scope of this document
- Intended audience

About this document

This document enables you to verify the installed files for ClearDesign.



A ClearVote™ system can comprise the ClearAccess™, ClearAudit™, ClearCast™, ClearCount™, and ClearDesign™ products. Jurisdictions are not required to purchase all products. You can ignore references to any ClearVote components that are not part of your voting system. Also ignore implementation options that are not relevant to your policies and procedures.

Scope of this document

This document describes the following aspects of the ClearDesign system:

- [Installed Clear Ballot product files](#)
- [Installed system information](#)

Intended audience

This document is intended for state and federal election officials and their voting system test laboratories as part of the Technical Data Package (TDP) required to certify the ClearVote voting system for use. This document is also used by Clear Ballot personnel who support election officials and election staff.

ClearDesign files



For information about the location of run-time files, see the *ClearDesign Software Design and Specification*.

Verifying installed software

To verify that the installed software matches the certified version:

1. Copy the files installed on the ClearDesign server to removable media.
2. Identify a computer running a file integrity verification application, for example, fsum.
3. Load the removable media containing the Clear Ballot files on that computer.
4. Generate SHA-256 hashes for each of the Clear Ballot files.
5. Compare the hash generated for each file to that provided for the file in the following table. If a hash:
 - Matches—The file is unmodified.
 - Does not match—The file is modified, improperly installed, or rendered nonmatching for some other reason. In this case, the software on the server no longer matches the certified version.
6. If any mismatch occurs, do one of the following:
 - Follow jurisdictional procedures to resolve the discrepancy.
 - Contact Clear Ballot Technical Support for assistance.

Installed Clear Ballot product files

Table 1-1 lists the file specification and SHA-56 hash for each of the Clear Ballot-authored files installed on the DesignServer.

The **Date** column provides the timestamp of the corresponding file in the system, which reflects the most recent modification to the file. The **File Digest** column lists the hash value.

Table 1-1. Installed Clear Ballot product files

File		
/usr/share/cbg/clearDesign/clearDesign.conf		
/usr/share/cbg/clearDesign/clearDesign.fcgi		
/usr/share/cbg/clearDesign/install		
/usr/share/cbg/clearDesign/libcrypto.so.1.0.0		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/css/jquery.dataTables.min.css		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/ColReorder/css/dataTables.colReorder.min.css		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/ColReorder/images/insert.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/ColReorder/js/dataTables.colReorder.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/ColVis/css/dataTables.colVis.min.css		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/ColVis/js/dataTables.colVis.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/css/dataTables.tableTools.min.css		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/background.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/collection.png		



Table 1-1. Installed Clear Ballot product files (continued)

File		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/collection_hover.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/copy.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/copy_hover.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/csv.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/csv_hover.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/pdf.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/pdf_hover.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/print.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/print_hover.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/psd/collection.psd		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/psd/copy document.psd		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/psd/file_types.psd		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/psd/printer.psd		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/xls.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/images/xls_hover.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/js/dataTables.tableTools.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/extensions/TableTools/swf/copy_csv_xls_pdf.swf		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/Sorting icons.psd		

Table 1-1. Installed Clear Ballot product files (continued)

File		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/back_disabled.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/back_enabled.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/back_enabled_hover.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/favicon.ico		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/forward_disabled.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/forward_enabled.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/forward_enabled_hover.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/sort_asc.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/sort_asc_disabled.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/sort_both.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/sort_desc.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/images/sort_desc_disabled.png		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/js/jquery.dataTables.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/DataTables/js/natural.js		
/usr/share/cbg/clearDesign/static/3rdParty/bootstrap/css/bootstrap.min.css		
/usr/share/cbg/clearDesign/static/3rdParty/bootstrap/fonts/glyphicons-halflings-regular.eot		
/usr/share/cbg/clearDesign/static/3rdParty/bootstrap/fonts/glyphicons-halflings-regular.svg		
/usr/share/cbg/clearDesign/static/3rdParty/bootstrap/fonts/glyphicons-halflings-regular.ttf		



Table 1-1. Installed Clear Ballot product files (continued)

File		
/usr/share/cbg/clearDesign/static/3rdParty/bootstrap/fonts/glyphicons-halflings-regular.woff		
/usr/share/cbg/clearDesign/static/3rdParty/bootstrap/js/bootstrap.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/fastclick/LICENSE		
/usr/share/cbg/clearDesign/static/3rdParty/fastclick/fastclick.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/jquery-impromptu/MIT-LICENSE.txt		
/usr/share/cbg/clearDesign/static/3rdParty/jquery-impromptu/jquery-impromptu.min.css		
/usr/share/cbg/clearDesign/static/3rdParty/jquery-impromptu/jquery-impromptu.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/jquery-qrcode/MIT-LICENSE.txt		
/usr/share/cbg/clearDesign/static/3rdParty/jquery-qrcode/jquery.qrcode.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/jquery-splitter/css/jquery.splitter.min.css		
/usr/share/cbg/clearDesign/static/3rdParty/jquery-splitter/js/jquery.splitter.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/jquery-ui/MIT-LICENSE.txt		
/usr/share/cbg/clearDesign/static/3rdParty/jquery-ui/js/jquery-ui.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/jquery/MIT-LICENSE.txt		
/usr/share/cbg/clearDesign/static/3rdParty/jquery/js/jquery.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/jscolor/arrow.gif		
/usr/share/cbg/clearDesign/static/3rdParty/jscolor/cross.gif		
/usr/share/cbg/clearDesign/static/3rdParty/jscolor/hs.png		

Table 1-1. Installed Clear Ballot product files (continued)

File		
/usr/share/cbg/clearDesign/static/3rdParty/jscolor/hv.png		
/usr/share/cbg/clearDesign/static/3rdParty/jscolor/jscolor.js		
/usr/share/cbg/clearDesign/static/3rdParty/jszip/jszip.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/libmp3lame/libmp3lame.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/papaparse/papaparse.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/LICENSE.TXT		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/plugins/code/plugin.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/plugins/fullscreen/plugin.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/plugins/paste/plugin.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/plugins/searchreplace/plugin.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/plugins/table/plugin.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/plugins/textcolor/plugin.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/content.inline.min.css		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/content.min.css		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/fonts/tinymce-small.eot		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/fonts/tinymce-small.svg		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/fonts/tinymce-small.ttf		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/fonts/tinymce-small.woff		



Table 1-1. Installed Clear Ballot product files (continued)

File		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/fonts/tinymce.eot		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/fonts/tinymce.svg		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/fonts/tinymce.ttf		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/fonts/tinymce.woff		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/img/anchor.gif		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/img/loader.gif		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/img/object.gif		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/img/trans.gif		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/skin.ie7.min.css		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/skins/lightgray/skin.min.css		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/themes/modern/theme.min.js		
/usr/share/cbg/clearDesign/static/3rdParty/tinymce/tinymce.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/css/audioRecorder.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/base.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/digitalBallot.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/fonts.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/fonts/NotoSans-Bold.ttf		
/usr/share/cbg/clearDesign/static/clearBallot/css/fonts/NotoSans-Regular.ttf		

Table 1-1. Installed Clear Ballot product files (continued)

File		
/usr/share/cbg/clearDesign/static/clearBallot/css/fonts/NotoSansCJKtc-Regular.otf		
/usr/share/cbg/clearDesign/static/clearBallot/css/fonts/NotoSansExtended-Bold.ttf		
/usr/share/cbg/clearDesign/static/clearBallot/css/fonts/NotoSansExtended-Regular.ttf		
/usr/share/cbg/clearDesign/static/clearBallot/css/fonts/NotoSerif-Bold.ttf		
/usr/share/cbg/clearDesign/static/clearBallot/css/fonts/NotoSerif-Regular.ttf		
/usr/share/cbg/clearDesign/static/clearBallot/css/fonts/OFL.txt		
/usr/share/cbg/clearDesign/static/clearBallot/css/fonts/SourceCodePro-Bold.ttf		
/usr/share/cbg/clearDesign/static/clearBallot/css/fonts/SourceCodePro-Regular.ttf		
/usr/share/cbg/clearDesign/static/clearBallot/css/paperBallot.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/print.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/report.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/sampleBallot.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/signin.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/tinymce.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/tinymce_Candidate.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/tinymce_Contest.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/tinymce_Header.css		
/usr/share/cbg/clearDesign/static/clearBallot/css/tinymce_VoterGroup.css		



Table 1-1. Installed Clear Ballot product files (continued)

File		
/usr/share/cbg/clearDesign/static/clearBallot/images/CB-Logo.png		
/usr/share/cbg/clearDesign/static/clearBallot/images/CB-small.ico		
/usr/share/cbg/clearDesign/static/clearBallot/images/ClearDesign.png		
/usr/share/cbg/clearDesign/static/clearBallot/images/navigator.png		
/usr/share/cbg/clearDesign/static/clearBallot/js/audioEditor.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/ballotModel.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/base.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/bkLayoutPaper.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/cbg.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/digitalController.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/digitalLayout.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/digitalModel.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/paperController.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/paperLayout.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/paperViewer.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/printPDF.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/record.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/js/sampleBallot.min.js		
/usr/share/cbg/clearDesign/static/clearBallot/library/images/Filled oval.png		

Installed system information

Table 1-2 lists the system packages that are installed with ClearDesign. Clear Ballot does *not* modify any of the listed third-party system packages.

Table 1-2. Installed system information

Package	Version	Description
accountsservice	0.6.35-0ubuntu7.2	query and manipulate user account information
acpid	1:2.0.21-1ubuntu2	Advanced Configuration and Power Interface event daemon
adduser	3.113+nmu3ubuntu3	add and remove users and groups
apache2	2.4.7-1ubuntu4.9	Apache HTTP Server
apache2-bin	2.4.7-1ubuntu4.9	Apache HTTP Server (binary files and modules)
apache2-data	2.4.7-1ubuntu4.9	Apache HTTP Server (common files)
apparmor	2.8.95~2430-0ubuntu5.3	user-space parser utility for AppArmor
apport	2.14.1-0ubuntu3.19	automatically generate crash reports for debugging
apport-symptoms	0.20	symptom scripts for apport
apt	1.0.1ubuntu2.13	commandline package manager
apt-transport-https	1.0.1ubuntu2.13	https download transport for APT
apt-utils	1.0.1ubuntu2.13	package management related utility programs



Table 1-2. Installed system information (continued)

Package	Version	Description
apt-xapian-index	0.45ubuntu4	maintenance and search tools for a Xapian index of Debian packages
aptitude	0.6.8.2-1ubuntu4	terminal-based package manager
aptitude-common	0.6.8.2-1ubuntu4	architecture independent files for the aptitude package manager
arping	2.11-1	sends IP and/or ARP pings (to the MAC address)
at	3.1.14-1ubuntu1	Delayed job execution and batch processing
attr	1:2.4.47-1ubuntu1	Utilities for manipulating filesystem extended attributes
base-files	7.2ubuntu5.4	Debian base system miscellaneous files
base-passwd	3.5.33	Debian base system master password and group files
bash	4.3-7ubuntu1.5	GNU Bourne Again SHell
bash-completion	1:2.1-4ubuntu0.1	programmable completion for the bash shell
bc	1.06.95-8ubuntu1	GNU bc arbitrary precision calculator language
bind9-host	1:9.9.5.dfsg-3ubuntu0.8	Version of 'host' bundled with BIND 9.X
biosdevname	0.4.1-0ubuntu6.3	apply BIOS-given names to network devices
bsdmainutils	9.0.5ubuntu1	collection of more utilities from FreeBSD
bsdutils	1:2.20.1-5.1ubuntu20.7	Basic utilities from 4.4BSD-Lite

Table 1-2. Installed system information (continued)

Package	Version	Description
busybox-initramfs	1:1.21.0-1ubuntu1	Standalone shell setup for initramfs
busybox-static	1:1.21.0-1ubuntu1	Standalone rescue shell with tons of builtin utilities
byobu	5.77-0ubuntu1.2	powerful
text based window manager and shell multiplexer	bzip2	1.0.6-5
high-quality block-sorting file compressor - utilities	ca-certificates	20160104ubuntu0.14.04.1
Common CA certificates	cloud-guest-utils	0.27-0ubuntu9.2
cloud guest utilities	cloud-init	0.7.5-0ubuntu1.18
Init scripts for cloud instances	command-not-found	0.3ubuntu12
Suggest installation of packages in interactive bash sessions	command-not-found-data	0.3ubuntu12
Set of data files for command-not-found.	console-setup	1.70ubuntu8
console font and keymap setup program	coreutils	8.21-1ubuntu5.4
GNU core utilities	cpio	2.11+dfsg-1ubuntu1.2
GNU cpio -- a program to manage archives of files	cpp	4:4.8.2-1ubuntu6
GNU C preprocessor (cpp)	cpp-4.8	4.8.4-2ubuntu1~14.04.1
GNU C preprocessor	crda	1.1.2-1ubuntu2

Table 1-2. Installed system information (continued)

Package	Version	Description
wireless Central Regulatory Domain Agent	cron	3.0pl1-124ubuntu2
process scheduling daemon	curl	7.35.0-1ubuntu2.6
command line tool for transferring data with URL syntax	dash	0.5.7-4ubuntu1
POSIX-compliant shell	davfs2	1.4.7-3
mount a WebDAV resource as a regular file system	dbus	1.6.18-0ubuntu4.3
simple interprocess messaging system (daemon and utilities)	debconf	1.5.51ubuntu2
Debian configuration management system	debconf-i18n	1.5.51ubuntu2
full internationalization support for debconf	debianutils	4.4
Miscellaneous utilities specific to Debian	dh-python	1.20140128-1ubuntu8.2
Debian helper tools for packaging Python libraries and applications	diffutils	1:3.3-1
File comparison utilities	dmidecode	2.12-2
SMBIOS/DMI table decoder	dmsetup	2:1.02.77-6ubuntu2
Linux Kernel Device Mapper userspace library	dnsutils	1:9.9.5.dfsg-3ubuntu0.8
Clients provided with BIND	dosfstools	3.0.26-1
utilities for making and checking MS-DOS FAT filesystems	dpkg	1.17.5ubuntu5.6

Table 1-2. Installed system information (continued)

Package	Version	Description
Debian package management system	e2fslibs	1.42.9-3ubuntu1.3
ext2/ext3/ext4 file system libraries	e2fsprogs	1.42.9-3ubuntu1.3
ext2/ext3/ext4 file system utilities	eatmydata	26-2
library and utilities designed to disable fsync and friends	ed	1.9-2
classic UNIX line editor	eject	2.1.5+deb1+cvs20081104-13.1
ejects CDs and operates CD-Changers under Linux	espeak	1.47.11-1ubuntu1
Multi-lingual software speech synthesizer	espeak-data	1.47.11-1ubuntu1
Multi-lingual software speech synthesizer: speech data files	ethtool	1:3.13-1
display or change Ethernet device settings	file	1:5.14-2ubuntu3.3
Determines file type using magic numbers	findutils	4.4.2-7
utilities for finding files--find	xargs	fontconfig-config
2.11.0-0ubuntu4.1	generic font configuration library - configuration	fonts-dejavu-core
2.34-1ubuntu1	Vera font family derivate with additional characters	fonts-ubuntu-font-family-console
0.80-0ubuntu6	Ubuntu Font Family Linux console fonts	sans-serif monospace
friendly-recovery	0.2.25	Make recovery more user-friendly
ftp	0.17-28	classical file transfer client

Table 1-2. Installed system information (continued)

Package	Version	Description
fuse	2.9.2-4ubuntu4.14.04.1	Filesystem in Userspace
gawk	1:4.0.1+dfsg-2.1ubuntu2	GNU awk
a pattern scanning and processing language	gcc-4.8-base	4.8.4-2ubuntu1~14.04.1
GCC	the GNU Compiler Collection (base package)	gcc-4.9-base
4.9.3-0ubuntu4	GCC	the GNU Compiler Collection (base package)
gdisk	0.8.8-1ubuntu0.1	GPT fdisk text-mode partitioning tool
geoip-database	20140313-1	IP lookup command line tools that use the GeoIP library (country database)
gettext-base	0.18.3.1-1ubuntu3	GNU Internationalization utilities for the base system
gir1.2-glib-2.0	1.40.0-1ubuntu0.2	Introspection data for GLib
GObject	Gio and GModule	gnupg
1.4.16-1ubuntu2.3	GNU privacy guard - a free PGP replacement	gpgv
1.4.16-1ubuntu2.3	GNU privacy guard - signature verification tool	grep
2.16-1	GNU grep	egrep and fgrep
groff-base	1.22.2-5	GNU troff text-formatting system (base system components)
grub2-common	2.02~beta2-9ubuntu1.7	GRand Unified Bootloader (common files for version 2)

Table 1-2. Installed system information (continued)

Package	Version	Description
grub-common	2.02~beta2-9ubuntu1.7	GRand Unified Bootloader (common files)
grub-gfxpayload-lists	0.6	GRUB gfxpayload blacklist
grub-pc	2.02~beta2-9ubuntu1.7	GRand Unified Bootloader
version 2 (PC/BIOS version)	grub-pc-bin	2.02~beta2-9ubuntu1.7
GRand Unified Bootloader	version 2 (PC/BIOS binaries)	gzip
1.6-3ubuntu1	GNU compression utilities	hdparm
9.43-1ubuntu3	tune hard disk parameters for high performance	hostname
3.15ubuntu1	utility to set/show the host name or domain name	ifupdown
0.7.47.2ubuntu4.4	high level tools to configure network interfaces	info
5.2.0.dfsg.1-2	Standalone GNU Info documentation browser	init-system-helpers
1.14	helper tools for all init systems	initramfs-tools
0.103ubuntu4.3	tools for generating an initramfs	initramfs-tools-bin
0.103ubuntu4.3	binaries used by initramfs-tools	initscripts
2.88dsf-41ubuntu6.3	scripts for initializing and shutting down the system	insserv
1.14.0-5ubuntu2	boot sequence organizer using LSB init.d script dependency information	install-info
5.2.0.dfsg.1-2	Manage installed documentation in info format	installation-report
2.54ubuntu1	system installation report	iproute2

Table 1-2. Installed system information (continued)

Package	Version	Description
3.12.0-2ubuntu1	networking and traffic control tools	iptables
1.4.21-1ubuntu1	administration tools for packet filtering and NAT	iputils-ping
3:20121221-4ubuntu1.1	Tools to test the reachability of network hosts	iputils-tracepath
3:20121221-4ubuntu1.1	Tools to trace the network path to a remote host	irqbalance
1.0.6-2ubuntu0.14.04.4	Daemon to balance interrupts for SMP systems	isc-dhcp-client
4.2.4-7ubuntu12.4	ISC DHCP client	isc-dhcp-common
4.2.4-7ubuntu12.4	common files used by all the isc-dhcp* packages	iso-codes
3.52-1	ISO language	territory
currency	script codes and their translations	kbd
1.15.5-1ubuntu1	Linux console font and keytable utilities	keyboard-configuration
1.70ubuntu8	system-wide keyboard preferences	klibc-utils
2.0.3-0ubuntu1	small utilities built with klibc for early boot	kmod
15-0ubuntu6	tools for managing Linux kernel modules	krb5-locales
1.12+dfsg-2ubuntu5.2	Internationalization support for MIT Kerberos	lame
3.99.5+repack1-3ubuntu1	MP3 encoding library (frontend)	landscape-common
14.12-0ubuntu0.14.04	The Landscape administration system client - Common files	language-pack-en
1:14.04+20150219	translation updates for language English	language-pack-en-base

Table 1-2. Installed system information (continued)

Package	Version	Description
1:14.04+20150219	translations for language English	language-selector-common
0.129.3	Language selector for Ubuntu	laptop-detect
0.13.7ubuntu2	attempt to detect a laptop	less
458-2	pager program similar to more	libaccountsservice0
0.6.35-0ubuntu7.2	query and manipulate user account information - shared libraries	libacl1
2.2.52-1	Access control list shared library	libaio1
0.3.109-4	Linux kernel AIO access library - shared library	libapache2-mod-fcgid
1:2.3.9-1	FastCGI interface module for Apache 2	libapparmor1
2.8.95~2430-0ubuntu5.3	changehat AppArmor library	libapparmor-perl
2.8.95~2430-0ubuntu5.3	AppArmor library Perl bindings	libapr1
1.5.0-1	Apache Portable Runtime Library	libaprutil1
1.5.3-1	Apache Portable Runtime Utility Library	libaprutil1-dbd-sqlite3
1.5.3-1	Apache Portable Runtime Utility Library - SQLite3 Driver	libaprutil1-ldap
1.5.3-1	Apache Portable Runtime Utility Library - LDAP Driver	libapt-inst1.5
1.0.1ubuntu2.13	deb package format runtime library	libapt-pkg4.12
1.0.1ubuntu2.13	package management runtime library	libarchive-extract-perl

Table 1-2. Installed system information (continued)

Package	Version	Description
0.70-1	generic archive extracting module	libasn1-8-heimdal
1.6~git20131207+dfsg-1ubuntu1.1	Heimdal Kerberos - ASN.1 library	libasound2
1.0.27.2-3ubuntu7	shared library for ALSA applications	libasound2-data
1.0.27.2-3ubuntu7	Configuration files and profiles for ALSA drivers	libasprintf0c2
0.18.3.1-1ubuntu3	GNU library to use fprintf and friends in C++	libasyncns0
0.8-4ubuntu2	Asynchronous name service query library	libattr1
1:2.4.47-1ubuntu1	Extended attribute shared library	libaudit1
1:2.3.2-2ubuntu1	Dynamic library for security auditing	libaudit-common
1:2.3.2-2ubuntu1	Dynamic library for security auditing - common files	libavahi-client3
0.6.31-4ubuntu1	Avahi client library	libavahi-common3
0.6.31-4ubuntu1	Avahi common library	libavahi-common-data
0.6.31-4ubuntu1	Avahi common data files	libbind9-90
1:9.9.5.dfsg-3ubuntu0.8	BIND9 Shared Library used by BIND	libblas3
1.2.20110419-7	Basic Linear Algebra Reference implementations	shared library
libblkid1	2.20.1-5.1ubuntu20.7	block device id library
libboost-iostreams1.54.0	1.54.0-4ubuntu3.1	Boost.iostreams Library
libbsd0	0.6.0-2ubuntu1	utility functions from BSD systems - shared library

Table 1-2. Installed system information (continued)

Package	Version	Description
libbz2-1.0	1.0.6-5	high-quality block-sorting file compressor library - runtime
libc6	2.19-0ubuntu6.7	Embedded GNU C Library: Shared libraries
libc-bin	2.19-0ubuntu6.7	Embedded GNU C Library: Binaries
libcap2	1:2.24-0ubuntu2	support for getting/setting POSIX.1e capabilities
libcap2-bin	1:2.24-0ubuntu2	basic utility programs for using capabilities
libcap-ng0	0.7.3-1ubuntu2	An alternate POSIX capabilities library
libcgmanager0	0.24-0ubuntu7.5	Central cgroup manager daemon (client library)
libck-connector0	0.4.5-3.1ubuntu2	ConsoleKit libraries
libclass-accessor-perl	0.34-1	Perl module that automatically generates accessors
libcloog-isl4	0.18.2-1	Chunky Loop Generator (runtime library)
libcomerr2	1.42.9-3ubuntu1.3	common error description library
libcups2	1.7.2-0ubuntu1.7	Common UNIX Printing System(tm) - Core library
libcurl3	7.35.0-1ubuntu2.6	easy-to-use client-side URL transfer library (OpenSSL flavour)
libcurl3-gnutls	7.35.0-1ubuntu2.6	easy-to-use client-side URL transfer library (GnuTLS flavour)
libcwwidget3	0.5.16-3.5ubuntu1	high-level terminal interface library for C++ (runtime files)

Table 1-2. Installed system information (continued)

Package	Version	Description
libdb5.3	5.3.28-3ubuntu3	Berkeley v5.3 Database Libraries [runtime]
libdbd-mysql-perl	4.025-1	Perl5 database interface to the MySQL database
libdbi-perl	1.630-1	Perl Database Interface (DBI)
libdbus-1-3	1.6.18-0ubuntu4.3	simple interprocess messaging system (library)
libdbus-glib-1-2	0.100.2-1	simple interprocess messaging system (GLib-based shared library)
libdebconfclient0	0.187ubuntu1	Debian Configuration Management System (C-implementation library)
libdevmapper1.02.1	2:1.02.77-6ubuntu2	Linux Kernel Device Mapper userspace library
libdns100	1:9.9.5.dfsg-3ubuntu0.8	DNS Shared Library used by BIND
libdrm2	2.4.64-1~ubuntu14.04.1	Userspace interface to kernel DRM services -- runtime
libedit2	3.1-20130712-2	BSD editline and history libraries
libelf1	0.158-0ubuntu5.2	library to read and write ELF files
libept1.4.12	1.0.12	High-level library for managing Debian package information
libespeak1	1.47.11-1ubuntu1	Multi-lingual software speech synthesizer: shared library
libestr0	0.1.9-0ubuntu2	Helper functions for handling strings (lib)
libevent-2.0-5	2.0.21-stable-1ubuntu1.14.04.1	Asynchronous event notification library

Table 1-2. Installed system information (continued)

Package	Version	Description
libexpat1	2.1.0-4ubuntu1.1	XML parsing C library - runtime library
libffi6	3.1~rc1+r3.0.13-12ubuntu0.1	Foreign Function Interface library runtime
libfile-copy-recursive-perl	0.38-1	Perl extension for recursively copying files and directories
libflac8	1.3.0-2ubuntu0.14.04.1	Free Lossless Audio Codec - runtime C library
libfontconfig1	2.11.0-0ubuntu4.1	generic font configuration library - runtime
libfreetype6	2.5.2-1ubuntu2.5	FreeType 2 font engine
shared library files	libfribidi0	0.19.6-1
Free Implementation of the Unicode BiDi algorithm	libfuse2	2.9.2-4ubuntu4.14.04.1
Filesystem in Userspace (library)	libgc1c2	1:7.2d-5ubuntu2
conservative garbage collector for C and C++	libgcc1	1:4.9.3-0ubuntu4
GCC support library	libgck-1-0	3.10.1-1
Glib wrapper library for PKCS#11 - runtime	libgcr-3-common	3.10.1-1
Library for Crypto UI related tasks - common files	libgcr-base-3-1	3.10.1-1
Library for Crypto related tasks	libgcrypt11	1.5.3-2ubuntu4.3
LGPL Crypto library - runtime library	libgdbm3	1.8.3-12build1
GNU dbm database routines (runtime version)	libgeoip1	1.6.0-1

Table 1-2. Installed system information (continued)

Package	Version	Description
non-DNS IP-to-country resolver library	libgirepository-1.0-1	1.40.0-1ubuntu0.2
Library for handling GObject introspection data (runtime library)	libglib2.0-0	2.40.2-0ubuntu1
GLib library of C routines	libglib2.0-data	2.40.2-0ubuntu1
Common files for GLib library	libgmp10	2:5.1.3+dfsg-1ubuntu1
Multiprecision arithmetic library	libgnutls26	2.12.23-12ubuntu2.5
GNU TLS library - runtime library	libgnutls-openssl27	2.12.23-12ubuntu2.5
GNU TLS library - OpenSSL wrapper	libgpg-error0	1.12-0.2ubuntu1
library for common error values and messages in GnuPG components	libgpm2	1.20.4-6.1
General Purpose Mouse - shared library	libgssapi3-heimdal	1.6~git20131207+dfsg-1ubuntu1.1
Heimdal Kerberos - GSSAPI support library	libgssapi-krb5-2	1.12+dfsg-2ubuntu5.2
MIT Kerberos runtime libraries - krb5 GSS-API Mechanism	libhcrypto4-heimdal	1.6~git20131207+dfsg-1ubuntu1.1
Heimdal Kerberos - crypto library	libheimbase1-heimdal	1.6~git20131207+dfsg-1ubuntu1.1
Heimdal Kerberos - Base library	libheimntlm0-heimdal	1.6~git20131207+dfsg-1ubuntu1.1
Heimdal Kerberos - NTLM support library	libhtml-template-perl	2.95-1
module for using HTML templates with Perl	libhx509-5-heimdal	1.6~git20131207+dfsg-1ubuntu1.1
Heimdal Kerberos - X509 support library	libicu52	52.1-3ubuntu0.4

Table 1-2. Installed system information (continued)

Package	Version	Description
International Components for Unicode	libidn11	1.28-1ubuntu2
GNU Libidn library	implementation of IETF IDN specifications	libio-string-perl
1.08-3	Emulate IO::File interface for in-core strings	libisc95
1:9.9.5.dfsg-3ubuntu0.8	ISC Shared Library used by BIND	libisccc90
1:9.9.5.dfsg-3ubuntu0.8	Command Channel Library used by BIND	libiscfg90
1:9.9.5.dfsg-3ubuntu0.8	Config File Handling Library used by BIND	libisl10
0.12.2-1	manipulating sets and relations of integer points bounded by linear constraints	libiw30
30~pre9-8ubuntu1	Wireless tools - library	libjack-jackd2-0
1.9.9.5+20130622git7de15e7a-1ubuntu1	JACK Audio Connection Kit (libraries)	libjpeg8
8c-2ubuntu8	Independent JPEG Group's JPEG runtime library (dependency package)	libjpeg-turbo8
1.3.0-0ubuntu2	IJG JPEG compliant runtime library.	libjson0
0.11-3ubuntu1.2	JSON manipulation library (transitional package)	libjson-c2
0.11-3ubuntu1.2	JSON manipulation library - shared library	libk5crypto3
1.12+dfsg-2ubuntu5.2	MIT Kerberos runtime libraries - Crypto Library	libkeyutils1
1.5.6-1	Linux Key Management Utilities (library)	libklibc
2.0.3-0ubuntu1	minimal libc subset for use with initramfs	libkmod2
15-0ubuntu6	libkmod shared library	libkrb5-3

Table 1-2. Installed system information (continued)

Package	Version	Description
1.12+dfsg-2ubuntu5.2	MIT Kerberos runtime libraries	libkrb5-26-heimdal
1.6~git20131207+dfsg-1ubuntu1.1	Heimdal Kerberos - libraries	libkrb5support0
1.12+dfsg-2ubuntu5.2	MIT Kerberos runtime libraries - Support library	libldap-2.4-2
2.4.31-1+nmu2ubuntu8.2	OpenLDAP libraries	libldb1
1:1.1.24-0ubuntu0.14.04.1	LDAP-like embedded database - shared library	liblinear1
1.8+dfsg-1ubuntu1	Library for Large Linear Classification	liblinear-tools
1.8+dfsg-1ubuntu1	Standalone applications for LIBLINEAR	liblocale-gettext-perl
1.05-7build3	module using libc functions for internationalization in Perl	liblockfile1
1.09-6ubuntu1	NFS-safe locking library	liblockfile-bin
1.09-6ubuntu1	support binaries for and cli utilities based on liblockfile	liblog-message-simple-perl
0.10-1	simplified interface to Log::Message	liblua5.2-0
5.2.3-1	Shared library for the Lua interpreter version 5.2	liblwres90
1:9.9.5.dfsg-3ubuntu0.8	Lightweight Resolver Library used by BIND	liblzm5
5.1.1alpha+20120614-2ubuntu2	XZ-format compression library	libmagic1
1:5.14-2ubuntu3.3	File type determination library using magic numbers	libmodule-pluggable-perl

Table 1-2. Installed system information (continued)

Package	Version	Description
5.1-1	module for giving modules the ability to have plugins	libmount1
2.20.1-5.1ubuntu20.7	block device id library	libmp3lame0
3.99.5+repack1-3ubuntu1	MP3 encoding library	libmpc3
1.0.1-1ubuntu1	multiple precision complex floating-point library	libmpdec2
2.4.0-6	library for decimal floating point arithmetic (runtime library)	libmpfr4
3.1.2-1	multiple precision floating-point computation	libmysqlclient18
5.5.49-0ubuntu0.14.04.1	MySQL database client library	libncurses5
5.9+20140118-1ubuntu1	shared libraries for terminal handling	libncursesw5
5.9+20140118-1ubuntu1	shared libraries for terminal handling (wide character support)	libneon27-gnutls
0.30.0-1ubuntu1	HTTP and WebDAV client library (GnuTLS enabled)	libnet1
1.1.6+dfsg-2ubuntu1	library for the construction and handling of network packets	libnewt0.52
0.52.15-2ubuntu5	Not Erik's Windowing Toolkit - text mode windowing with slang	libnfnlink0
1.0.1-2	Netfilter netlink library	libnih1
1.0.3-4ubuntu25	NIH Utility Library	libnih-dbus1
1.0.3-4ubuntu25	NIH D-Bus Bindings Library	libnl-3-200

Table 1-2. Installed system information (continued)

Package	Version	Description
3.2.21-1	library for dealing with netlink sockets	libnl-genl-3-200
3.2.21-1	library for dealing with netlink sockets - generic netlink	libnuma1
2.0.9~rc5-1ubuntu3.14.04.2	Libraries for controlling NUMA policy	libogg0
1.3.1-1ubuntu1	Ogg bitstream library	libp11-kit0
0.20.2-2ubuntu2	Library for loading and coordinating access to PKCS#11 modules - runtime	libpam0g
1.1.8-1ubuntu2.2	Pluggable Authentication Modules library	libpam-cap
1:2.24-0ubuntu2	PAM module for implementing capabilities	libpam-modules
1.1.8-1ubuntu2.2	Pluggable Authentication Modules for PAM	libpam-modules-bin
1.1.8-1ubuntu2.2	Pluggable Authentication Modules for PAM - helper binaries	libpam-runtime
1.1.8-1ubuntu2.2	Runtime support for the PAM library	libpam-systemd
204-5ubuntu20.19	system and service manager - PAM module	libparse-debianchangelog-perl
1.2.0-1ubuntu1	parse Debian changelogs and output them in other formats	libparted0debian1
2.3-19ubuntu1.14.04.1	disk partition manipulator - shared library	libpcap0.8
1.5.3-2	system interface for user-level packet capture	libpci3
1:3.2.1-1ubuntu5.1	Linux PCI Utilities (shared library)	libpcrc3

Table 1-2. Installed system information (continued)

Package	Version	Description
1:8.31-2ubuntu2.3	Perl 5 Compatible Regular Expression Library - runtime files	libpcsc-lite1
1.8.10-1ubuntu1	Middleware to access a smart card using PC/SC (library)	libpipeline1
1.3.0-1	pipeline manipulation library	libplymouth2
0.8.8-0ubuntu17.1	graphical boot animation and logger - shared libraries	libpng12-0
1.2.50-1ubuntu2.14.04.2	PNG library - runtime	libpod-latex-perl
0.61-1	module to convert Pod data to formatted LaTeX	libpolkit-agent-1-0
0.105-4ubuntu3.14.04.1	PolicyKit Authentication Agent API	libpolkit-backend-1-0
0.105-4ubuntu3.14.04.1	PolicyKit backend API	libpolkit-gobject-1-0
0.105-4ubuntu3.14.04.1	PolicyKit Authorization API	libpopt0
1.16-8ubuntu1	lib for parsing cmdline parameters	libportaudio2
19+svn20140130-1	Portable audio I/O - shared library	libprocps3
1:3.3.9-1ubuntu2.2	library for accessing process information from /proc	libpulse0
1:4.0-0ubuntu11.1	PulseAudio client libraries	libpython2.7
2.7.6-8ubuntu0.2	Shared Python runtime library (version 2.7)	libpython2.7-minimal
2.7.6-8ubuntu0.2	Minimal subset of the Python language (version 2.7)	libpython2.7-stdlib

Table 1-2. Installed system information (continued)

Package	Version	Description
2.7.6-8ubuntu0.2	Interactive high-level object-oriented language (standard library	version 2.7)
libpython3-stdlib	3.4.0-0ubuntu2	interactive high-level object-oriented language (default python3 version)
libpython3.4-minimal	3.4.3-1ubuntu1~14.04.3	Minimal subset of the Python language (version 3.4)
libpython3.4-stdlib	3.4.3-1ubuntu1~14.04.3	Interactive high-level object-oriented language (standard library
version 3.4)	libpython-stdlib	2.7.5-5ubuntu3
interactive high-level object-oriented language (default python version)	libreadline5	5.2+dfsg-2
GNU readline and history libraries	run-time libraries	libreadline6
6.3-4ubuntu2	GNU readline and history libraries	run-time libraries
libroken18-heimdal	1.6~git20131207+dfsg-1ubuntu1.1	Heimdal Kerberos - roken support library
librtmp0	2.4+20121230.gitdf6c518-1	toolkit for RTMP streams (shared library)
libsamplerate0	0.1.8-7	Audio sample rate conversion library
libsasl2-2	2.1.25.dfsg1-17build1	Cyrus SASL - authentication abstraction library
libsasl2-modules	2.1.25.dfsg1-17build1	Cyrus SASL - pluggable authentication modules
libsasl2-modules-db	2.1.25.dfsg1-17build1	Cyrus SASL - pluggable authentication modules (DB)
libselinux1	2.2.2-1ubuntu0.1	SELinux runtime shared libraries

Table 1-2. Installed system information (continued)

Package	Version	Description
libsemanage1	2.2-1	SELinux policy management library
libsemanage-common	2.2-1	Common files for SELinux policy management libraries
libsepol1	2.2-1ubuntu0.1	SELinux library for manipulating binary security policies
libsigc++-2.0-0c2a	2.2.10-0.2ubuntu2	type-safe Signal Framework for C++ - runtime
libsigsegv2	2.10-2	Library for handling page faults in a portable way
libslang2	2.2.4-15ubuntu1	S-Lang programming library - runtime version
libsndfile1	1.0.25-7ubuntu2.1	Library for reading/writing audio files
libsonic0	0.1.18-0ubuntu1	Simple library to speed up or slow down speech
libsqlite3-0	3.8.2-1ubuntu2.1	SQLite 3 shared library
libss2	1.42.9-3ubuntu1.3	command-line interface parsing library
libssl1.0.0	1.0.1f-1ubuntu2.19	Secure Sockets Layer toolkit - shared libraries
libstdc++6	4.8.4-2ubuntu1~14.04.1	GNU Standard C++ Library v3
libsub-name-perl	0.05-1build4	module for assigning a new name to referenced sub
libsystemd-daemon0	204-5ubuntu20.19	systemd utility library
libsystemd-login0	204-5ubuntu20.19	systemd login utility library
libtalloc2	2.1.5-0ubuntu0.14.04.1	hierarchical pool based memory allocator

Table 1-2. Installed system information (continued)

Package	Version	Description
libtasn1-6	3.4-3ubuntu0.4	Manage ASN.1 structures (runtime)
libtdb1	1.3.8-0ubuntu0.14.04.1	Trivial Database - shared library
libterm-readkey-perl	2.31-1	perl module for simple terminal control
libterm-ui-perl	0.42-1	Term::ReadLine UI made easy
libevent0	0.9.28-0ubuntu0.14.04.1	talloc-based event loop library - shared library
libtext-charwidth-perl	0.04-7build3	get display widths of characters on the terminal
libtext-iconv-perl	1.7-5build2	converts between character sets in Perl
libtext-soundex-perl	3.4-1build1	implementation of the soundex algorithm
libtext-wrapi18n-perl	0.06-7	internationalized substitute of Text::Wrap
libtimedate-perl	2.3000-1	collection of modules to manipulate date/time information
libtinfo5	5.9+20140118-1ubuntu1	shared low-level terminfo library for terminal handling
libudev1	204-5ubuntu20.19	libudev shared library
libusb-0.1-4	2:0.1.12-23.3ubuntu1	userspace USB programming library
libusb-1.0-0	2:1.0.17-1ubuntu2	userspace USB programming library
libustr-1.0-1	1.0.4-3ubuntu2	Micro string library: shared library
libuuid1	2.20.1-5.1ubuntu20.7	Universally Unique ID library

Table 1-2. Installed system information (continued)

Package	Version	Description
libvorbis0a	1.3.2-1.3ubuntu1	The Vorbis General Audio Compression Codec (Decoder library)
libvorbisenc2	1.3.2-1.3ubuntu1	The Vorbis General Audio Compression Codec (Encoder library)
libwbclient0	2:4.3.9+dfsg-0ubuntu0.14.04.3	Samba winbind client library
libwind0-heimdal	1.6~git20131207+dfsg-1ubuntu1.1	Heimdal Kerberos - stringprep implementation
libwrap0	7.6.q-25	Wietse Venema's TCP wrappers library
libx11-6	2:1.6.2-1ubuntu2	X11 client-side library
libx11-data	2:1.6.2-1ubuntu2	X11 client-side library
libxapian22	1.2.16-2ubuntu1	Search engine library
libxau6	1:1.0.8-1	X11 authorisation library
libxcb1	1.10-2ubuntu1	X C Binding
libxdmcp6	1:1.1.1-1	X11 Display Manager Control Protocol library
libxext6	2:1.3.2-1ubuntu0.0.14.04.1	X11 miscellaneous extension library
libxml2	2.9.1+dfsg1-3ubuntu4.7	GNOME XML library
libxmuu1	2:1.1.1-1	X11 miscellaneous micro-utility library
libxtables10	1.4.21-1ubuntu1	netfilter xtables library
libyaml-0-2	0.1.4-3ubuntu3.1	Fast YAML 1.1 parser and emitter library
linux-firmware	1.127.22	Firmware for Linux kernel drivers

Table 1-2. Installed system information (continued)

Package	Version	Description
linux-generic	3.13.0.85.91	Complete Generic Linux kernel and headers
linux-headers-3.13.0-85	3.13.0-85.129	Header files related to Linux kernel version 3.13.0
linux-headers-3.13.0-85-generic	3.13.0-85.129	Linux kernel headers for version 3.13.0 on 64 bit x86 SMP
linux-headers-generic	3.13.0.85.91	Generic Linux kernel headers
linux-image-3.13.0-85-generic	3.13.0-85.129	Linux kernel image for version 3.13.0 on 64 bit x86 SMP
linux-image-extra-3.13.0-85-generic	3.13.0-85.129	Linux kernel extra modules for version 3.13.0 on 64 bit x86 SMP
linux-image-generic	3.13.0.85.91	Generic Linux kernel image
locales	2.13+git20120306-12.1	common files for locale support
lockfile-progs	0.1.17	Programs for locking and unlocking files and mailboxes
login	1:4.1.5.1-1ubuntu9.2	system login tools
logrotate	3.8.7-1ubuntu1	Log rotation utility
lsb-base	4.1+Debian11ubuntu6	Linux Standard Base 4.1 init script functionality
lsb-release	4.1+Debian11ubuntu6	Linux Standard Base version reporting utility
lshw	02.16-2ubuntu1.3	information about hardware configuration
lsof	4.86+dfsg-1ubuntu2	Utility to list open files

Table 1-2. Installed system information (continued)

Package	Version	Description
ltrace	0.7.3-4ubuntu5.1	Tracks runtime library calls in dynamically linked programs
makedev	2.3.1-93ubuntu1	creates device files in /dev
man-db	2.6.7.1-1ubuntu1	on-line manual pager
manpages	3.54-1ubuntu1	Manual pages about using a GNU/Linux system
mawk	1.3.3-17ubuntu2	a pattern scanning and text processing language
memtest86+	4.20-1.1ubuntu8	thorough real-mode memory tester
mime-support	3.54ubuntu1.1	MIME files 'mime.types' & 'mailcap'
and support programs	mlocate	0.26-1ubuntu1
quickly find files on the filesystem based on their name	module-init-tools	15-0ubuntu6
transitional dummy package (module-init-tools to kmod)	mount	2.20.1-5.1ubuntu20.7
Tools for mounting and manipulating filesystems	mountall	2.53
filesystem mounting tool	mtr-tiny	0.85-2
Full screen ncurses traceroute tool	multiarch-support	2.19-0ubuntu6.7
Transitional package to ensure multiarch compatibility	mysql-client-5.5	5.5.49-0ubuntu0.14.04.1
MySQL database client binaries	mysql-client-core-5.5	5.5.49-0ubuntu0.14.04.1

Table 1-2. Installed system information (continued)

Package	Version	Description
MySQL database core client binaries	mysql-common	5.5.49-0ubuntu0.14.04.1
MySQL database common files	e.g. /etc/mysql/my.cnf	mysql-server
5.5.49-0ubuntu0.14.04.1	MySQL database server (metapackage depending on the latest version)	mysql-server-5.5
5.5.49-0ubuntu0.14.04.1	MySQL database server binaries and system database setup	mysql-server-core-5.5
5.5.49-0ubuntu0.14.04.1	MySQL database server binaries	nano
2.2.6-1ubuntu1	small	friendly text editor inspired by Pico
ncurses-base	5.9+20140118-1ubuntu1	basic terminal type definitions
ncurses-bin	5.9+20140118-1ubuntu1	terminal-related programs and man pages
ncurses-term	5.9+20140118-1ubuntu1	additional terminal type definitions
net-tools	1.60-25ubuntu2.1	The NET-3 networking toolkit
netbase	5.2	Basic TCP/IP networking system
netcat-openbsd	1.105-7ubuntu1	TCP/IP swiss army knife
nmap	6.40-0.2ubuntu1	The Network Mapper
ntfs-3g	1:2013.1.13AR.1-2ubuntu2	read/write NTFS driver for FUSE
ntpdate	1:4.2.6.p5+dfsg-3ubuntu2.14.04.8	client for setting system time from NTP servers
openssh-client	1:6.6p1-2ubuntu2.6	secure shell (SSH) client
for secure access to remote machines	openssh-server	1:6.6p1-2ubuntu2.6

Table 1-2. Installed system information (continued)

Package	Version	Description
secure shell (SSH) server	for secure access from remote machines	openssh-sftp-server
1:6.6p1-2ubuntu2.6	secure shell (SSH) sftp server module	for SFTP access from remote machines
openssl	1.0.1f-1ubuntu2.19	Secure Sockets Layer toolkit - cryptographic utility
os-prober	1.63ubuntu1.1	utility to detect other OSes on a set of drives
parted	2.3-19ubuntu1.14.04.1	disk partition manipulator
passwd	1:4.1.5.1-1ubuntu9.2	change and administer password and group data
patch	2.7.1-4ubuntu2.3	Apply a diff file to an original
pciutils	1:3.2.1-1ubuntu5.1	Linux PCI Utilities
perl	5.18.2-2ubuntu1.1	Larry Wall's Practical Extraction and Report Language
perl-base	5.18.2-2ubuntu1.1	minimal Perl system
perl-modules	5.18.2-2ubuntu1.1	Core Perl modules
phantomjs	1.9.0-1	minimalistic headless WebKit-based with JavaScript API
plymouth	0.8.8-0ubuntu17.1	graphical boot animation and logger - main package
plymouth-theme-ubuntu-text	0.8.8-0ubuntu17.1	graphical boot animation and logger - ubuntu-logo theme
pmount	0.9.23-2	mount removable devices as normal user

Table 1-2. Installed system information (continued)

Package	Version	Description
policykit-1	0.105-4ubuntu3.14.04.1	framework for managing administrative policies and privileges
popularity-contest	1.57ubuntu1	Vote for your favourite packages automatically
powermgmt-base	1.31build1	Common utils and configs for power management
ppp	2.4.5-5.1ubuntu2.2	Point-to-Point Protocol (PPP) - daemon
pppconfig	2.3.19ubuntu1	A text menu based utility for configuring ppp
pppoeconf	1.20ubuntu1	configures PPPoE/ADSL connections
procps	1:3.3.9-1ubuntu2.2	/proc file system utilities
psmisc	22.20-1ubuntu2	utilities that use the proc file system
python	2.7.5-5ubuntu3	interactive high-level object-oriented language (default version)
python2.7	2.7.6-8ubuntu0.2	Interactive high-level object-oriented language (version 2.7)
python2.7-minimal	2.7.6-8ubuntu0.2	Minimal subset of the Python language (version 2.7)
python3	3.4.0-0ubuntu2	interactive high-level object-oriented language (default python3 version)
python3-apport	2.14.1-0ubuntu3.19	Python 3 library for Apport crash report handling
python3-apt	0.9.3.5ubuntu2	Python 3 interface to libapt-pkg
python3-commandnotfound	0.3ubuntu12	Python 3 bindings for command-not-found.

Table 1-2. Installed system information (continued)

Package	Version	Description
python3-dbus	1.2.0-2build2	simple interprocess messaging system (Python 3 interface)
python3-distupgrade	1:0.220.8	manage release upgrades
python3-gdbm	3.4.3-1~14.04.2	GNU dbm database support for Python 3.x
python3-gi	3.12.0-1ubuntu1	Python 3 bindings for gobject-introspection libraries
python3-minimal	3.4.0-0ubuntu2	minimal subset of the Python language (default python3 version)
python3-newt	0.52.15-2ubuntu5	NEWT module for Python3
python3-problem-report	2.14.1-0ubuntu3.19	Python 3 library to handle problem reports
python3-pycurl	7.19.3-0ubuntu3	Python 3 bindings to libcurl
python3-software-properties	0.92.37.7	manage the repositories that you install software from
python3-update-manager	1:0.196.14	python 3.x module for update-manager
python3.4	3.4.3-1ubuntu1~14.04.3	Interactive high-level object-oriented language (version 3.4)
python3.4-minimal	3.4.3-1ubuntu1~14.04.3	Minimal subset of the Python language (version 3.4)
python-apt	0.9.3.5ubuntu2	Python interface to libapt-pkg
python-apt-common	0.9.3.5ubuntu2	Python interface to libapt-pkg (locales)
python-chardet	2.0.1-2build2	universal character encoding detector

Table 1-2. Installed system information (continued)

Package	Version	Description
python-cheetah	2.4.4-3.fakesyncbuild1	text-based template engine and Python code generator
python-configobj	4.7.2+ds-5build1	simple but powerful config file reader and writer for Python
python-crypto	2.6.1-4build1	cryptographic algorithms and protocols for Python
python-debian	0.1.21+nmu2ubuntu2	Python modules to work with Debian-related data formats
python-dnspython	1.11.1-1build1	DNS toolkit for Python
python-gdbm	2.7.5-1ubuntu1	GNU dbm database support for Python
python-json-pointer	1.0-2build1	resolve JSON pointers - python 2.x
python-jsonpatch	1.3-4	library to apply JSON patches - python 2.x
python-ldb	1:1.1.24-0ubuntu0.14.04.1	Python bindings for LDB
python-minimal	2.7.5-5ubuntu3	minimal subset of the Python language (default version)
python-oauth	1.0.1-3build2	Python library implementing of the OAuth protocol
python-openssl	0.13-2ubuntu6	Python 2 wrapper around the OpenSSL library
python-pam	0.4.2-13.1ubuntu3	Python interface to the PAM library
python-pkg-resources	3.3-1ubuntu2	Package Discovery and Resource Access using pkg_resources

Table 1-2. Installed system information (continued)

Package	Version	Description
python-prettytable	0.7.2-2ubuntu2	library to represent tabular data in visually appealing ASCII tables
python-requests	2.2.1-1ubuntu0.3	elegant and simple HTTP library for Python
built for human beings	python-samba	2:4.3.9+dfsg-0ubuntu0.14.04.3
Python bindings for Samba	python-serial	2.6-1build1
pyserial - module encapsulating access for the serial port	python-six	1.5.2-1ubuntu1
Python 2 and 3 compatibility library (Python 2 interface)	python-talloc	2.1.5-0ubuntu0.14.04.1
hierarchical pool based memory allocator - Python bindings	python-tdb	1.3.8-0ubuntu0.14.04.1
Python bindings for TDB	python-twisted-bin	13.2.0-1ubuntu1
Event-based framework for internet applications	python-twisted-core	13.2.0-1ubuntu1
Event-based framework for internet applications	python-urllib3	1.7.1-1ubuntu4
HTTP library with thread-safe connection pooling for Python	python-xapian	1.2.16-2ubuntu1
Xapian search engine interface for Python	python-yaml	3.10-4ubuntu0.1
YAML parser and emitter for Python	python-zope.interface	4.0.5-1ubuntu4
Interfaces for Python	readline-common	6.3-4ubuntu2

Table 1-2. Installed system information (continued)

Package	Version	Description
GNU readline and history libraries	common files	resolvconf
1.69ubuntu1.1	name server information handler	rsync
3.1.0-2ubuntu0.2	fast	versatile
remote (and local) file-copying tool	rsyslog	7.4.4-1ubuntu2.6
reliable system and kernel logging daemon	run-one	1.17-0ubuntu1
run just one instance of a command and its args at a time	samba	2:4.3.9+dfsg-0ubuntu0.14.04.3
SMB/CIFS file	print	and login server for Unix
samba-common	2:4.3.9+dfsg-0ubuntu0.14.04.3	common files used by both the Samba server and client
samba-common-bin	2:4.3.9+dfsg-0ubuntu0.14.04.3	Samba common files used by both the server and the client
samba-libs	2:4.3.9+dfsg-0ubuntu0.14.04.3	Samba core libraries
samba-vfs-modules	2:4.3.9+dfsg-0ubuntu0.14.04.3	Samba Virtual FileSystem plugins
screen	4.1.0~20120320gitdb59704-9	terminal multiplexer with VT100/ANSI terminal emulation
sed	4.2.2-4ubuntu1	The GNU sed stream editor
sensible-utils	0.0.9	Utilities for sensible alternative selection

Table 1-2. Installed system information (continued)

Package	Version	Description
sgml-base	1.26+nmu4ubuntu1	SGML infrastructure and SGML catalog file support
shared-mime-info	1.2-0ubuntu3	FreeDesktop.org shared MIME database and spec
software-properties-common	0.92.37.7	manage the repositories that you install software from (common)
ssh-import-id	3.21-0ubuntu1	securely retrieve an SSH public key and install it locally
ssl-cert	1.0.33	simple debconf wrapper for OpenSSL
strace	4.8-1ubuntu5	A system call tracer
sudo	1.8.9p5-1ubuntu1.2	Provide limited super user privileges to specific users
systemd-services	204-5ubuntu20.19	systemd runtime services
systemd-shim	6-2bzl	shim for systemd
sysv-rc	2.88dsf-41ubuntu6.3	System-V-like runlevel change mechanism
sysvinit-utils	2.88dsf-41ubuntu6.3	System-V-like utilities
tar	1.27.1-1	GNU version of the tar archiving utility
tasksel	2.88ubuntu15	Tool for selecting tasks for installation on Debian systems
tasksel-data	2.88ubuntu15	Official tasks used for installation of Debian systems

Table 1-2. Installed system information (continued)

Package	Version	Description
tcpd	7.6.q-25	Wietse Venema's TCP wrapper utilities
tcpdump	4.5.1-2ubuntu1.2	command-line network traffic analyzer
tdb-tools	1.3.8-0ubuntu0.14.04.1	Trivial Database - bundled binaries
telnet	0.17-36build2	The telnet client
time	1.7-24	GNU time program for measuring CPU resource usage
tmux	1.8-5	terminal multiplexer
traceroute	1:2.0.20-0ubuntu0.1	Traces the route taken by packets over an IPv4/IPv6 network
tzdata	2016d-0ubuntu0.14.04	time zone and daylight-saving time data
ubuntu-keyring	2012.05.19	GnuPG keys of the Ubuntu archive
ubuntu-minimal	1.325	Minimal core of Ubuntu
ubuntu-release-upgrader-core	1:0.220.8	manage release upgrades
ubuntu-standard	1.325	The Ubuntu standard system
ucf	3.0027+nmu1	Update Configuration File(s): preserve user changes to config files
udev	204-5ubuntu20.19	/dev/ and hotplug management daemon
ufw	0.34~rc-0ubuntu2	program for managing a Netfilter firewall
unattended-upgrades	0.82.1ubuntu2.4	automatic installation of security upgrades

Table 1-2. Installed system information (continued)

Package	Version	Description
unzip	6.0-9ubuntu1.5	De-archiver for .zip files
update-inetd	4.43	inetd configuration file updater
update-manager-core	1:0.196.14	manage release upgrades
update-notifier-common	0.154.1ubuntu1	Files shared between update-notifier and other packages
upstart	1.12.1-0ubuntu4.2	event-based init daemon
ureadahead	0.100.0-16	Read required files in advance
usbmount	0.0.22	automatically mount and unmount USB mass storage devices
usbutils	1:007-2ubuntu1.1	Linux USB utilities
util-linux	2.20.1-5.1ubuntu20.7	Miscellaneous system utilities
uuid-runtime	2.20.1-5.1ubuntu20.7	runtime components for the Universally Unique ID library
vim	2:7.4.052-1ubuntu3	Vi IMproved - enhanced vi editor
vim-common	2:7.4.052-1ubuntu3	Vi IMproved - Common files
vim-runtime	2:7.4.052-1ubuntu3	Vi IMproved - Runtime files
vim-tiny	2:7.4.052-1ubuntu3	Vi IMproved - enhanced vi editor - compact version
w3m	0.5.3-15	WWW browsable pager with excellent tables/frames support

Table 1-2. Installed system information (continued)

Package	Version	Description
wget	1.15-1ubuntu1.14.04.1	retrieves files from the web
whiptail	0.52.15-2ubuntu5	Displays user-friendly dialog boxes from shell scripts
Windows	Windows 10 Pro	Windows operating system for DesignStations
wireless-regdb	2013.02.13-1ubuntu1	wireless regulatory database
wireless-tools	30~pre9-8ubuntu1	Tools for manipulating Linux Wireless Extensions
wpa_supplicant	2.1-0ubuntu1.4	client support for WPA and WPA2 (IEEE 802.11i)
xauth	1:1.0.7-1ubuntu1	X authentication utility
xkb-data	2.10.1-1ubuntu1	X Keyboard Extension (XKB) configuration data
xml-core	0.13+nmu2	XML infrastructure and XML catalog file support
xz-utils	5.1.1alpha+20120614-2ubuntu2	XZ-format compression utilities
zlib1g	1:1.2.8.dfsg-1ubuntu1	compression library - runtime