Palo Alto Networks Public Sector, LLC 12110 Sunset Hills Road, Suite 200 Reston, VA 20190

EC America Rider to Product Specific License Terms and Conditions (for U.S. Government End Users)

- 1. Scope. This Rider and the attached Palo Alto Networks Public Sector, LLC ("Manufacturer") product specific license terms establish the terms and conditions enabling EC America ("Contractor") to provide Manufacturer's information technology products and services to Ordering Activities under EC America's GSA MAS IT70 contract number GS-35F-0511T (the "Schedule Contract"). Installation and use of the information technology shall be in accordance with this Rider and Manufacturer Specific Terms attached hereto, unless an Ordering Activity determines that it requires different terms of use and Manufacturer agrees in writing to such terms in a valid delivery order placed pursuant to the Schedule Contract.
- 2. **Applicability**. Whereas GSA and EC America agreed at the time of Schedule Contract award upon a base set of terms and conditions applicable to all manufacturers and items represented on the Schedule Contract; and Whereas, the parties further agreed that all product specific license, warranty and software maintenance terms and conditions would be submitted at the time each new manufacturer was to be added to the Schedule Contract; Now, Therefore, the parties hereby agree that the product specific license, warranty and software maintenance terms set forth in Attachment A hereto (the "Manufacturer Specific Terms" or the "Attachment A Terms") are incorporated into the Schedule Contract, but only to the extent that they are consistent with Federal law (*e.g.*, the Anti-Deficiency Act (31 U.S.C. § 1341), the Contracts Disputes Act of 1978 (41 U.S.C. §§ 7101 *et seq.*), the Prompt Payment Act (31 U.S.C. §§ 3901 *et. seq.*), the Anti-Assignment statutes (31 U.S.C. § 3727 and 41 U.S.C. § 15), DOI's jurisdictional statute 28 U.S.C. § 516 (Conduct of Litigation Reserved to the Department of Justice (DOJ), and 28 U.S.C. § 1498 (Patent and copyright cases)). To the extent any Attachment A Terms are inconsistent with Federal law (See, FAR 12.212(a)), such inconsistent terms shall be superseded, unenforceable and of no legal force or effect in all resultant orders under the Schedule Contract, including but not limited to the following provisions:
- a) **Contracting Parties.** The GSA Customer ("Licensee") is the "Ordering Activity", defined as the entity authorized to order under GSA MAS contracts as set forth in GSA Order OGP 4800.2I, as may be revised from time to time.
- b) Changes to Work and Delays. Subject to GSAR Clause 552.238-81, Modifications (Federal Supply Schedule) (April 2014) (Alternate I JUN 2016) and (Alternate II JUN 2016), and 52.212-4(f) Excusable Delays (JUN 2010) regarding which the GSAR and the FAR provisions take precedence.
- c) Contract Formation. Subject to FAR 1.601(a) and FAR 43.102, the GSA Customer Purchase Order must be signed by a duly warranted Contracting Officer, in writing. The same requirement applies to contract modifications affecting the rights of the parties. All terms and conditions intended to bind the Government must be included within the contract signed by the Government.
- d) **Termination**. Clauses in the Manufacturer Specific Terms referencing termination or cancellation are superseded and not applicable to any GSA Customer order. Termination shall be governed by the FAR, the underlying GSA Schedule Contract and the terms in any applicable GSA Customer Purchase Orders. If the Contractor believes the GSA Customer to be in breach, it must file a claim with the Contracting Officer and continue to diligently pursue performance. In commercial item contracting under FAR 12.302(b), the FAR provisions dealing with disputes and continued performance cannot be changed by the Contracting Officer.
- e) **Choice of Law.** Subject to the Contracts Disputes Act, the validity, interpretation and enforcement of this Rider shall be governed by and construed in accordance with the Federal laws of the United States. In the event the Uniform

Computer Information Transactions Act (UCITA) or any similar Federal laws or regulations are enacted, to the extent allowed by Federal law, they will not apply to this Rider or the underlying Schedule Contract.

- f) **Equitable remedies**. Equitable remedies are generally not awarded against the Government absent a statute providing therefore. In the absence of a direct citation to such a statute, all clauses in the Manufacturer Specific Terms referencing equitable remedies are superseded and not applicable to any GSA Customer order.
- g) **Unilateral Termination.** Unilateral termination by the Contractor does not apply to a GSA Customer Purchase Order and all clauses in the Manufacturer Specific Terms referencing unilateral termination rights of the Manufacturer are hereby superseded.
- h) **Unreasonable Delay.** Subject to FAR 52.212-4(f) Excusable delays, the Contractor shall be liable for default unless the nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.
- i) **Assignment.** All clauses regarding the Contractor's assignment are subject to FAR 52.232-23, Assignment of Claims (JAN 1986) and FAR 42.12 Novation and Change-of-Name Agreements (Sep. 2013). All clauses governing the Contractor's assignment in the Manufacturer Specific Terms are hereby superseded.
- j) Waiver of Jury Trial. Waivers of Jury Trials are subject to FAR 52.233-1 Disputes (JULY 2002). The Government will not agree to waive any right that it may have under federal law. All clauses governing a waiver of jury trial in the Manufacturer Specific Terms are hereby superseded.
- k) **Government Indemnities.** This is an obligation in advance of an appropriation that violates anti-deficiency laws (31 U.S.C. § 1341 and 41 U.S.C. § 6301), since the GSA Customer commits to pay an unknown amount at an unknown future time. The violation occurs when the commitment is made, i.e., when the agreement featuring this clause is incorporated into a Government contract, and not when the clause is triggered. The Interim FAR Rule dated June 21, 2013 and the Office of Legal Counsel opinion dated March 12, 2012 prohibit such indemnifications. All Manufacturer Specific Terms referencing customer indemnities are hereby superseded.
- Contractor Indemnities. All Manufacturer Specific Terms that violate DOJ's jurisdictional statute (28 U.S.C. § 516) by requiring that the Government give sole control over the litigation and/or settlement to the Contractor are hereby superseded. Nothing contained in the Manufacturer's Specific terms shall be construed in derogation of the U.S. Department of Justice's right to defend any claim or action brought against the U.S., pursuant to its jurisdictional statute.
- m) **Renewals.** All Manufacturer Specific Terms that provide for automatic renewals violate the Anti-Deficiency Act and are hereby superseded. This is an obligation in advance of an appropriation that violates anti-deficiency laws (31 U.S.C. § 1341 and 41 U.S.C. § 6301), since the GSA Customer commits to pay an unknown amount at an unknown future time. The violation occurs when the commitment is made, i.e., when the agreement featuring this clause is incorporated into a Government contract, and not when the clause is triggered.
- n) Future Fees or Penalties. All Manufacturer Specific Terms that require the Government to pay any future fees, charges or penalties are hereby superseded unless specifically authorized by existing statutes, such as the Prompt Payment Act (31 U.S.C. § 3901 et seq.) or Equal Access To Justice Act (5 U.S.C. § 504; 28 U.S.C. § 2412).

- o) **Taxes.** Taxes are subject to FAR 52.212-4(k), which provides that the contract price includes all applicable federal, state, local taxes and duties. Contractor shall state separately on its invoices, taxes excluded from the fees, and the GSA Customer agrees to either pay the amount of the taxes (based on the current value of the equipment or services) to Contractor or provide it evidence necessary to sustain an exemption, in accordance with FAR 52.229-1 and FAR 52.229-3.
- p) Third Party Terms. When the end user is an instrumentality of the U.S., no license terms bind the GSA Customer unless included verbatim (not by reference) in the EULA, and the EULA is made an attachment to the underlying GSA Schedule Contract. All terms and conditions affecting the GSA Customer must be contained in a writing signed by a duly warranted Contracting Officer. Any third party manufacturer shall be brought into the negotiation, or the components acquired separately under federally-compatible agreements, if any. All Manufacturer Specific Terms that incorporate third party terms by reference are hereby superseded.
- q) **Dispute Resolution and Standing.** Any disputes relating to the Manufacturer Specific Terms or to this Rider shall be resolved in accordance with the FAR, the underlying GSA Schedule Contract, any applicable GSA Customer Purchase Orders, and the Contract Disputes Act. The Ordering Activity expressly acknowledges that EC America as contractor, on behalf of the Manufacturer, shall have standing to bring such claim under the Contract Disputes Act.
- r) Advertisements and Endorsements. Pursuant to GSAR 552.203-71, use of the name or logo of any U.S. Government entity is prohibited. All Manufacturer Specific Terms that allow the Contractor to use the name or logo of a Government entity are hereby superseded.
- s) **Public Access to Information.** EC America agrees that the attached Manufacturer Specific Terms and this Rider contain no confidential or proprietary information and acknowledges the Rider shall be available to the public.
- t) **Confidentiality.** Any provisions in the attached Manufacturer Specific Terms that require the Ordering Activity to keep certain information confidential are subject to the Freedom of Information Act (5 U.S.C. § 552), and any order by a United States Federal Court. When the end user is an instrumentality of the U.S. Government, neither this Rider, the Manufacturer's Specific Terms nor the Schedule Price List shall be deemed "confidential information" notwithstanding marking to that effect. Notwithstanding anything in this Rider, the Manufacturer's Specific Terms or the Schedule Contract to the contrary, the GSA Customer may retain such Confidential Information as required by law, regulation or its bonafide document retention procedures for legal, regulatory or compliance purposes; provided however, that such retained Confidential Information will continue to be subject to the confidentiality obligations of this Rider, the Manufacturer's Specific Terms and the Schedule Contract.
- u) Alternate Dispute Resolution. The GSA Customer cannot be forced to mediate or arbitrate. Arbitration requires prior guidance by the head of a federal agency promulgated via administrative rulemaking according to 5 U.S.C. § 575(c). GSA has not issued any because it considers the Board of Contract Appeals to be an adequate, binding ADR alternative. All Manufacturer Specific Terms that allow the Contractor to choose arbitration, mediation or other forms of alternate dispute resolution are hereby superseded.
- v) Ownership of Derivative Works. Provisions purporting to vest exclusive ownership of all derivative works in the licensor of the standard software on which such works may be based are superseded. Ownership of derivative works should be as set forth in the copyright statute, 17 U.S.C. § 103 and the FAR clause at 52.227-14, but at a minimum, the GSA Customer shall receive unlimited rights to use such derivative works at no further cost.
- 3. Order of Precedence/Conflict. To the extent there is a conflict between the terms of this Rider and the terms of the underlying Schedule Contract or a conflict between the terms of this Rider and the terms of an applicable GSA Customer Purchase Order, the terms of the GSA Schedule Contract or any specific, negotiated terms on the GSA Customer Purchase Order shall control over the terms of this Rider. Any capitalized terms used herein but not defined, shall have the meaning assigned to them in the underlying Schedule Contract.

ATTACHMENT A

END USER LICENSE AGREEMENT ("EULA")

PLEASE READ CAREFULLY

THIS EULA IS A LEGAL AGREEMENT BETWEEN YOU, EITHER AS AN INDIVIDUAL, COMPANY OR OTHER LEGAL ENTITY (IN ANY CAPACITY REFERRED TO HEREIN AS "END USER", "YOU" or "YOUR") AND (I) PALO ALTO NETWORKS, INC., A DELAWARE CORPORATION WITH OFFICES AT 4401 GREAT AMERICA PARKWAY, SANTA CLARA, CALIFORNIA 95054 UNITED STATES, (II) PALO ALTO NETWORKS (NETHERLANDS) B.V., A COMPANY FORMED UNDER THE LAWS OF THE NETHERLANDS, WITH OFFICES AT OVAL TOWER, DE ENTRÉE 99-197, 5TH FLOOR, 1101 HE AMSTERDAM-ZUIDOOST, OR (III) ANY OTHER PALO ALTO NETWORKS AFFILIATE (COLLECTIVELY, "PALO ALTO NETWORKS").

THIS EULA GOVERNS YOUR USE OF THE PALO ALTO NETWORKS HARDWARE ("HARDWARE"), ANY SOFTWARE THAT IS INCLUDED IN THE HARDWARE AND ANY STANDALONE SOFTWARE THAT IS PROVIDED WITHOUT HARDWARE FOR USE ON YOUR HARDWARE INCLUDING VIRTUAL MACHINE ("VM") SOFTWARE OR ENDPOINT SOLUTIONS ("ENDPOINT") (COLLECTIVELY, "SOFTWARE"), ANY SOFTWARE-AS-A-SERVICE (SaaS), SUBSCRIPTION-BASED SERVICES INCLUDING, BUT NOT LIMITED TO, WILDFIRE, GLOBALPROTECT, URL FILTERING, AND THREAT PREVENTION ("SUBSCRIPTION SERVICES"), OR A COMBINATION OF THE

FOREGOING, ALL COLLECTIVELY REFERRED TO HEREIN AS "PRODUCTS", UNLESS YOU AND PALO ALTO NETWORKS HAVE EXECUTED A SEPARATE EULA IN WRITING, SIGNED BY BOTH PALO ALTO NETWORKS AND YOU WHICH EXPRESSLY SUPERSEDES THIS EULA.

BY OPERATING, DOWNLOADING, INSTALLING, REGISTERING OR OTHERWISE USING THE PRODUCTS, YOU ARE EXPRESSLY AND EXPLICITLY ACKNOWLEDGING AND AGREEING THAT THIS IS A BINDING EULA AND YOU HEREBY AGREE TO THE TERMS OF THIS EULA.

IF YOU DO NOT ACCEPT ALL THE TERMS AND CONDITIONS SET FORTH HEREIN, DO NOT OPERATE, DOWNLOAD, INSTALL, REGISTER OR OTHERWISE USE THIS PRODUCT.

1. LICENSE GRANT AND RESTRICTIONS.

- 1.1 **Software License Grant.** Subject to the terms and conditions of this EULA, Palo Alto Networks grants to End User a non-exclusive license to: (i) use the Software solely as part of the Hardware with which the Software is delivered, or (ii) in accordance with the published specifications. The Software is solely for End User's internal business purposes unless otherwise agreed to with Palo Alto Networks in a separate written agreement. All other rights in the Software are expressly reserved by Palo Alto Networks.
- 1.2 **Subscription Services Limited Right to Use**. Palo Alto Networks grants to End User the limited right to use the Subscription Services solely in connection with the Hardware and/or Software and solely for End User's internal business purposes.
- 1.3 License Restrictions. End User shall maintain the Products in strict confidence and shall not: (a) except in accordance with Palo Alto Networks license transfer procedure (Secondary Market Policy attached hereto), sell, resell, distribute, transfer, publish, disclose, rent, lend, lease or sublicense the Products, or make the functionality of the Products available to any other party (excluding contractors or other third party providing IT services to Customer) through any means (unless otherwise permitted in writing by Palo Alto Networks as expressly agreed to in a separate Managed Security Services Provider agreement), including, without, limitation, by uploading the Software or Subscription Services to a network or file-sharing service or through any hosting, application services provider, service bureau or other type of services; (b) modify, translate or create derivative works based on the Software or Subscription Services, in whole or in part, or permit or authorize a third party to do so; (c) disassemble, decompile, reverse compile, reverse engineer or otherwise attempt to derive the source code of the Software, in whole or in part, or permit or authorize a third party to do so, except to the extent

such activities are expressly permitted by applicable law in the jurisdiction of use notwithstanding this prohibition; (d) disclose, publish or otherwise make publicly available any benchmark, performance or comparison **tests** that End User runs (or has run on its behalf by a third party) on the Products; (e) duplicate the Software except for making a reasonable number of archival or backup copies, <u>provided</u> that End User reproduces on or in such copies the copyright, trademark and other proprietary notices or markings that appear on the original copy of the Software (if any) as delivered to End User.

1.4 **Affiliates.** If End User purchases the Product for use by any End User Affiliate (defined below), End User shall: (a) provide each such End User Affiliate with a copy of this EULA; (b) ensure that each such End User Affiliate complies with the terms and conditions therein; and (c) be responsible for any breach of these terms and conditions by any such End User Affiliate. For purposes of this EULA, "Affiliate" means any entity that Controls, is Controlled by, or is under common Control with End User or Palo Alto Networks, as applicable, where "Control" means ownership, directly or indirectly, of 50% or more of the voting interest of End User or Palo Alto Networks, as applicable.

2. OWNERSHIP.

The Software and Subscription Services are licensed, not sold. Palo Alto Networks and its suppliers, as applicable, retain all right, title, interest and ownership of the Software and Subscription Services, including copyrights, patents, trade secret rights, trademarks and any other intellectual property rights therein. End User shall not delete or in any manner alter the copyright, trademark, or other proprietary rights notices or markings that appear on the Software and Subscription Services or related documentation as delivered to End User. To the extent you provide any suggestions or comments related to the Products to Palo Alto Networks or its authorized third party agent, Palo Alto Networks shall have the right to retain and use any such suggestions or comments in current or future products or services, without your approval or further compensation to you.

3. TERM; TERMINATION; AND EFFECT OF TERMINATION.

This EULA is effective until terminated. End User's rights under this EULA will terminate immediately without notice from Palo Alto Networks if End User fails to comply with or breaches any provision of this EULA. End User may terminate this EULA upon written notice to Palo Alto Networks. Upon termination, End User shall destroy all copies of Software and documentation and cease to use any Subscription Services and/or Hardware.

4. WARRANTY, EXCLUSIONS AND DISCLAIMERS.

- **4.1 Warranty.** Palo Alto Networks warrants that, under normal authorized use (a) the Hardware shall be free from defects in material and workmanship for one (1) year from the date of shipment; and (b) the Software will substantially conform to Palo Alto Networks' published specifications for three (3) months from the date of shipment. As End User's sole and exclusive remedy and Palo Alto Networks' and its suppliers' sole and exclusive liability for breach of warranty, Palo Alto Networks shall, at its option and expense, repair or replace the Hardware or correct the Software, as applicable. All warranty claims must be made on or before the expiration of the warranty period specified herein. Replacement Products may consist of new or remanufactured parts that are equivalent to new. All Products that are returned to Palo Alto Networks and replaced become the property of Palo Alto Networks. Palo Alto Networks shall not be responsible for End User's or any third party's software, firmware, information, or memory data contained in, stored on, or integrated with any Product returned to Palo Alto Networks for repair or upon termination, whether under warranty or not. End User will pay the shipping costs for return of Products to Palo Alto Networks. Palo Alto Networks will pay the shipping costs for shipment of repaired or replacement Products back to End User.
- **4.2 Exclusions.** The warranty set forth above shall not apply if the failure of the Product results from or is otherwise attributable to: (i) repair, maintenance or modification of the Product by persons other than Palo Alto Networks-authorized third party; (ii) accident, negligence, abuse or misuse of a Product; (iii) use of the Product other than in accordance with Palo Alto Networks' specifications; (iv) improper installation or site preparation or any failure by End User to comply with environmental and storage requirements for the Product specified by Palo Alto Networks, including, without limitation, temperature or humidity ranges; or (v) causes external to the Product such as, but not limited to, failure of electrical systems, fire or water damage.
- **4.3 Disclaimers.** EXCEPT FOR THE WARRANTIES EXPRESSLY STATED AND AS OTHERWISE PROHIBITED BY APPLICABLE LAW, THE HARDWARE, SOFTWARE AND SUBSCRIPTION SERVICES ARE PROVIDED "AS IS". PALO ALTO NETWORKS AND ITS SUPPLIERS MAKE NO OTHER WARRANTIES AND EXPRESSLY DISCLAIM ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING OUT OF COURSE OF DEALING OR USAGE OF TRADE. PALO ALTO NETWORKS

DOES NOT WARRANT THAT (I) THE PRODUCT WILL MEET END USER'S REQUIREMENTS, (II) USE THEREOF SHALL BE UNINTERRUPTED OR ERROR-FREE, OR (III) THE HARDWARE, SOFTWARE OR SUBSCRPTION SERVICES WILL PROTECT AGAINST ALL POSSIBLE THREATS WHETHER KNOWN OR UNKNOWN.

5. LIMITATION OF LIABILITY.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, (A) IN NO EVENT SHALL PALO ALTO NETWORKS OR ITS SUPPLIERS BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES OF ANY KIND (INCLUDING BUT NOT LIMITED TO LOSS OF USE, DATA, BUSINESS OR PROFITS, OR FOR THE COST OF PROCURING SUBSTITUTE PRODUCTS, SERVICES OR OTHER GOODS), ARISING OUT OF OR RELATING TO THIS EULA, REGARDLESS OF THE THEORY OF LIABILITY AND WHETHER OR NOT PALO ALTO NETWORKS WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGE OR LOSS; AND (B) IN NO EVENT SHALL PALO ALTO NETWORKS' TOTAL LIABILITY ARISING OUT OF OR RELATING TO THIS EULA, FROM ALL CLAIMS OR CAUSES OF ACTION AND UNDER ALL THEORIES OF LIABILITY, EXCEED THE AMOUNT OF FEES PAID BY END USER UNDER THE ORDER GIVING RISE TO SUCH LIABILITY, AND IF SUCH CLAIMS RELATE TO PARTICULAR PRODUCTS OR SERVICES, SUCH LIABILITY SHALL BE LIMITED TO FEES PAID FOR THE RELEVANT PRODUCTS OR SERVICES GIVING RISE TO THE LIABILITY. THE FOREGOING LIMITATIONS SHALL NOT APPLY TO LIABILITY ARISING FROM DEATH OR BODILY INJURY. End User agrees that the foregoing limitations of liability constitute a material inducement for Palo Alto Networks to enter into this EULA and that the purchase price and fees charged to End User would be substantially higher without such limitations.

THIS AGREEMENT SHALL NOT IMPAIR THE U.S. GOVERNMENT'S RIGHT TO RECOVER FOR FRAUD OR CRIMES ARISING OUT OF OR RELATED TO THIS CONTRACT UNDER ANY FEDERAL FRAUD STATUTE, INCLUDING THE FALSE CLAIMS ACT, 31 U.S.C. 3729-3733. FURTHERMORE, THIS CLAUSE SHALL NOT IMPAIR NOR PREJUDICE THE U.S. GOVERNMENT'S RIGHT TO EXPRESS REMEDIES PROVIDED IN THE GSA SCHEDULE CONTRACT (E.G., CLAUSE 552.238-75 – PRICE REDUCTIONS, CLAUSE 52.212-4(H) – PATENT INDEMNIFICATION, AND GSAR 552.215-72 – PRICE ADJUSTMENT – FAILURE TO PROVIDE ACCURATE INFORMATION).

6. INDEMNIFICATION.

6.1 Indemnification and Procedure. Palo Alto Networks will defend, at its expense, any third-party action or suit brought against End User alleging that any Palo Alto Networks Product provided to End User hereunder infringes or misappropriates the third party's patent, copyright, trademark, or trade secret (a "Claim"), and Palo Alto Networks will pay any damages awarded in final judgment against End User or agreed to in settlement by Palo Alto Networks that are attributable to any such Claim; provided that End User: (i) promptly notifies Palo Alto Networks in writing of the Claim; (ii) gives Palo Alto Networks sole control of the defense and settlement of the Claim; and (iii) gives Palo Alto Networks, at Palo Alto Networks' expense, all information and assistance reasonably requested for the defense and settlement of the Claim. Palo Alto Networks will not be bound by any settlement or compromise that End User enters into without Palo Alto Networks' prior written consent.

6.2 Remedy. If the Product becomes, or in Palo Alto Networks' opinion is likely to become, the subject of a Claim, then Palo Alto Networks may, at its sole option and expense: (i) procure for End User the right to continue using the Product; (ii) replace or modify the Product to avoid the Claim; or (iii) if options (i) and (ii) cannot be accomplished despite Palo Alto Networks' reasonable efforts, then Palo Alto Networks may accept return of the Product from End User and grant End User credit for the price of the Product as depreciated on a straight-line five (5) year basis, commencing on the date of receipt by End User of such Product.

6.3 Exceptions. Palo Alto Networks' obligations under this section shall not apply to the extent any Claim results from or is based on (a) modifications to the Product made by a party other than Palo Alto Networks or its designee; (b) the combination, operation, or use of the Product with hardware or software not supplied by Palo Alto Networks, if a Claim would not have occurred but for such combination, operation or use; (c) failure to use the most recent version or release of the Product; (d) Palo Alto Networks' compliance with End User's explicit or written designs, specifications or instructions; or (e) use of the Product that is not in accordance with Palo Alto Networks' published specifications.

THE FOREGOING TERMS STATE PALO ALTO NETWORKS' SOLE AND EXCLUSIVE LIABILITY AND END USER'S SOLE AND EXCLUSIVE REMEDY FOR ANY CLAIMS OF INTELLECTUAL PROPERTY INFRINGEMENT OR MISAPPROPRIATION.

7. END USER DATA.

Palo Alto Networks utilizes industry standard practices and policies to maintain administrative, physical and technical safeguards for the protection and security of End User Data (defined below). End User is hereby notified and acknowledges that Palo Alto Networks Products may include interaction and communication with facilities hosted outside of the country where End User purchased or utilizes the Products. End User is further notified and acknowledges that some Subscription Services may allow End User, in its sole discretion, to send data to Palo Alto Networks, where such data may contain personally-identifiable, sensitive, and/or confidential data and information (collectively, "End User Data"). End User represents and warrants that End User's use of the Subscription Services and related submission of End User Data complies with all applicable laws, including those related to data privacy, data security, international communication and the exportation of technical, personal or sensitive data. Palo Alto Networks is not a data processor or data collector, and the inclusion of such personally identifying or sensitive data in End User Data is solely incidental to the provision of the Subscription Services. Submission of End User Data to Palo Alto Networks shall be at End User's sole discretion and at its own risk, and Palo Alto Networks assumes no responsibility or liability for receipt of such End User Data. End User Data sent to Palo Alto Networks may be stored by Palo Alto Networks. End User further acknowledges that Palo Alto Networks may anonymize such End User Data to use for statistical purposes and share samples of such anonymized End User Data with other third party security-related researchers, vendors and customers.

8. GENERAL.

- **8.1 Governing Law.** Where Palo Alto Networks, Inc., is the contracting entity, this EULA is governed by and construed in accordance with the laws of the State of California, excluding its conflict of laws principles. Where Palo Alto Network (Netherlands) B.V., is the contracting party, this EULA is governed by and construed in accordance with the laws of the Netherlands, excluding its conflict of laws principles. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to this EULA.
- **8.2 Compliance with Laws; Export Control.** End User shall be solely responsible for its compliance with, and agrees to comply with, all applicable laws in connection with its use of the Product. End User further agrees that it will not engage in any illegal activity in any relevant jurisdiction, and acknowledges that Palo Alto Networks reserves the right to notify its customers or appropriate law enforcement in the event of such illegal activity. End User agrees to comply fully with the U.S. Export Administration Regulations, and any other export laws, restrictions, and regulations to ensure that the Product and any technical data related thereto is not exported or re-exported directly or indirectly in violation of, or used for any purposes prohibited by such laws and regulations.
- **8.3 Cumulative Remedies.** Except as expressly set forth in this EULA, the exercise by either party of any of its remedies will be without prejudice to any other remedies under this EULA or otherwise.
- **8.4 Notices.** All notices shall be in writing and delivered by overnight delivery service or by certified mail sent to the address published on the respective parties' websites or the address specified on the relevant order document (attention: Legal Department), and in each instance will be deemed given upon receipt.
- **8.5 Waiver and Severability.** The failure by either party to enforce any provision of this EULA will not constitute a waiver of future enforcement of that or any other provision. Any waiver, modification or amendment of any provision of this EULA will be effective only if in writing and signed by authorized representatives of both parties. If any provision of this EULA is held to be unenforceable or invalid, that provision will be enforced to the maximum extent possible and the other provisions will remain in full force and effect.
- **8.6 Entire Agreement.** This EULA together with the underlying GSA Schedule Contract, Schedule Pricelist, and Purchase Order(s), constitutes the entire agreement between the parties with respect to the subject matter hereof, and supersedes all prior written or oral agreements, understandings and communications between the parties with respect to the subject matter hereof. Any terms or conditions contained in End User's purchase order or other ordering document that are inconsistent with or in addition to the terms and conditions of this EULA are hereby rejected by Palo Alto Networks and will be deemed null.
- **8.7 U.S. Government End Users.** This section applies to United States Government End Users only and does not apply to any other End Users. The Software and its documentation are "commercial computer software" and "commercial computer software documentation," respectively; as such terms are used in FAR 12.212 and DFARS 227.7202. If the Software and its documentation are being acquired by or on behalf of the U.S. Government, then, as provided in FAR 12.212 and DFARS

227.7202-1 through 227.7202-4, as applicable, the U.S. Government's rights in the Software and its documentation shall be as specified in this EULA.

If any term or condition set forth in this EULA, (a) allows for the automatic termination of the Government's license rights or maintenance of services; (b) allows for the automatic renewal of services and/or fees; (c) allows for the Government to pay audit costs; and/or (d) requires the governing law to be anything other than Federal law, then such term and condition shall not apply to the United States Government, but shall continue to apply to prime contractors and subcontractors of the Government. Furthermore, nothing contained in this EULA is meant to diminish the rights of the United States Department of Justice as identified in 28 U.S.C. Section 516. Finally, to the extent any term and condition set forth in this EULA is contrary to United States Federal procurement law, then such term and condition shall not apply to the United States Government, but shall continue to apply to prime contractors and subcontractors of the Government.

- **8.8 Open Source Software.** The Products may contain or be provided with components subject to the terms and conditions of open source software licenses ("Open Source Software"). A list of Open Source Software is attached hereto.
- **8.9 End User Records.** End User grants to Palo Alto Networks and its independent advisors the right to examine End User's books, records, and accounts during End User's normal business hours to verify compliance with this EULA. In the event such audit discloses non-compliance with this EULA, End User shall promptly pay the appropriate license fees to the relevant party, plus reasonable audit costs.
- **8.10** Authorization Codes, Grace Periods and Registration. Your Product may require an authorization code for activation for support of Your Product or to access Subscription Services. The authorization codes will be issued at the time of order fulfillment and sent to You via email. The service period will commence in accordance with the grace period policy at https://www.paloaltonetworks.com/support/support-policies/grace-period.html. You are hereby notified that, upon applicable grace period expiration, if any, Palo Alto Networks reserves the right to register Your Product and activate support services (if purchased) on Your behalf without further notification to You.
- **8.11 WildFire Related Microsoft Licenses.** End User acknowledges that certain WildFire offerings require licenses for certain Microsoft software, including Windows and Office, as described further in the relevant Wildfire documentation. Where Microsoft software is provided with certain WildFire offerings, Palo Alto Networks has procured or otherwise provided the necessary Microsoft licenses for the WildFire offering. Customer is hereby notified and acknowledges that Microsoft updates and upgrades (software assurance) are not provided with the WildFire product and must be obtained by Customer directly from Microsoft in order for Customer to utilize later versions of Microsoft products beyond the versions initially provided with the WildFire offerings.
- **8.12 Survival.** Sections regarding license restrictions, ownership, term and termination, U.S. Government End Users, limitations of liability, and this General section shall survive termination of this EULA.

GLOBAL CUSTOMER SUPPORT SERVICES TERMS AND CONDITIONS

THESE TERMS AND CONDITIONS FORM A LEGAL AGREEMENT BETWEEN YOU, EITHER AS AN INDIVIDUAL, COMPANY OR OTHER LEGAL ENTITY (IN ANY CAPACITY REFERRED TO HEREIN AS "END USER", "CUSTOMER", "YOU" or "YOUR") AND (I) PALO ALTO NETWORKS, INC., A DELWARE CORPORATION WITH OFFICES AT 4401 GREAT AMERICA PARKWAY, SANTA CLARA, CALIFORNIA 95054 UNITED STATES, IF YOU ARE LOCATED IN THE AMERICAS; OR (II) PALO ALTO NETWORKS (NETHERLANDS) B.V., A COMPANY FORMED UNDER THE LAWS OF THE NETHERLANDS, WITH OFFICES AT OVAL TOWER, DE ENTRÉE 99-197, 5TH FLOOR, 1101 HE AMSTERDAM, IF YOU ARE LOCATED IN ANY COUNTRY OUTSIDE THE AMERICAS.

This Agreement sets forth the terms and conditions under which Palo Alto Networks will provide technical support services to you under the Palo Alto Networks Support Plan purchased for the Palo Alto Networks products sold and/or licensed pursuant to the Palo Alto Networks End User License Agreement ("EULA"). Palo Alto Networks is willing to provide technical support services to you only if you accept these terms. By checking the box labeled "I accept", you are indicating that you understand and accept all of these terms and conditions. The date on which you check the box labeled "I accept" is the Effective Date. If you are entering into this Agreement on behalf of a company or other legal entity, you represent that you have the authority to bind such entity to this Agreement, in which case the terms "you" or "your" shall refer to such company or other legal entity.

1. SUPPORT PLANS AND SERVICES OFFERED

Support Offerings	Premium Plus Support	Premium Support	Standard Support
Business Hours Availability	N	Mon – Fri, 7am to 6pm PT	
After Hours Availability	Yes - 24x7x365	Yes - 24x7x365	No
Designated Technical Support Engineer	Yes	No	No
Technical Account Manager	Yes	No	No
Hardware Support			
4 Hour Replacement Service (available only for products located within a specified range of a Palo Alto Networks service location)	Yes, Optional Add-on	Yes, Optional Add-on	No
Advance Replacement Service: Next Business Day Service	Yes	Yes	No
Return and Repair	N/A	N/A	Yes
Call Response Times			
Severity 1 – Critical Product is down, critically affects Customer production environment. No workaround available yet.	< 1 hour	< 1 hour	< 1 Business Hour
Severity 2 – High Product is impaired, Customer production up, but impacted. No workaround available yet.	2 Hours	2 Hours	2 Business Hours
Severity 3 – Medium A Product function has failed, Customer production not affected. Support is aware of the issue and a workaround is available.	4 Hours	4 Hours	4 Business Hours
Severity 4 Low Non-critical issue. Does not impact Customer business. Feature, information, documentation, how-to and enhancement requests from Customer.	8 Business Hours	8 Business Hours	8 Business Hours
Contact Support:	Toll Fi	support.paloaltonetworee US – 1.866.898.908 de the US +1.408.738.7	37

2. **DEFINITIONS**

"Affiliate" means any entity that Controls, is Controlled by, or is under common Control with End User or Palo Alto Networks, as applicable, where "Control" means ownership, directly or indirectly, of 50% or more of the voting interest of End User or Palo Alto Networks, as applicable.

"Business Hours" means Mondays through Fridays, 7:00 am – 6:00 pm PT, excluding US and California holidays.

"Hardware" means the hardware products listed on Palo Alto Networks then-current published product price list.

"Maintenance Releases" means bug fixes to the Software that: (i) are designated by a change in the 3rd set of digits of the version release number (e.g., v5.00.01 to v5.00.02); and (ii) are generally made available by Palo Alto Networks to its customers under valid support contracts, at no additional cost.

"Major Releases" means significant modifications or improvements to the Software that: (i) are designated by a change in the 1st digit of the version release number (e.g., v5.0 to v6.0); and (ii) are generally made available by Palo Alto Networks to its customers under valid support contracts, at no additional cost.

"Minor Releases" means minor modifications or improvements to the Software, cumulative bug fixes from Maintenance Releases since the last Minor Release and new bug fixes, as applicable, that: (i) are designated by a change in the 2nd set of digits of the version release number (e.g., v5.00 to v5.01); and (ii) are generally made available by Palo Alto Networks to its customers under valid support contracts, at no additional cost.

"Products" means, collectively, Hardware, Software and Subscription Services, or a combination thereof.

"Software" means any Palo Alto Networks software that is included in the Hardware; and any standalone software that is provided without Hardware, including virtual machine ("VM") software or endpoint solutions software listed on Palo Alto Networks' then-current published product price list.

"Standard Support," "Premium Support," and "Premium Plus Support" and "Support Plans" refer to the various support programs offered by Palo Alto Networks, as further detailed in Section 3 below.

"Subscription Services" means software-as-a-service (SaaS), subscription-based services including, but not limited to WildFire, GlobalProtect, URL Filtering, and Threat Prevention.

"Support Website" means the website currently located at https://support.paloaltonetworks.com, or any successor site thereto, as specified by Palo Alto Networks.

"Technical Account Manager" is a designated resource who will act as your advocate, will have a comprehensive understanding of your environment at the operations level, and will assist you with business objectives, deployment plans, and coordination of all aspects of your Palo Alto Networks support interaction.

"Designated Technical Support Engineer (DE)" is a designated engineer who will work with you on all your support cases, build deep knowledge of your deployment in order to speed support incident resolution. Your DE will be accessible during Business Hours at one of Palo Alto Networks' global support centers.

3. DESCRIPTION OF SUPPORT PLANS

You must register each Product for which you have purchased support on the Support Website in order to access the features and benefits available to such Product. In consideration of your purchase of a Support Plan, Palo Alto Networks shall provide the services as set forth in the table entitled "Support Plans and Services Offered" above, including:

a) Remote Technical Support

- i. Telephone support available during the times specified for the Support Plan purchased.
- ii. Support cases created via the web will be classified as non-critical and will have a response time based on the severity classification as set forth in the table entitled "Support Plans and Services Offered" above.

b) Secure Web Access

i. Access to the Support Website to acquire the latest software versions, fixes, feature releases, software release notes, signature updates, FAQs, case management and technical documentation.

ii. Palo Alto Networks will use commercially reasonable efforts to ensure that the Support Website is available 24x7.

Palo Alto Networks reserves the right to modify the Support Plans offered so long as such modification does not result in degradation of service. Please refer to the Support Website for the most current support plan descriptions.

4. SUPPORT OPTIONS

You shall choose from three support plans: (i) Standard Support, (ii) Premium Support, or (iii) Premium Plus Support. Based upon your selection and payment of applicable fees, Palo Alto Networks must:

a) Standard Support

- i. Maintain and support the list of releases defined as the currently-supported releases on the Support Website.
- ii. Make available all supported Maintenance Releases, Minor Releases and Major Releases.
- iii. Verify defects in the Software identified and submitted by customers.
- iv. Correct material defects in the Software for the currently-supported Maintenance Releases.
- v. Provide access to Palo Alto Networks online support through the Support Website including, but not limited to, knowledge base/FAQ, case management and software downloads.
- vi. Provide technical telephone support during Business Hours.
- vii. Provide a return and repair service for Hardware defects.

b) Premium Support

Includes all of the benefits of Standard Support plus the following:

- i. After hours technical telephone support on a 7x24 basis.
- ii. Provide a same business day shipment of advance replacement for defective Hardware. Please refer to section 5 (RMA Policy and Process) below for additional details.

c) Premium Plus Support

Premium Plus Support requires purchase of, at a minimum, Premium Support on all covered devices. Premium Plus Support includes all of the benefits of Premium Support plus the following:

- i. Appointment of a Designated Technical Support Engineer to help facilitate access to support services.
- ii. Appointment of a Technical Account Manager who will act as your advocate.
- iii. Annual onsite health-check to review key aspects of your deployment to identify areas of optimization and improvement.

d) Optional Add-On: 4-Hour Replacement Service

This support option is available only for Hardware located within a specified range of a Palo Alto Networks service location. It includes all of the benefits of Premium or Premium Plus Support (as applicable) plus commercially reasonable efforts by Palo Alto Networks to deliver replacement Hardware to you within four hours from the issuance of an RMA.

5. RMA POLICY AND PROCESS

In situations when it is necessary for you to return a Product to Palo Alto Networks, you must ask Palo Alto Networks to issue a Return Material Authorization (RMA) number prior to shipment. Each RMA number will be uniquely identified to track the processing of the returned Product, pursuant to the RMA Process and Policy.

a) Return and Repair: You shall obtain an RMA number for the Product that you wish to return to Palo Alto Networks by contacting Support via telephone or email or via the Support Website. Support will work with you to confirm the Hardware problem and issue a RMA number to be used to ship the Product back to Palo Alto Networks. You shall repackage the Product in the original packaging (shipping damage that occurs as a result of insufficient

packaging is not covered under this Agreement), note the RMA number on the shipping label and ship the Product to the specified Palo Alto Networks location. You will be responsible for all shipping costs incurred in returning the defective Product to Palo Alto Networks. Products will be repaired or replaced within 10 business days from receipt of the defective Product by Palo Alto Networks. Palo Alto Networks will pay all shipping costs that it incurs in connection with shipping the repaired or replacement Product to you, except that if you are located outside the United States, you will be responsible for any taxes, duties, fees or other charges assessed in connection with importing the repaired or replaced Product into your country of destination.

- b) Advance Replacement: You shall obtain an RMA number for the Product that you wish to return to Palo Alto Networks by contacting Support via telephone or via the Support Website. Support will work with you to confirm the Hardware problem and issue an RMA number to be used in connection with shipping the Product back to Palo Alto Networks. Palo Alto Networks will use commercially reasonable efforts to have a replacement Product delivered to you by the next business day. Palo Alto Networks will pay all shipping costs incurred in shipping the replacement Product to you. Upon receipt of a replacement Product, you shall return the defective Product to Palo Alto Networks in the replacement Product's packaging (shipping damage that occurs as a result of insufficient packaging is not covered under this Agreement), using the prepaid return airbill affixed to the exterior of the shipping carton, and arranging for the designated courier service for pickup. If Palo Alto Networks does not receive the returned Product within 10 business days after the delivered date of the replacement Product, you will be charged current list price of the replacement Product.
- c) 4 Hour RMA Replacement: You shall obtain an RMA number for the Product that you wish to return to Palo Alto Networks by contacting Support. Support will work with you to confirm the Hardware problem and issue an RMA number. Palo Alto Networks will use commercially reasonable efforts to have a replacement Product delivered to you within four hours after issuance of the RMA number. You must have an authorized representative available to accept delivery of the replacement Product. If Palo Alto Networks (or its subcontractor) is unable to complete delivery because you did not have an authorized representative available, Palo Alto Networks reserves the right to charge you for costs incurred in making a subsequent delivery.

6. YOUR OBLIGATIONS

During the term of this Agreement, you must:

- a) Operate at the then-supported Maintenance Release;
- b) Use reasonable efforts to isolate, collect all error and log files to enable Palo Alto Networks to fulfill its obligations herein;
- c) Notify Palo Alto Networks if you physically relocates device(s) covered by 4 Hour RMA Replacement service to new location(s).

7. LIMITATIONS

The following services are expressly excluded from the Support Plans:

- a) Repair or replacement of Product required as a result of causes other than normal use, including without limitation: (i) repair, maintenance or modification of the Product by persons other than Palo Alto Networks-authorized personnel; (ii) accident or negligence of your fault; (Iii) user error or misuse of the Product; or (iv) causes external to the Product such as, but not limited to, failure of electrical systems or fire or water damage or hardware failure, operation system software failure or any other damage and failure not caused by Palo Alto Networks.
- b) Maintenance or technical services for any third party software or hardware, where such third party software or hardware was not provided by Palo Alto Networks.

8. TERM AND TERMINATION

This Agreement will begin on the Effective Date and, unless terminated earlier in accordance with its terms, will remain in effect for the one, two or other multi-year support contract purchased. Palo Alto Networks will send you renewal reminders in advance of the expiration date(s). At the end of such term (and each renewal term thereafter, if any), this Agreement will automatically expire unless you renew by paying Palo Alto Networks the applicable fee and by following the renewal

procedure specified on the Support Website. Either party may terminate this Agreement at any time in the event that the other party breaches any material term of this Agreement and fails to cure such breach within thirty (30) days following notice thereof from the non-breaching party.

9. CONFIDENTIALITY

"Confidential Information" means the non-public information that is exchanged between the parties, provided that such information is: (a) identified as confidential at the time of disclosure by the disclosing party ("Discloser"), or (b) disclosed under circumstances that would indicate to a reasonable person that the information ought to be treated as confidential by the party receiving such information ("Recipient"). Notwithstanding the foregoing, Confidential Information is exclusive of information or data that Recipient can prove by credible evidence: (i) was in the public domain at the time it was communicated to Recipient; (ii) entered the public domain subsequent to the time it was communicated to Recipient through no fault of Recipient; (iii) was in Recipient's possession not in violation of any obligation of confidentiality at the time it was communicated to Recipient; (iv) was disclosed to Recipient not in any violation of any obligation of confidentiality; or (v) was developed by employees or agents of Recipient without use of or reference to the Confidential Information of Discloser. Each party will not use the other party's Confidential Information, except as necessary for the performance of this Agreement, and will not disclose such Confidential Information to any third party, except to those of its employees and subcontractors that need to know such Confidential Information for the performance of this Agreement, provided that each such employee and subcontractor is subject to a written Agreement that includes binding use and disclosure restrictions that are at least as protective as those set forth herein. Each party will use all reasonable efforts to maintain the confidentiality of all of the other party's Confidential Information in its possession or control, but in no event use less effort that it ordinarily uses with respect to its own confidential information of similar nature and importance. The foregoing obligations will not restrict either party from disclosing the other party's Confidential Information or the terms and conditions of this Agreement: (vi) pursuant to the order or requirement of a court, administrative agency, or other governmental body, provided that the party required to make such a disclosure gives reasonable notice to the other party to enable it to contest such order or requirement; (vii) on a confidential basis to its legal or professional financial advisors; or (viii) as required under applicable securities regulations. The foregoing obligations of each Party shall continue for the period terminating three (3) years from (ix) the date on which the Confidential Information is last disclosed, or (x) the date of termination of this Agreement, whichever is later.

10. GENERAL

- 10.1 No Warranty. Nothing in this Agreement shall be construed as expanding or adding to the warranty set forth in the EULA. PALO ALTO NETWORKS MAKES, AND YOU RECEIVE, NO WARRANTIES OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, ARISING IN ANY WAY OUT OF, RELATED TO, OR UNDER THIS AGREEMENT OR THE PROVISION OF MATERIALS OR SERVICES THEREUNDER, AND PALO ALTO NETWORKS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE.
- 10.2 Indemnification and Procedure. Palo Alto Networks will defend, at its expense, any third-party action or suit brought against End User alleging that any Palo Alto Networks Product provided to End User hereunder infringes or misappropriates the third party's patent, copyright, trademark, or trade secret (a "Claim"), and Palo Alto Networks will pay any damages awarded in final judgment against End User or agreed to in settlement by Palo Alto Networks that are attributable to any such Claim; provided that End User: (i) promptly notifies Palo Alto Networks in writing of the Claim; (ii) gives Palo Alto Networks sole control of the defense and settlement of the Claim; and (iii) gives Palo Alto Networks, at Palo Alto Networks' expense, all information and assistance reasonably requested for the defense and settlement of the Claim. Palo Alto Networks will not be bound by any settlement or compromise that End User enters into without Palo Alto Networks' prior written consent. If the Product becomes, or in Palo Alto Networks' opinion is likely to become, the subject of a Claim, then Palo Alto Networks may, at its sole option and expense: (i) procure for End User the right to continue using the Product; (ii) replace or modify the Product to avoid the Claim; or (iii) if options (i) and (ii) cannot be accomplished despite Palo Alto Networks' reasonable efforts, then Palo Alto Networks may accept return of the Product from End User and grant End User credit for the price of the Product as depreciated on a straight-line five (5) year basis, commencing on the date of receipt by End User of such Product. Palo Alto Networks' obligations under this section shall not apply to the extent any Claim results from or is based on (a) modifications to the Product made by a party other than Palo Alto Networks or its designee; (b) the combination, operation, or use of the Product with hardware or software not supplied by Palo Alto Networks, if a Claim would not have occurred but for such combination, operation or use; (c) failure to use the most recent version or release of the Product; (d) Palo Alto

Networks' compliance with End User's explicit or written designs, specifications or instructions; or (e) use of the Product that is not in accordance with Palo Alto Networks' published specifications. THE FOREGOING TERMS STATE PALO ALTO NETWORKS' SOLE AND EXCLUSIVE LIABILITY AND END USER'S SOLE AND EXCLUSIVE REMEDY FOR ANY CLAIMS OF INTELLECTUAL PROPERTY INFRINGEMENT OR MISAPPROPRIATION.

10.3 LIMITATION OF LIABILITY. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW (A) IN NO EVENT SHALL PALO ALTO NETWORKS OR ITS SUPPLIERS BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES OF ANY KIND (INCLUDING BUT NOT LIMITED TO LOSS OF USE, DATA, BUSINESS OR PROFITS, OR FOR THE COST OF PROCURING SUBSTITUTE PRODUCTS, SERVICES OR OTHER GOODS), ARISING OUT OF OR RELATING TO THIS AGREEMENT, REGARDLESS OF THE THEORY OF LIABILITY AND WHETHER OR NOT PALO ALTO NETWORKS WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGE OR LOSS; AND (B) IN NO EVENT SHALL PALO ALTO NETWORKS' TOTAL LIABILITY ARISING OUT OF OR RELATING TO THIS AGREEMENT, FROM ALL CLAIMS OR CAUSES OF ACTION AND UNDER ALL THEORIES OF LIABILITY, EXCEED THE AMOUNT OF FEES PAID BY END USER UNDER THE ORDER GIVING RISE TO SUCH LIABILITY, AND IF SUCH CLAIMS RELATE TO PARTICULAR PRODUCTS OR SERVICES, SUCH LIABILITY SHALL BE LIMITED TO FEES PAID FOR THE RELEVANT PRODUCTS OR SERVICES GIVING RISE TO THE LIABILITY. THE FOREGOING LIMITATIONS SHALL NOT APPLY TO LIABILITY ARISING FROM DEATH OR BODILY INJURY. You agree that the foregoing limitations of liability constitute a material inducement for Palo Alto Networks to enter into this Agreement and that the purchase price and fees charged to you would be substantially higher without such limitations.

THIS AGREEMENT SHALL NOT IMPAIR THE U.S. GOVERNMENT'S RIGHT TO RECOVER FOR FRAUD OR CRIMES ARISING OUT OF OR RELATED TO THIS CONTRACT UNDER ANY FEDERAL FRAUD STATUTE, INCLUDING THE FALSE CLAIMS ACT, 31 U.S.C. 3729-3733. FURTHERMORE, THIS CLAUSE SHALL NOT IMPAIR NOR PREJUDICE THE U.S. GOVERNMENT'S RIGHT TO EXPRESS REMEDIES PROVIDED IN THE GSA SCHEDULE CONTRACT (E.G., CLAUSE 552.238-75 – PRICE REDUCTIONS, CLAUSE 52.212-4(H) – PATENT INDEMNIFICATION, AND GSAR 552.215-72 – PRICE ADJUSTMENT – FAILURE TO PROVIDE ACCURATE INFORMATION).

- 10.4 Governing Law. Where Palo Alto Networks, Inc., is the contracting entity, this Agreement is governed by and construed in accordance with the laws of the State of California, excluding its conflict of laws principles. Any legal action or proceeding arising under this Agreement will be brought exclusively in the state or federal courts located in Santa Clara, California, or the Northern District of California, as applicable. Where Palo Alto Network (Netherlands) B.V., is the contracting party, this Agreement is governed by and construed in accordance with the laws of the Netherlands, excluding its conflict of laws principles. Any legal action or proceeding arising under this Agreement will be brought exclusively in the courts located in Amsterdam, Netherlands. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to this Agreement.
- **10.5 Cumulative Remedies.** Except as expressly set forth in this Agreement, the exercise by either party of any of its remedies will be without prejudice to any other remedies under this Agreement or otherwise.
- **10.6 Notices.** All notices shall be in writing and delivered by overnight delivery service or by certified mail sent to the address published on the respective parties' websites or the address specified on the relevant order document (attention: Legal Department), and in each instance will be deemed given upon receipt.
- 10.7 Waiver and Severability. The failure by either party to enforce any provision of this Agreement will not constitute a waiver of future enforcement of that or any other provision. Any waiver, modification or amendment of any provision of this Agreement will be effective only if in writing and signed by authorized representatives of both parties. If any provision of this Agreement is held to be unenforceable or invalid, that provision will be enforced to the maximum extent possible and the other provisions will remain in full force and effect.
- 10.8 Entire Agreement. This Agreement, together with the underlying GSA Schedule Contract, Schedule Pricelist, and Purchase Order(s), constitutes the entire Agreement between the parties with respect to the subject matter hereof, and supersedes all prior written or oral Agreements, understandings and communications between the parties with respect to the subject matter hereof. Therefore, the parties agree that this Agreement shall be interpreted on the basis of its text only. Further, any terms or conditions contained in your purchase order or other ordering document that are inconsistent with or in addition to the terms and conditions of this Agreement are hereby rejected and will be deemed null.
- 10.9 Force Majeure. Palo Alto Networks shall not be responsible for any cessation, interruption or delay in the

performance of its obligations hereunder due to earthquake, flood, fire, storm, natural disaster, act of God, war, terrorism, armed conflict, labor strike, lockout, boycott or other similar events beyond its reasonable control.

SECONDARY MARKET POLICY

The secondary market policy for previously owned Palo Alto Networks devices provides you with the necessary steps required to ensure that the secondary market device can be supported and used. If you are considering the purchase of previously owned Palo Alto Networks equipment on the secondary market, please review the requirements below prior to the secondary market purchase to determine if it will meet the requirements in this policy. If you have additional questions on the secondary market policy, please contact your local sales representative.

Policy Requirements

Any licenses or subscriptions that come with the device are not transferrable to you and are considered expired by Palo Alto Networks. Palo Alto Networks will have no obligation to provide any support or services under any previous licenses or subscriptions that come with the purchased device.

Before hardware devices that are purchased on the secondary market may be licensed for use, including the activation of support and subscriptions, the following requirements must be met:

- Devices may not be lost or stolen. If the device is determined to be lost or stolen, then it will NOT be re-certified and will be requested to be returned to Palo Alto Networks. Palo Alto Networks may pay for shipment of the device, but will not pay for the device itself.
- Devices that are currently end-of-sale cannot be re-certified. For our current end-of-life policy and listing of products, please see our support web site.
- Upon receipt of a purchased device on the secondary market, you must place two orders through a Palo Alto Networks
 authorized local reseller. The first order must be for a non-refundable certification fee and the second for a one time
 activation fee and the purchase of a one year support subscription (you may purchase a longer support subscription if
 desired but the purchase it at minimum a one year subscription). The purchase of other subscriptions or services are
 optional.
- After the two orders have been placed, Palo Alto Networks will send instructions on the verification process that will
 be used to determine if the device is in good working condition. The verification process will involve verification tests
 to validate hardware is in good operating condition, the generation and uploading of a technical support file to our
 support portal, and may require an internet connection to allow a Palo Alto Networks engineer to test the device
 remotely.
- If the device is determined to NOT be in good working condition, the re-certification fee will not be refunded, and the second order will be cancelled.

Once all of the above steps are met, the remainder of your order will be processed and your Palo Alto Networks device will be ready to use.

Palo Alto Networks Grace Periods

Summary

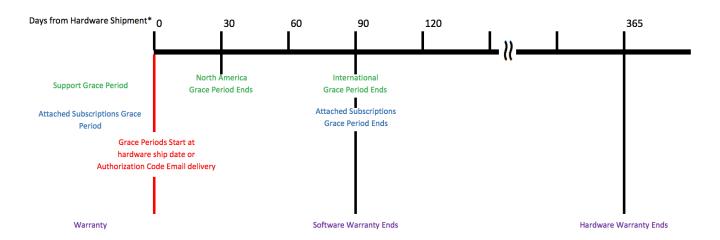
This document defines Palo Alto Networks* grace periods for activation and entitlement of warranties, support contracts, and subscriptions. Grace periods exist to avoid penalizing our customers during the time it takes for hardware to ship, to clear customs if applicable, and to be received and processed at the destination. Grace periods do not apply to support contract renewals; support renewals always start at the end of the previous support contract regardless of any gap between the expiration date of the previous contract and the date on which the customer renews the support contract.

The policy defined in this document applies to all sales except *stocking order* sales to Palo Alto Networks authorized channels, for which the grace period begins on the day the distributor sells the product to a reseller as documented in the distributor's point-of-sale (POS) reports. Additionally, products sold as part of a stocking order cannot receive warranty or support service and cannot have any subscriptions attached to them until the distributor provides the necessary POS data to Palo Alto Networks.

When an applicable grace period expires, Palo Alto Networks reserves the right to register the product (hardware or software) as well as activate support and any purchased attached subscriptions on behalf of the product owner without notification.

For the purposes of this policy, attached subscriptions are subscriptions attached to a Palo Alto Networks hardware or software appliance and include GlobalProtect™ network security for endpoints, WildFire® cloud-based threat analysis service, Threat Prevention, and URL Filtering. Term-based license offerings are not considered to be attached subscriptions.

Policy Requirements:



^{*} Shipment from Palo Alto Networks or a Palo Alto Networks authorized dealer.

Figure 1: Summary of the grace period policy, where North America covers the U.S. and Canada.

Overview

- Support contracts start either (i) at the time hardware is registered or (ii) 30 days after hardware is shipped when shipped to North America and 90 days after hardware is shipped when it is shipped outside North America, whichever is earlier.

 Japan only: support contracts start either (i) at the time the authorization code is activated or (ii) 90 days after hardware is shipped, whichever is earlier.
- Attached subscriptions start when subscriptions are activated or 90 days after the delivery of the authorization code, whichever is earlier.
- Lab subscription and support bundles for end users as well as not-for-resale (NFR) subscription and support bundles for partners follow the support policy defined herein, which means support contracts and applicable attached subscriptions start on the same day.

Warranty

The warranty start date for hardware is the same as the ship date. For software, the warranty start date is the same as the email delivery date of the authorization code. For additional information, refer to the Palo Alto Networks Product Warranty document located at https://www.paloaltonetworks.com/services/support/product-warranty.

Support Contracts

The support contract start date is determined by the timing of the applicable hardware or software shipment but we provide a grace period—30 days in North America and 90 days outside North America—to allow for in-transit shipment time and enduser setup time. Support is similar to *insurance* in that, when active, it is in place to help if something goes wrong and, thus, it is important that support contracts start on the hardware or software shipment date. For details about support options, refer to the Global Customer Support Services Terms and Conditions at

https://www.paloaltonetworks.com/content/dam/pan/en_US/assets/pdf/datasheets/support/global-customer-support-services-terms-conditions.pdf.

<u>Important:</u> The grace period for support contracts is based on the hardware ship date, not the delivery date of the support authorization code. For example, if a hardware appliance was shipped on January 1, 2011, and a support contract was purchased and applied to this appliance on May 1, 2011, the start date for support would be January 31, 2011 (30 days after the ship date). The start date would be earlier if the appliance was activated prior to January 31, 2011.

Attached Subscriptions

Attached subscriptions start either (i) at the time they are activated or (ii) 90 days after delivery of the authorization code, whichever is earlier, and they expire at the end of their subscription term even if you never activate the subscription. For example, a one-year attached subscription purchased on January 1, 2012, but never activated would still expire on March 31, 2013 (at the end of the 90-day grace period plus one year).

Additionally, attached subscription grace periods are determined by the delivery date of the authorization code(s)—not by the hardware ship date—and are 90 days long because attached subscriptions are product services that provide functionality only after they are activated. For example, if an appliance was shipped on January 1, 2018, and a Threat Prevention subscription was purchased on May 1, 2018, and activated on June 15, 2018, then the start date for the attached Threat Prevention subscription would be June 15, 2018 (because it is within the 90-day grace period that started on May 1, 2018, for the attached subscription).

Bundles—Excluding VM-Series Firewall

The support contract start date for support and subscription bundles, including lab and NFR bundles, follows the support contracts grace period model defined above, which means that support starts either (i) at the time the hardware or software appliance is registered or (ii) either 30 days after the hardware or software appliances is shipped within North America or 90 days after the hardware or software appliance is shipped outside North America, whichever is earlier.

Term-Based Licensed Offerings

Term-based licensed offerings (such as Traps™ advanced endpoint protection, AutoFocus™, Logging Service, GlobalProtect cloud service, and Aperture™ SaaS security service) do not have grace periods. Terms for term-based licenses start on the email delivery date of authorization codes.

VM-Series Firewall Perpetual Bundles

All VM-Series firewall perpetual bundles do not have a grace period: support contracts and applicable attached subscriptions start on the email delivery date of authorization codes. This policy applies to VM-50, VM-100, VM-300, VM-1000-HV, VM-500, and VM-700 firewall perpetual bundles. Each bundle includes a VM-Series firewall perpetual capacity license, support contract, and zero or more attached subscriptions. All renewals of VM-Series firewall bundles start at the end of the previous bundle term regardless of any gap between the end of that previous term and the date that the bundle is renewed.

Enterprise Agreements

Enterprise Agreements do not have a grace period. Enterprise Agreements start (i) on the email delivery date of authorization codes or (ii) on the start date requested by the customer, whichever is later.





PAN-OS OSS Listings

Open Source
Software
Licenses

Contact Information Corporate Headquarters:

Palo Alto Networks

4401 Great America Parkway Santa Clara, CA 95054

www.paloaltonetworks.com/company/contact-support

About this Guide

This guide lists the open source software (OSS) licenses used with Palo Alto Networks products and software. For additional information, refer to the following resources:

- For information on how to configure the Palo Alto Networks Next-Generation Security Platform, go to the Technical Documentation portal: https://www.paloaltonetworks.com/documentation or search the documentation.
- For access to the knowledge base and community forums, refer to https://live.paloaltonetworks.com.
- For contacting support, for information on support programs, to manage your account or devices, or to open a support case, refer to https://www.paloaltonetworks.com/support/tabs/overview.html.
- For the most current PAN-OS and Panorama 8.0 release notes, go to https://www.paloaltonetworks.com/documentation/80/pan-os/pan-os-release-notes.html.

To provide feedback on the documentation, please write to us at: documentation@paloaltonetworks.com.

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Revision Date: April 5, 2017



PAN-OS OSSListings

The following sections display Open Source Software (OSS) licenses specific to each feature release of PAN- OS° :

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- ▲ PAN-OS 4.0 Open Source Software (OSS) Listing

PAN-OS 8.0 Open Source Software (OSS) Listing

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
M2Crypto	Standalone apps/libraries	0.21.1	BSD	Support for using OpenSSL in python scripts
MAKEDEV	Standalone apps/libraries	3.23	GPLv2	A program used for creating the device files in /dev
SysVinit	Standalone apps/libraries	2.86	GPLv2	Programs which control basic system processes
acpid	Standalone apps/libraries	1.0.10	GPLv2	ACPI Event Daemon
basesystem		8	Public Domain	The skeleton package which defines a simple Red Hat Linux system
bash	Standalone apps/libraries	3.1	GPLv2	The GNU Bourne Again shell (bash) version 3.1
beecrypt	OSS Shared library linkage	4.1.2	LGPLv2.1	An open source cryptography library
bind-libs	OSS Shared library linkage	9.3.3	ISC	Libraries used by the BIND DNS packages
bind-utils	Standalone apps/libraries	9.3.3	ISC	Utilities for querying DNS name servers
binutils		2.23.51.0. 3	GPL	A collection of binary tools
bonnie++	Standalone apps/libraries	1.03d	GPLv2	A program for benchmarking hard drives and file systems
bzip2	Standalone apps/libraries	1.0.3	BSD	A file compression utility
bzip2-libs	OSS Shared library linkage	1.0.3	BSD	Libraries for applications using bzip2
chkconfig	Standalone apps/libraries	1.3.30.1	GPLv2	A system tool for maintaining the /etc/rc*.d hierarchy
coreutils	Standalone apps/libraries	5.97	GPLv2	The GNU core utilities: a set of tools commonly used in shell scripts
cpio	Standalone apps/libraries	2.6	GPLv2	A GNU archiving program
срр	Standalone apps/libraries	4.1.1	GPLv2	The C Preprocessor
cracklib	OSS Shared library linkage	2.8.9	Artistic	A password-checking library
cracklib-dicts	Dictionaries used by cracklib	2.8.9	Artistic	The standard CrackLib password- checking dictionaries
crontabs	Root crontab files, used by system utilities	1.1	Public Domain	Root crontab files used to schedule the execution of programs

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
curl	Standalone apps/libraries	7.20.1	MIT	Get and send files to a FTP, HTTP, TFTP, SSH or other servers
dhclient	Standalone apps/libraries	3.0.5	Distributable	The ISC DHCP client for configuring network interfaces
dhcp	Standalone apps/libraries	3.0.5	Distributable	DHCP (Dynamic Host Configuration Protocol) server and relay agent
diffutils	Standalone apps/libraries	2.8.1	GPLv2	A GNU collection of diff utilities
dmidecode	Standalone apps/libraries	2.11	GPLv2	Tool to analyze BIOS DMI data
dpdk	Standalone apps/libraries	2.2	BSD	Libraries and drivers for fast packet processing
drng_samples		1	BSD-3	Creating a simple library to support the Intel RDRAND instructions
e2fsprogs	Standalone apps/libraries	1.39	GPLv2	Utilities for managing the second extended (ext2) file system
e2fsprogs-libs	OSS Shared library linkage	1.39	GPLv2	Ext2/3 file-system-specific static libraries and headers
e4fsprogs	Standalone apps/libraries	1.41.12	GPLv2	Utilities for managing the fourth extended (ext4) file system
e4fsprogs-libs	OSS Shared library linkage	1.41.12	GPLv2	Ext4 file-system-specific static libraries and headers
elfutils-libelf	OSS Shared library linkage	0.128	GPLv2	Library to read and write ELF files
ethtool	Standalone apps/libraries	5	GPLv2	Ethernet settings tool for PCI ethernet cards
eventlog	OSS Shared library linkage	0.2.12	BSD	A library for event logs
expat	OSS Shared library linkage	1.95.8	BSD	A library for parsing XML
fastlz	Shared library linkage	0.1.0	FastLZ	A real-time compression library
file	Standalone apps/libraries	5.04	Distributable	A utility for determining file types
file-libs	Standalone apps/libraries	5.04	Distributable	Libraries for applications using the LibMagic Perl interface
filesystem	Standalone apps/libraries	2.4.0	Distributable	The basic directory layout for a Linux system
findutils	Standalone apps/libraries	4.2.27	GPLv2	The GNU versions of find utilities (find and xargs)
fipscheck	Standalone apps/libraries	1.2.0	FreeBSD	Alibrary for integrity verification of FIPS validated modules
fipscheck-lib	Standalone apps/libraries	1.2.0	FreeBSD	Library files for fipscheck
flashrom	Standalone apps/libraries	0.9.4	GPLv2	Flashrom flash utility

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
fontconfig	OSS Shared library linkage	2.4.1	MIT	Font configuration and customization library
freetype	OSS Shared library linkage	2.3.11	BSD-like	A free and portable font rendering engine
fuse-libs	Standalone apps/libraries	2.8.5	GPLv2/LGPLv2	File System in Userspace (FUSE) libraries
gawk	Standalone apps/libraries	3.1.5	GPLv2	The GNU version of the awk text processing utility
gdb	Standalone apps/libraries	7.6	GPLv3+	A GNU source-level debugger for C, C++, Java and other languages
glib	OSS Shared library linkage	2.12.9	LGPLv2	Abundle of low-level system libraries in Clanguage
glib2	OSS Shared library linkage	2.12.3	LGPLv2	A library of useful utility functions
glibc	Shared library linkage	2.16	LGPLv2	The GNU libc libraries
glibc-common	Shared library linkage	2.16	LGPLv2	Common binaries and locale data for glibc
gmp	OSS Shared library linkage	4.3.1	LGPLv3	A GNU arbitrary precision library
gnupg	Standalone apps/libraries	1.4.5	GPLv2	A GNU utility for secure communication and data storage
gperftools	OSS Shared library linkage	2.2	BSD	Performance Tools for C++
grep	Standalone apps/libraries	2.5.1	GPLv2	The GNU versions of grep pattern matching utilities
grub	Standalone apps/libraries	6.0.97	GPL	GRUB - the Grand Unified Boot Loader
gzip	Standalone apps/libraries	1.3.5	GPLv2	The GNU data compression program
inetutils	Standalone apps/libraries	1.5	GPLv3	Internet utilities
info	Standalone apps/libraries	4.8	GPLv2	A stand-alone TTY-based reader for GNU Texinfo documentation
initscripts	Standalone apps/libraries + startup and shutdown scripts	8.45.15	GPLv2	The inittab file and the /etc/init.d scripts
iproute	Standalone apps/libraries	2.6.18	GPLv2	Advanced IP routing and network device configuration tools
iptables	Standalone apps/libraries	1.3.5	GPLv2	Tools for managing Linux kernel packet filtering capabilities
iptables-ipv6	Standalone apps/libraries	1.3.5	GPLv2	IPv6 support for IP tables
iputils	Standalone apps/libraries	20020927	GPLv2	Network monitoring tools including ping

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
irqbalance	Standalone apps/libraries	1.13	GPLv2	IRQ balancing daemon
keyutils-libs	Key utilities library	1.2	LGPLv2.1	OSS Shared library linkage
krb5-libs	Shared library linkage	1.13.1	MIT	The shared libraries used by Kerberos 5
krb5-workstatio n	Standalone apps/libraries	1.13.1	MIT	Kerberos 5 programs for use on workstations
less	Standalone apps/libraries	394	GPLv2	A text file browser similar to more, but better
leveldb	Shared library linkage	1.15.0	BSD	LevelDB library
libacl	OSS Shared library linkage	2.2.39	LGPLv2.1	Dynamic library for access control list support
libattr	OSS Shared library linkage	2.4.32	LGPLv2.1	Dynamic library for extended attribute support
libcurl4	Shared library linkage	7.20.1	MIT	The cURL library
libevent	OSS Shared library linkage	2.0.19	GPLv2	Abstract asynchronous event notification library
libgcc	Shared library linkage	4.7.0	LGPLv2	GCC version 4.1 shared support library
libgethostbyna me	Shared library linkage	1	LGPLv2	Fix glibc ghost bug
libgssapi	OSS Shared library linkage	0.1	BSD-like	Generic Security Services Application Programming Interface Library
libjpeg	OSS Shared library linkage	6b	IJĞ	A library for manipulating JPEG image format files
liblog4shib1	Standalone apps/libraries	1.09	LGPLv2.1	Log for C++, Shibboleth Edition
libmcrypt	OSS Shared library linkage	2.5.8	LGPLv2	Encryption algorithms library
libpcap	Shared library linkage	0.9.4	BSD	A system-independent interface for user-level packet capture
libpng	Shared library linkage	1.2.44	OSI certified/ZI	A library of functions for manipulating PNG image format files
libresolv	Shared library linkage	1	LGPLv2	Alibrary of functions for packets sent to a DNS
libsaml8	OpenSAML SAML library	2.5.5	Apache 2.0	Standalone apps/libraries
libselinux	OSS Shared library linkage	2.2.2	Public Domain	SELinux library and simple utilities
libsepol		1.15.2	LGPLv2.1	SELinux binary policy manipulation library

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
libsmbclient		3.0.33	GPLv2	The SMB client library
libssp	OSS Shared library linkage	4.7.2	GPLv3	A library to translate some pythos library speech signal processing (SSP) to C++
libstdc++	Shared library linkage	4.7.0	GPL	GNU Standard C++ Library
libsysfs	OSS Shared library linkage	2.0.0	LGPLv2	Shared library for interfacing with the Linux sysfs virtual file system
libtecla	Shared library linkage	1.6.1	MIT/X11	The Tecla command-line editing library
libtermcap	Configuration Files	2.0.8	Public Domain	A basic system library for accessing the termcap database
libunwind	OSS Shared library linkage	1.1	BSD	Unwind Library
libuser	OSS Shared library linkage	0.54.7	LGPLv2	A user and group account administration library
libvolume_id	OSS Shared library linkage	127	GPLv2	Dynamic libraries to get volume IDs
libxerces-c-3_1	Standalone apps/libraries	3.1.2	Apache 2.0	Shared library for Xerces-C++ validating XML parser
libxml-security- c17	Standalone apps/libraries	1.7.3	Apache 2.0	Apache XML security C++ library
libxml2	Shared library linkage	2.9.4	MIT	Library providing XML and HTML support
libxml2-python	Standalone apps/libraries	2.9.4	PSF	Python bindings for the libxml2 library
libxmltooling6	Standalone apps/libraries	1.5.6	Apache 2.0	OpenSAML XMLTooling library
libxslt	Shared library linkage	1.1.28	MIT	Library providing the Gnome XSLT engine
lm_sensors	Standalone apps/libraries	2.10.7	GPLv2	Hardware monitoring tools
lockdev	Standalone apps/libraries	1.0.1	LGPLv2.1	A library for locking devices
logrotate	Standalone apps/libraries	3.7.4	GPLv2	Rotates, compresses, removes and mails system log files
lunasa	Shared library linkage, Standalone apps/libraries	1	Commercial	Client software for SafeNet Luna SA hardware security module (HSM)
lz4	Standalone apps/libraries	r129	BSD	Extremely fast compression algorithm
mailx	Standalone apps/libraries	8.1.1	BSD	The /bin/mail program for sending quick email messages
mdadm		2.6.9	GPL	Linux utility used to manage and monitor software RAID devices

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
mingetty	Standalone apps/libraries	1.07	GPLv2	A compact getty program for virtual consoles only
minicom	Standalone apps/libraries	2.1	GPLv2	A text-based modem control and terminal emulation program
mktemp	Standalone apps/libraries	1.5	BSD	A small utility for safely making .TMP files
mmc-utils	Standalone apps/libraries	1.0	GPLv2	Userspace tools for MMC/SD devices
module-init-tool	Standalone apps/libraries	3.3	GPLv2	Kernel module management utilities
mongodb	Standalone apps/libraries	2.6.11	MIT	MongoDB client shell and tools
mtdutils	Standalone apps/libraries	1.0.0	GPL	Memory Technology Device Utilities
ncurses	Shared library linkage	5.5	Distributable	A terminal handling library
net-snmp	Standalone apps/libraries	5.4.4	BSD	Tools and servers for the SNMP protocol
net-tools	Standalone apps/libraries	1.6	GPLv2	Basic networking tools
nfast	Shared library linkage, Standalone apps/libraries	1	Commercial	Client software for Thales hardware security module (HSM)
nfs-utils	Standalone apps/libraries	1.0.9	GPLv2	Network File System (NFS) utilities and supporting clients and daemons for the kernel NFS server
nfs-utils-lib	OSS Shared library linkage	1.0.8	GPLv2	Network File System (NFS) Support Library
nss-softokn-fre ebl	Shared library linkage	3.14.3	MPLv2.0	Freebllibrary for the Network Security Services
ntp	Standalone apps/libraries	4.2.8p6	Distributable	The Network Time Protocol (NTP) daemon and utilities
ntp-dp	Standalone apps/libraries	4.2.8p6	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
ntpdate	Standalone apps/libraries	4.2.8p6	Distributable	Utility to set the date and time via Network Time Protocol (NTP)
open-vm-tools	OSS Shared library linkage	9.4.6	GPLv2/LGPLv2	Open Virtual Machine Tools for virtual machineshostedonVMware
openIdap	Shared library linkage	2.4.23	OpenLDAP	The configuration files, libraries, and documentation for OpenLDAP
openIdap-clients	Standalone apps/libraries	2.4.23	OpenLDAP	Client programs for OpenLDAP
opensaml-sche mas	Standalone apps/libraries	2.5.5	Apache 2.0	OpenSAML schemas and catalog

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
openssh	Standalone apps/libraries	6.4p1	BSD	Anopensourceimplementation of SSH protocol versions 1 and 2
openssh-clients	Standalone apps/libraries	6.4p1	BSD	An open source SSH client application
openssh-server	Standalone apps/libraries	6.4p1	BSD	An open source SSH server daemon
openssl	Shared library linkage	1.0.1e	OpenSSL	A general purpose cryptography library with TLS implementation
openssl-mp	Shared library linkage	1.0.1e	OpenSSL	A general purpose cryptography library with TLS implementation
pam	Shared library linkage	1.0.2	BSD	A security tool which provides authentication for applications
pam_krb5	Standalone apps/libraries	2.2.14	MIT	A pluggable authentication module (PAM) for Kerberos 5
pam_ldap	OSS Shared library linkage	1.8.4	LGPLv3	A pluggable authentication module (PAM) for use with LDAP servers
panos-release	Base Linux OS version info for our systems	2	GPLv2	PAN-OS Linux release file
parted	Standalone apps/libraries	1.8.1	GPLv3	The GNU disk partition manipulation program
passwd	Standalone apps/libraries	0.73	GPLv2	The passwd utility for setting/changing passwords using PAM
pciutils	Standalone apps/libraries	3.1.4	GPLv2	PCI bus related utilities
pciutils-libs	Standalone apps/libraries	3.1.4	GPLv2	Linux PCI library
pcre	Shared library linkage	6.6	BSD	Perl-compatible regular expression library
pexpect	OSS libraries in interpreted scripts	2.3	MIT	Pexpect is a Pure Python Expect-like module
phantomjs	OSS Shared library linkage	1.9.8	BSD	Head-Less Web Browser
php	Standalone apps/libraries	5.3.17	PHP v3.01	The PHP server-side scripting language
php-cli	Standalone apps/libraries	5.3.17	PHP v3.01	Command-line interface for PHP server- side scripting language
php-ext	Standalone apps/libraries	5.3.17	PHP v3.01	Shared PHP-Ext open source widget library for PHP 4 and PHP 5 server-side scripting language
popt	OSS Shared library linkage	1.12	MIT	A C library for parsing command line parameters
portmap	Standalone apps/libraries	4	BSD	A program which manages remote procedure call (RPC) connections

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
procps	Standalone apps/libraries	3.2.8	GPLv2	System and process monitoring utilities
psmisc	Standalone apps/libraries	22.2	BSD	Utilities for managing processes on your system
python	Standalone apps/libraries	2.4.3	PSF	An interpreted, interactive, object- oriented programming language
python26	OSS libraries in interpreted scripts	2.6.5	PSF	An interpreted, interactive, object- oriented programming language
python26-libs	OSS libraries in interpreted scripts	2.6.5	PSF	An interpreted, interactive, object- oriented programming language
python-alt		2.7.5	PSF	An interpreted, interactive, object- oriented programming language
python-alt-libs		2.7.5	PSF	Runtime libraries for Python
python-bloom	OSS libraries in interpreted scripts	0.1.12	BSD-like	Pythonimplementationofbloom filter
python-boto	OSS libraries in interpreted scripts	2.32.1	MIT	A simple, lightweight interface to Amazon Web Services (AWS)
python-element tree	OSS Shared library linkage	1.2.6	PSF	Fast XML parser and writer
python-imaging	Shared library linkage	1.1.5	Distributable	Python's own image processing library
python-pyasn1	OSS libraries in interpreted scripts	0.1.7	BSD	ASN.1 tools for Python
python-sqlite	Shared library linkage	1.1.7	Public Domain	Python bindings for SQLite
python-urlgrabb er	Standalone apps/libraries	3.1.0	LGPLv2.1	A high-level cross-protocol URL-grabber
python-waagent lib	Standalone apps/libraries	2.0.13	Apache 2.0	Azure Agent Python Library
rcs	Standalone apps/libraries	5.7	GPLv2	Revision control system (RCS) file version management tools
readline	OSS Shared library linkage	5.1	GPLv2	A library for editing typed command lines
redhat-logos		4.9.8		Red Hat-related icons and pictures
reportlab	OSS libraries in interpreted scripts	2.2	BSD	Python PDF generation library

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
rootfiles	Standalone apps/libraries	8.1	Distributable	The basic required files for the root user's directory
rpm	Standalone apps/libraries	4.4.2	GPLv2	The Route Processing Module (RPM) packagemanagementsystem
rpm-libs	Standalone apps/libraries	4.4.2	GPLv2	Libraries for manipulating Route Processing Module (RPM) packages
rpm-python	OSS libraries in interpreted scripts	4.4.2	GPLv2	Python bindings for apps which will manipulate Route Processing Module (RPM) packages
s3fs	Standalone apps/libraries	1.74	GPLv2	FUSE file system backed by Amazon S3 bucket
samba-common	Standalone apps	3.0.33	GPLv2	Files used by both Samba servers and clients
scrub	Standalone apps/libraries	2.1	GPLv2	Disk scrubbing program
sed	Standalone apps/libraries	4.1.5	GPLv2	A GNU stream text editor
setup		2.5.58	Public Domain	A set of system configuration and setup files
shadow-utils	Standalone apps/libraries	4.0.17	BSD	Utilities for managing accounts and shadow password files
smartmontools	Standalone apps/libraries	6.4	GPLv2	S.M.A.R.T. utility toolkit
snappy	Shared library linkage	1.0.1	Apache 2.0	High-speed compression and decompression library
sqlite	Shared library linkage	3.6.12	Public Domain	Library that implements an embeddable SQLite in-process database engine
sscep	Standalone apps/libraries	1.0.0	BSD-like	Simple SCEP client
sshpass	Standalone apps/libraries	1.05	BSD	Non-interactive SSH password provider
sysfsutils	Standalone apps/libraries	2.0.0	GPLv2	Shared library for interfacing with the Linux sysfs virtual file system
sysklogd	Standalone apps/libraries	1.4.1	GPLv2	System logging and kernel message trapping daemons
syslinux	Standalone apps/libraries	3.11	GPL	Simple kernel loader which boots from a FAT file system
syslog-ng	Standalone apps/libraries	3.2.5	GPLv2/LGPLv2	Syslog replacement daemon
tar	Standalone apps/libraries	1.15.1	GPLv2	A GNU file archiving program
tcpdump	Standalone apps/libraries	3.9.4	BSD	A network traffic monitoring tool
termcap	Configuration Files	5.5	Public Domain	The terminal feature database used by certain applications

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
tftp	Standalone apps/libraries	0.48	BSD	The client for Trivial FTP (TFTP)
tftp-server	Standalone apps/libraries	0.48	BSD	The server for Trivial FTP (TFTP)
traceroute	Standalone apps/libraries	2.0.1	GPLv2	Traces the route taken by packets over an IPv4/IPv6 network
tzdata	Configuration files	2011	Public domain	Time-zone data
udev	Standalone apps/libraries	127	GPLv2	Device manager for devicenodes and user space events (improved functionality over devfs)
util-linux	Standalone apps/libraries	2.13	GPLv2	Acollection of basic system utilities
vconfig		1.9	GPL	Linux 802.1q VLAN configuration utility
vim-minimal	Standalone apps/libraries	7.0.109	Charityware	Aminimalversion of VIsual editor iMproved (VIM)
virt-what	Standalone apps/libraries	1.13	GPLv2	Detect if we are running in a virtual machine
vixie-cron	Standalone apps/libraries	4.1	ISC	The Vixie cron daemon for executing scheduled commands
vmware-netx	Shared library linkage	0.6		VMware netx library
wget	Standalone apps/libraries	1.16.2	GPLv3	A utility for retrieving files using the HTTP or FTP protocols
wmi	Standalone apps	1.3.13	GPLv2	WMI client
xdelta		1.1.3	GPL	A binary file delta generator and an RCS replacement library
xdelta3	Standalone apps/libraries	3.0t	GPLv2	A binary file delta generator
xe-guest-utilitie	Standalone apps/libraries	6.1.0	GPL/LGPL	Virtual Machine Monitoring Scripts
xe-guest-utilitie s-xenstore	Standalone apps/libraries	6.1.0	GPL/LGPL	Virtual Machine XenStore utilities
xinetd	Standalone apps/libraries	2.3.14	Distributable	A secure replacement for inetd
xmltooling-sche mas	Standalone apps/libraries	1.5.6	Apache 2.0	XMLTooling schemas and catalog
xz-libs	OSS Shared library linkage	4.999.9	LGPLv2	Libraries for decoding LZMA compression
zlib	Shared library linkage	1.2.3	BSD	The zlib compression and decompression library

PAN-OS 7.1 Open Source Software (OSS) Listing

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
M2Crypto	Standalone apps/libraries	0.21.1	BSD	Support for using OpenSSL in python scripts
MAKEDEV	Standalone apps/libraries	3.23	GPLv2	A program used for creating the device files in /dev
SysVinit	Standalone apps/libraries	2.86	GPLv2	Programs which control basic system processes
acpid	Standalone apps/libraries	1.0.10	GPLv2	ACPI Event Daemon
basesystem		8	Public Domain	The skeleton package which defines a simple Red Hat Linux system
bash	Standalone apps/libraries	3.1	GPLv2	The GNU Bourne Again shell (bash) version 3.1
beecrypt	OSS Shared library linkage	4.1.2	LGPLv2.1	An open source cryptography library
bind-libs	OSS Shared library linkage	9.3.3	ISC	Libraries used by the BIND DNS packages
bind-utils	Standalone apps/libraries	9.3.3	ISC	Utilities for querying DNS name servers
binutils		2.23.51.0. 3	GPL	A collection of binary tools
bonnie++	Standalone apps/libraries	1.03d	GPLv2	A program for benchmarking hard drives and file systems
bzip2	Standalone apps/libraries	1.0.3	BSD	A file compression utility
bzip2-libs	OSS Shared library linkage	1.0.3	BSD	Libraries for applications using bzip2
chkconfig	Standalone apps/libraries	1.3.30.1	GPLv2	A system tool for maintaining the /etc/rc*.d hierarchy
coreutils	Standalone apps/libraries	5.97	GPLv2	The GNU core utilities: a set of tools commonly used in shell scripts
cpio	Standalone apps/libraries	2.6	GPLv2	A GNU archiving program
срр	Standalone apps/libraries	4.1.1	GPLv2	The C Preprocessor
cracklib	OSS Shared library linkage	2.8.9	Artistic	A password-checking library
cracklib-dicts	Dictionaries used by cracklib	2.8.9	Artistic	The standard CrackLib password- checking dictionaries
crontabs	Root crontab files, used by system utilities	1.1	Public Domain	Root crontab files used to schedule the execution of programs

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
curl	Standalone apps/libraries	7.20.1	MIT	Get and send files to a FTP, HTTP, TFTP, SSH or other servers
dhclient	Standalone apps/libraries	3.0.5	Distributable	The ISC DHCP client for configuring network interfaces
dhcp	Standalone apps/libraries	3.0.5	Distributable	DHCP (Dynamic Host Configuration Protocol) server and relay agent
diffutils	Standalone apps/libraries	2.8.1	GPLv2	A GNU collection of diff utilities
dmidecode	Standalone apps/libraries	2.11	GPLv2	Tool to analyze BIOS DMI data
drng_samples		1	BSD-3	Creating a simple library to support the Intel RDRAND instructions
e2fsprogs	Standalone apps/libraries	1.39	GPLv2	Utilities for managing the second extended (ext2) file system
e2fsprogs-libs	OSS Shared library linkage	1.39	GPLv2	Ext2/3 file-system-specific static libraries and headers
e4fsprogs	Standalone apps/libraries	1.41.12	GPLv2	Utilities for managing the fourth extended (ext4) file system
e4fsprogs-libs	OSS Shared library linkage	1.41.12	GPLv2	Ext4 file-system-specific static libraries and headers
elfutils-libelf	OSS Shared library linkage	0.128	GPLv2	Library to read and write ELF files
ethtool	Standalone apps/libraries	5	GPLv2	Ethernet settings tool for PCI ethernet cards
eventlog	OSS Shared library linkage	0.2.12	BSD	A library for event logs
expat	OSS Shared library linkage	1.95.8	BSD	A library for parsing XML
fastlz	Shared library linkage	0.1.0	FastLZ	A real-time compression library
file	Standalone apps/libraries	5.04	Distributable	A utility for determining file types
file-libs	Standalone apps/libraries	5.04	Distributable	Libraries for applications using the LibMagic Perl interface
filesystem	Standalone apps/libraries	2.4.0	Distributable	The basic directory layout for a Linux system
findutils	Standalone apps/libraries	4.2.27	GPLv2	The GNU versions of find utilities (find and xargs)
fipscheck	Standalone apps/libraries	1.2.0	FreeBSD	Alibraryforintegrityverification of FIPS validated modules
fipscheck-lib	Standalone apps/libraries	1.2.0	FreeBSD	Library files for fipscheck
flashrom	Standalone apps/libraries	0.9.4	GPLv2	Flashrom flash utility
fontconfig	OSS Shared library linkage	2.4.1	MIT	Font configuration and customization library

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
freetype	OSS Shared library linkage	2.3.11	BSD-like	A free and portable font rendering engine
fuse-libs	Standalone apps/libraries	2.8.5	GPLv2/LGPLv2	File System in Userspace (FUSE) libraries
gawk	Standalone apps/libraries	3.1.5	GPLv2	The GNU version of the awk text processing utility
gdb	Standalone apps/libraries	7.6	GPLv3+	A GNU source-level debugger for C, C++, Java and other languages
glib	OSS Shared library linkage	2.12.9	LGPLv2	A bundle of low-level system libraries in Clanguage
glib2	OSS Shared library linkage	2.12.3	LGPLv2	A library of useful utility functions
glibc	Shared library linkage	2.16	LGPLv2	The GNU libc libraries
glibc-common	Shared library linkage	2.16	LGPLv2	Common binaries and locale data for glibo
gmp	OSS Shared library linkage	4.3.1	LGPLv3	A GNU arbitrary precision library
gnupg	Standalone apps/libraries	1.4.5	GPLv2	A GNU utility for secure communication and data storage
gperftools	OSS Shared library linkage	2.2	BSD	Performance Tools for C++
grep	Standalone apps/libraries	2.5.1	GPLv2	The GNU versions of grep pattern matching utilities
grub	Standalone apps/libraries	6.0.97	GPL	GRUB - the Grand Unified Boot Loader
gzip	Standalone apps/libraries	1.3.5	GPLv2	The GNU data compression program
inetutils	Standalone apps/libraries	1.5	GPLv3	Internet utilities
info	Standalone apps/libraries	4.8	GPLv2	A stand-alone TTY-based reader for GNU Texinfo documentation
initscripts	Standalone apps/libraries + startup and shutdown scripts	8.45.15	GPLv2	The inittab file and the /etc/init.d scripts
iproute	Standalone apps/libraries	2.6.18	GPLv2	Advanced IP routing and network device configuration tools
iptables	Standalone apps/libraries	1.3.5	GPLv2	Tools for managing Linux kernel packet filtering capabilities
iptables-ipv6	Standalone apps/libraries	1.3.5	GPLv2	IPv6 support for IP tables
iputils	Standalone apps/libraries	20020927	GPLv2	Network monitoring tools including ping
irqbalance	Standalone apps/libraries	1.13	GPLv2	IRQ balancing daemon

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
krb5-libs	Shared library linkage	1.8.1	MIT	The shared libraries used by Kerberos 5
krb5-workstatio	Standalone apps/libraries	1.8.1	MIT	Kerberos 5 programs for use on workstations
less	Standalone apps/libraries	394	GPLv2	A text file browser similar to more, but better
leveldb	Shared library linkage	1.15.0	BSD	LevelDB library
libacl	OSS Shared library linkage	2.2.39	LGPLv2.1	Dynamic library for access control list support
libattr	OSS Shared library linkage	2.4.32	LGPLv2.1	Dynamic library for extended attribute support
libcurl4	Shared library linkage	7.20.1	MIT	The cURL library
libevent	OSS Shared library linkage	2.0.19	GPLv2	Abstract asynchronous event notification library
libgcc	Shared library linkage	4.7.0	LGPLv2	GCC version 4.1 shared support library
libgethostbyna me	Shared library linkage	1	LGPLv2	Fix glibc ghost bug
libgssapi	OSS Shared library linkage	0.1	BSD-like	Generic Security Services Application Programming Interface Library
libjpeg	OSS Shared library linkage	6b	IJĞ	A library for manipulating JPEG image format files
libmcrypt	OSS Shared library linkage	2.5.8	LGPLv2	Encryption algorithms library
libpcap	Shared library linkage	0.9.4	BSD	A system-independent interface for user-level packet capture
libpng	Shared library linkage	1.2.44	OSI certified/ZI	A library of functions for manipulating PNG image format files
libresolv	Shared library linkage	1	LGPLv2	Alibrary of functions for packets sent to a DNS
libselinux	OSS Shared library linkage	2.2.2	Public Domain	SELinux library and simple utilities
libsmbclient		3.0.33	GPLv2	The SMB client library
libssp	OSS Shared library linkage	4.7.2	GPLv3	A library to translate some pythos library speech signal processing (SSP) to C++
libstdc++	Shared library linkage	4.7.0	GPL	GNU Standard C++ Library
libsysfs	OSS Shared library linkage	2.0.0	LGPLv2	Shared library for interfacing with the Linux sysfs virtual file system

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
libtecla	Shared library linkage	1.6.1	MIT/X11	The Tecla command-line editing library
libtermcap	Configuration Files	2.0.8	Public Domain	A basic system library for accessing the termcap database
libunwind	OSS Shared library linkage	1.1	BSD	Unwind Library
libuser	OSS Shared library linkage	0.54.7	LGPLv2	A user and group account administration library
libvolume_id	OSS Shared library linkage	127	GPLv2	Dynamic libraries to get volume IDs
libxml2	Shared library linkage	2.9.1	MIT	Library providing XML and HTML support
libxml2-python	Standalone apps/libraries	2.9.1	PSF	Python bindings for the libxml2 library
libxslt	Shared library linkage	1.1.22	MIT	Library providing the Gnome XSLT engine
lm_sensors	Standalone apps/libraries	2.10.7	GPLv2	Hardware monitoring tools
lockdev	Standalone apps/libraries	1.0.1	LGPLv2.1	A library for locking devices
logrotate	Standalone apps/libraries	3.7.4	GPLv2	Rotates, compresses, removes and mails system log files
lunasa	Shared library linkage, Standalone apps/libraries	1	Commercial	Client software for SafeNet Luna SA hardware security module (HSM)
mailx	Standalone apps/libraries	8.1.1	BSD	The /bin/mail program for sending quick email messages
mdadm		2.6.9	GPL	Linux utility used to manage and monitor software RAID devices
mingetty	Standalone apps/libraries	1.07	GPLv2	A compact getty program for virtual consoles only
minicom	Standalone apps/libraries	2.1	GPLv2	A text-based modem control and terminal emulation program
mkinitrd		5.1.19.6	GPL	Creates an initial image for preloading block device modules (such as SCSI and RAID)
mktemp	Standalone apps/libraries	1.5	BSD	A small utility for safely making .TMP files
module-init-tool	Standalone apps/libraries	3.3	GPLv2	Kernel module management utilities
mongodb	Standalone apps/libraries	2.4.3	MIT	MongoDB client shell and tools
mtdutils	Standalone apps/libraries	1.0.0	GPL	Memory Technology Device Utilities
nash		5.1.19.6	GPL	A simple script interpretor

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
ncurses	Shared library linkage	5.5	Distributable	A terminal handling library
net-snmp	Standalone apps/libraries	5.4.4	BSD	Tools and servers for the SNMP protocol
net-tools	Standalone apps/libraries	1.6	GPLv2	Basic networking tools
nfast	Shared library linkage, Standalone apps/libraries	1	Commercial	Client software for Thales hardware security module (HSM)
nfs-utils	Standalone apps/libraries	1.0.9	GPLv2	Network File System (NFS) utilities and supporting clients and daemons for the kernel NFS server
nfs-utils-lib	OSS Shared library linkage	1.0.8	GPLv2	Network File System (NFS) Support Library
nss-softokn-fre ebl	Shared library linkage	3.14.3	MPLv2.0	Freebllibrary for the Network Security Services
ntp	Standalone apps/libraries	4.2.8	Distributable	The Network Time Protocol (NTP) daemon and utilities
ntp-dp	Standalone apps/libraries	4.2.8	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
ntpdate	Standalone apps/libraries	4.2.8	Distributable	Utility to set the date and time via Network Time Protocol (NTP)
open-vm-tools	OSS Shared library linkage	9.4.6	GPLv2/LGPLv2	Open Virtual Machine Tools for virtual machineshostedonVMware
openidap	Shared library linkage	2.4.23	OpenLDAP	The configuration files, libraries, and documentation for OpenLDAP
openIdap-clients	Standalone apps/libraries	2.4.23	OpenLDAP	Client programs for OpenLDAP
openssh	Standalone apps/libraries	6.4p1	BSD	Anopensourceimplementation of SSH protocol versions 1 and 2
openssh-clients	Standalone apps/libraries	6.4p1	BSD	An open source SSH client application
openssh-server	Standalone apps/libraries	6.4p1	BSD	An open source SSH server daemon
openssl	Shared library linkage	1.0.1e	OpenSSL	A general purpose cryptography library with TLS implementation
pam	Shared library linkage	1.0.2	BSD	A security tool which provides authentication for applications
pam_krb5	Standalone apps/libraries	2.2.14	MIT	A pluggable authentication module (PAM) for Kerberos 5
pam_ldap	OSS Shared library linkage	1.8.4	LGPLv3	A pluggable authentication module (PAM) for use with LDAP servers
panos-release	Base Linux OS version info for our systems	2	GPLv2	PAN-OS Linux release file

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
passwd	Standalone apps/libraries	0.73	GPLv2	The passwd utility for setting/changing passwords using PAM
pcre	Shared library linkage	6.6	BSD	Perl-compatible regular expression library
pexpect	OSS libraries in interpreted scripts	2.3	MIT	Pexpect is a Pure Python Expect-like module
phantomjs	OSS Shared library linkage	1.9.8	BSD	Head-Less Web Browser
php	Standalone apps/libraries	5.3.17	PHP v3.01	The PHP server-side scripting language
php-cli	Standalone apps/libraries	5.3.17	PHP v3.01	Command-line interface for PHP server- side scripting language
php-ext	Standalone apps/libraries	5.3.17	PHP v3.01	Shared PHP-Ext open source widget library for PHP 4 and PHP 5 server-side scripting language
popt	OSS Shared library linkage	1.12	MIT	A C library for parsing command line parameters
portmap	Standalone apps/libraries	4	BSD	A program which manages remote procedure call (RPC) connections
procps	Standalone apps/libraries	3.2.8	GPLv2	System and process monitoring utilities
psmisc	Standalone apps/libraries	22.2	BSD	Utilities for managing processes on your system
python	Standalone apps/libraries	2.4.3	PSF	An interpreted, interactive, object- oriented programming language
python26	OSS libraries in interpreted scripts	2.6.5	PSF	An interpreted, interactive, object- oriented programming language
python26-libs	OSS libraries in interpreted scripts	2.6.5	PSF	An interpreted, interactive, object- oriented programming language
python-bloom	OSS libraries in interpreted scripts	0.1.12	BSD-like	Pythonimplementationofbloom filter
python-boto	OSS libraries in interpreted scripts	2.32.1	MIT	A simple, lightweight interface to Amazon Web Services (AWS)
python-element tree	OSS Shared library linkage	1.2.6	PSF	Fast XML parser and writer
python-imaging	Shared library linkage	1.1.5	Distributable	Python's own image processing library

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
python-pyasn1	OSS libraries in interpreted scripts	0.1.7	BSD	ASN.1 tools for Python
python-sqlite	Shared library linkage	1.1.7	Public Domain	Python bindings for SQLite
python-urlgrabb er	Standalone apps/libraries	3.1.0	LGPLv2.1	A high-level cross-protocol URL-grabber
python-waagent lib	Standalone apps/libraries	2.0.13	Apache 2.0	Azure Agent Python Library
rcs	Standalone apps/libraries	5.7	GPLv2	Revision control system (RCS) file version management tools
readline	OSS Shared library linkage	5.1	GPLv2	A library for editing typed command lines
redhat-logos		4.9.8		Red Hat-related icons and pictures
reportlab	OSS libraries in interpreted scripts	2.2	BSD	Python PDF generation library
rootfiles	Standalone apps/libraries	8.1	Distributable	The basic required files for the root user's directory
rpm	Standalone apps/libraries	4.4.2	GPLv2	The Route Processing Module (RPM) packagemanagementsystem
rpm-libs	Standalone apps/libraries	4.4.2	GPLv2	Libraries for manipulating Route Processing Module (RPM) packages
rpm-python	OSS libraries in interpreted scripts	4.4.2	GPLv2	Python bindings for apps which will manipulate Route Processing Module (RPM) packages
s3fs	Standalone apps/libraries	1.74	GPLv2	FUSE file system backed by Amazon S3 bucket
samba-common	Standalone apps	3.0.33	GPLv2	Files used by both Samba servers and clients
scrub	Standalone apps/libraries	2.1	GPLv2	Disk scrubbing program
sed	Standalone apps/libraries	4.1.5	GPLv2	A GNU stream text editor
setup		2.5.58	Public Domain	A set of system configuration and setup files
shadow-utils	Standalone apps/libraries	4.0.17	BSD	Utilities for managing accounts and shadow password files
smartmontools	Standalone apps/libraries	6.4	GPLv2	S.M.A.R.T. utility toolkit
snappy	Shared library linkage	1.0.1	Apache 2.0	High-speed compression and decompression library
sqlite	Shared library linkage	3.6.12	Public Domain	Library that implements an embeddable SQLite in-process database engine

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
sscep	Standalone apps/libraries	1.0.0	BSD-like	Simple SCEP client
sshpass	Standalone apps/libraries	1.05	BSD	Non-interactive SSH password provider
sysfsutils	Standalone apps/libraries	2.0.0	GPLv2	Shared library for interfacing with the Linux sysfs virtual file system
sysklogd	Standalone apps/libraries	1.4.1	GPLv2	System logging and kernel message trapping daemons
syslinux	Standalone apps/libraries	3.11	GPL	Simple kernel loader which boots from a FAT file system
syslog-ng	Standalone apps/libraries	3.2.5	GPLv2/LGPLv2	Syslog replacement daemon
tar	Standalone apps/libraries	1.15.1	GPLv2	A GNU file archiving program
tcpdump	Standalone apps/libraries	3.9.4	BSD	A network traffic monitoring tool
termcap	Configuration Files	5.5	Public Domain	The terminal feature database used by certain applications
tftp	Standalone apps/libraries	0.48	BSD	The client for Trivial FTP (TFTP)
tftp-server	Standalone apps/libraries	0.48	BSD	The server for Trivial FTP (TFTP)
traceroute	Standalone apps/libraries	2.0.1	GPLv2	Traces the route taken by packets over an IPv4/IPv6 network
tzdata	Configuration files	2011	Public domain	Time-zone data
udev	Standalone apps/libraries	127	GPLv2	Device manager for devicenodes and user space events (improved functionality over devfs)
util-linux	Standalone apps/libraries	2.13	GPLv2	Acollection of basic system utilities
vconfig		1.9	GPL	Linux 802.1q VLAN configuration utility
vim-minimal	Standalone apps/libraries	7.0.109	Charityware	AminimalversionofVIsualeditor iMproved (VIM)
virt-what	Standalone apps/libraries	1.13	GPLv2	Detect if we are running in a virtual machine
vixie-cron	Standalone apps/libraries	4.1	ISC	The Vixie cron daemon for executing scheduled commands
wget	Standalone apps/libraries	1.16.2	GPLv3	A utility for retrieving files using the HTTP or FTP protocols
wmi	Standalone apps	1.3.13	GPLv2	WMI client
xdelta		1.1.3	GPL	A binary file delta generator and an RCS replacement library
xdelta3	Standalone apps/libraries	3.0t	GPLv2	A binary file delta generator

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
xe-guest-utilitie s	Standalone apps/libraries	6.1.0	GPL/LGPL	Virtual Machine Monitoring Scripts
xe-guest-utilitie s-xenstore	Standalone apps/libraries	6.1.0	GPL/LGPL	Virtual Machine XenStore utilities
xinetd	Standalone apps/libraries	2.3.14	Distributable	A secure replacement for inetd
xz-libs	OSS Shared library linkage	4.999.9	LGPLv2	Libraries for decoding LZMA compression
zlib	Shared library linkage	1.2.3	BSD	The zlib compression and decompression library

PAN-OS 7.0 Open Source Software (OSS) Listing

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
M2Crypto	Standalone apps/libraries	0.21.1	BSD	Support for using OpenSSL in python scripts
MAKEDEV	Standalone apps/libraries	3.23	GPLv2	A program used for creating the device files in /dev
SysVinit	Standalone apps/libraries	2.86	GPLv2	Programs which control basic system processes
acpid	Standalone apps/libraries	1.0.10	GPLv2	ACPI Event Daemon
basesystem		8	Public Domain	The skeleton package which defines a simple Red Hat Linux system
bash	Standalone apps/libraries	3.1	GPLv2	The GNU Bourne Again shell (bash) version 3.1
beecrypt	OSS Shared library linkage	4.1.2	LGPLv2.1	An open source cryptography library
bind-libs	OSS Shared library linkage	9.3.3	ISC	Libraries used by the BIND DNS packages
bind-utils	Standalone apps/libraries	9.3.3	ISC	Utilities for querying DNS name servers
bonnie++	Standalone apps/libraries	1.03d	GPLv2	A program for benchmarking hard drives and file systems
bzip2	Standalone apps/libraries	1.0.3	BSD	A file compression utility
bzip2-libs	OSS Shared library linkage	1.0.3	BSD	Libraries for applications using bzip2
chkconfig	Standalone apps/libraries	1.3.30.1	GPLv2	A system tool for maintaining the /etc/rc*.d hierarchy
coreutils	Standalone apps/libraries	5.97	GPLv2	The GNU core utilities: a set of tools commonly used in shell scripts
cpio	Standalone apps/libraries	2.6	GPLv2	A GNU archiving program
срр	Standalone apps/libraries	4.1.1	GPLv2	The C Preprocessor
cracklib	OSS Shared library linkage	2.8.9	Artistic	A password-checking library
cracklib-dicts	Dictionaries used by cracklib	2.8.9	Artistic	The standard CrackLib password- checking dictionaries
crontabs	Root crontab files, used by system utilities	1.1	Public Domain	Root crontab files used to schedule the execution of programs
curl	Standalone apps/libraries	7.20.1	MIT	Get and send files to a FTP, HTTP, TFTP, SSH or other servers

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
dhclient	Standalone apps/libraries	3.0.5	Distributable	The ISC DHCP client for configuring network interfaces
dhcp	Standalone apps/libraries	3.0.5	Distributable	DHCP (Dynamic Host Configuration Protocol) server and relay agent
diffutils	Standalone apps/libraries	2.8.1	GPLv2	A GNU collection of diff utilities
dmidecode	Standalone apps/libraries	2.11	GPLv2	Tool to analyze BIOS DMI data
drng_samples		1	BSD-3	Creating a simple library to support the Intel RDRAND instructions
e2fsprogs	Standalone apps/libraries	1.39	GPLv2	Utilities for managing the second extended (ext2) file system
e2fsprogs-libs	OSS Shared library linkage	1.39	GPLv2	Ext2/3 file-system-specific static libraries and headers
e4fsprogs	Standalone apps/libraries	1.41.12	GPLv2	Utilities for managing the fourth extended (ext4) file system
e4fsprogs-libs	OSS Shared library linkage	1.41.12	GPLv2	Ext4 file-system-specific static libraries and headers
elfutils-libelf	OSS Shared library linkage	0.128	GPLv2	Library to read and write ELF files
ethtool	Standalone apps/libraries	5	GPLv2	Ethernet settings tool for PCI ethernet cards
eventlog	OSS Shared library linkage	0.2.12	BSD	event log library
expat	OSS Shared library linkage	1.95.8	BSD	A library for parsing XML
fastlz	Shared library linkage	0.1.0	FastLZ	A real-time compression library
file	Standalone apps/libraries	5.04	Distributable	A utility for determining file types
file-libs	Standalone apps/libraries	5.04	Distributable	Libraries for applications using the LibMagic Perl interface
filesystem	Standalone apps/libraries	2.4.0	Distributable	The basic directory layout for a Linux system
findutils	Standalone apps/libraries	4.2.27	GPLv2	The GNU versions of find utilities (find and xargs)
fipscheck	Standalone apps/libraries	1.2.0	FreeBSD	Alibrary for integrity verification of FIPS validated modules
fipscheck-lib	Standalone apps/libraries	1.2.0	FreeBSD	Library files for fipscheck
flashrom	Standalone apps/libraries	0.9.4	GPLv2	Flashrom flash utility
gawk	Standalone apps/libraries	3.1.5	GPLv2	The GNU version of the awk text processing utility
gdb	Standalone apps/libraries	7.6.1	GPLv3+	A GNU source-level debugger for C, C++, Java and other languages

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
glib	OSS Shared library linkage	2.12.9	LGPLv2	glib library
glib2	OSS Shared library linkage	2.12.3	LGPLv2	A library of useful utility functions
glibc	Shared library linkage	2.16	LGPLv2	The GNU libc libraries
glibc-common	Shared library linkage	2.16	LGPLv2	Common binaries and locale data for glibc
gmp	OSS Shared library linkage	4.3.1	LGPLv3	A GNU arbitrary precision library
gnupg	Standalone apps/libraries	1.4.5	GPLv2	A GNU utility for secure communication and data storage
gperftools	OSS Shared library linkage	2.2	BSD	Performance Tools for C++
grep	Standalone apps/libraries	2.5.1	GPLv2	The GNU versions of grep pattern matching utilities
grub	Standalone apps/libraries	6.0.97	GPL	GRUB - the Grand Unified Boot Loader
gzip	Standalone apps/libraries	1.3.5	GPLv2	The GNU data compression program
inetutils	Standalone apps/libraries	1.5	GPLv3	Internet utilities
info	Standalone apps/libraries	4.8	GPLv2	A stand-alone TTY-based reader for GNU Texinfo documentation
initscripts	Standalone apps/libraries + startup and shutdown scripts	8.45.15	GPLv2	The inittab file and the /etc/init.d scripts
iproute	Standalone apps/libraries	2.6.18	GPLv2	Advanced IP routing and network device configuration tools
iptables	Standalone apps/libraries	1.3.5	GPLv2	Tools for managing Linux kernel packet filtering capabilities
iptables-ipv6	Standalone apps/libraries	1.3.5	GPLv2	IPv6 support for IP tables
iputils	Standalone apps/libraries	20020927	GPLv2	Network monitoring tools including ping
irqbalance	Standalone apps/libraries	1.13	GPLv2	IRQ balancing daemon
krb5-libs	Shared library linkage	1.8.1	MIT	The shared libraries used by Kerberos 5
krb5-workstatio n	Standalone apps/libraries	1.8.1	MIT	Kerberos 5 programs for use on workstations
less	Standalone apps/libraries	394	GPLv2	A text file browser similar to more, but better
leveldb	Shared library linkage	1.15.0	BSD	LevelDB library
libacl	OSS Shared library linkage	2.2.39	LGPLv2.1	Dynamic library for access control list support

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
libattr	OSS Shared library linkage	2.4.32	LGPLv2.1	Dynamic library for extended attribute support
libcurl4	Shared library linkage	7.20.1	MIT	The cURL library
libevent	OSS Shared library linkage	2.0.19	GPLv2	Abstract asynchronous event notification library
libgcc	Shared library linkage	4.7.0	LGPLv2	GCC version 4.1 shared support library
libgethostbyna me	Shared library linkage	1	LGPLv2	Fix glibc ghost bug
libgssapi	OSS Shared library linkage	0.1	BSD-like	Generic Security Services Application Programming Interface Library
libjpeg	OSS Shared library linkage	6b	IJĞ	A library for manipulating JPEG image format files
libmcrypt	OSS Shared library linkage	2.5.8	LGPLv2	Encryption algorithms library
libpcap	Shared library linkage	0.9.4	BSD	A system-independent interface for user-level packet capture
libpng	Shared library linkage	1.2.44	OSI certified/ZI	A library of functions for manipulating PNG image format files
libselinux	OSS Shared library linkage	2.2.2	Public Domain	SELinux library and simple utilities
libsmbclient		3.0.33	GPLv2	The SMB client library
libstdc++	Shared library linkage	4.7.0	GPL	GNU Standard C++ Library
libsysfs	OSS Shared library linkage	2.0.0	LGPLv2	Shared library for interfacing with the Linux sysfs virtual file system
libtecla	Shared library linkage	1.6.1	MIT/X11	The Tecla command-line editing library
libtermcap	Configuration Files	2.0.8	Public Domain	A basic system library for accessing the termcap database
libunwind	OSS Shared library linkage	1.1	BSD	Unwind Library
libuser	OSS Shared library linkage	0.54.7	LGPLv2	A user and group account administration library
libvolume_id	OSS Shared library linkage	127	GPLv2	Dynamic libraries to get volume IDs
libxml2	Shared library linkage	2.9.1	MIT	Library providing XML and HTML support
libxml2-python	Standalone apps/libraries	2.9.1	PSF	Python bindings for the libxml2 library
libxslt	Shared library linkage	1.1.22	MIT	Library providing the Gnome XSLT engine

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
lm_sensors	Standalone apps/libraries	2.10.7	GPLv2	Hardware monitoring tools
lockdev	Standalone apps/libraries	1.0.1	LGPLv2.1	A library for locking devices
logrotate	Standalone apps/libraries	3.7.4	GPLv2	Rotates, compresses, removes and mails system log files
lunasa	Shared library linkage, Standalone apps/libraries	1	Commercial	Client software for SafeNet Luna SA hardware security module (HSM)
mailx	Standalone apps/libraries	8.1.1	BSD	The /bin/mail program for sending quick email messages
mdadm		2.6.9	GPL	Linux utility used to manage and monitor software RAID devices
mingetty	Standalone apps/libraries	1.07	GPLv2	A compact getty program for virtual consoles only
minicom	Standalone apps/libraries	2.1	GPLv2	A text-based modem control and terminal emulation program
mkinitrd		5.1.19.6	GPL	Creates an initial image for preloading block device modules (such as SCSI and RAID)
mktemp	Standalone apps/libraries	1.5	BSD	A small utility for safely making .TMP files
module-init-tool	Standalone apps/libraries	3.3	GPLv2	Kernel module management utilities
mongodb	Standalone apps/libraries	2.4.3	MIT	MongoDB client shell and tools
mtdutils		1.0.0	GPL	Memory Technology Device Utilities
nash		5.1.19.6	GPL	nash shell
ncurses	Shared library linkage	5.5	Distributable	A terminal handling library
net-snmp	Standalone apps/libraries	5.4.4	BSD	Tools and servers for the SNMP protocol
net-tools	Standalone apps/libraries	1.6	GPLv2	Basic networking tools
nfast	Shared library linkage, Standalone apps/libraries	1	Commercial	Client software for Thales hardware security module (HSM)
nfs-utils	Standalone apps/libraries	1.0.9	GPLv2	Network File System (NFS) utilities and supporting clients and daemons for the kernel NFS server
nfs-utils-lib	OSS Shared library linkage	1.0.8	GPLv2	Network File System (NFS) Support Library
nss-softokn-fre ebl	Shared library linkage	3.14.3	MPLv2.0	Freebllibrary for the Network Security Services

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
ntp	Standalone apps/libraries	4.2.8	Distributable	The Network Time Protocol (NTP) daemon and utilities
ntp-dp	Standalone apps/libraries	4.2.8	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
ntpdate	Standalone apps/libraries	4.2.8	Distributable	Utility to set the date and time via Network Time Protocol (NTP)
openIdap	Shared library linkage	2.4.23	OpenLDAP	The configuration files, libraries, and documentation for OpenLDAP
openIdap-clients	Standalone apps/libraries	2.4.23	OpenLDAP	Client programs for OpenLDAP
openssh	Standalone apps/libraries	6.4p1	BSD	Anopensourceimplementation of SSH protocol versions 1 and 2
openssh-clients	Standalone apps/libraries	6.4p1	BSD	An open source SSH client application
openssh-server	Standalone apps/libraries	6.4p1	BSD	An open source SSH server daemon
openssl	Shared library linkage	1.0.1e	OpenSSL	A general purpose cryptography library with TLS implementation
pam	Shared library linkage	1.0.2	BSD	A security tool which provides authentication for applications
pam_krb5	Standalone apps/libraries	2.2.14	MIT	A pluggable authentication module (PAM) for Kerberos 5
pam_ldap	OSS Shared library linkage	1.8.4	LGPLv3	A pluggable authentication module (PAM) for use with LDAP servers
panos-release	Base Linux OS version info for our systems	2	GPLv2	PAN-OS Linux release file
passwd	Standalone apps/libraries	0.73	GPLv2	The passwd utility for setting/changing passwords using PAM
pcre	Shared library linkage	6.6	BSD	Perl-compatible regular expression library
pexpect	OSS libraries in interpreted scripts	2.3	MIT	Pexpect is a Pure Python Expect-like module
php	Standalone apps/libraries	5.3.17	PHP v3.01	The PHP server-side scripting language
php-cli	Standalone apps/libraries	5.3.17	PHP v3.01	Command-line interface for PHP server- side scripting language
php-ext	Standalone apps/libraries	5.3.17	PHP v3.01	Shared PHP-Ext open source widget library for PHP 4 and PHP 5 server-side scripting language
popt	OSS Shared library linkage	1.12	MIT	A C library for parsing command line parameters

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
portmap	Standalone apps/libraries	4	BSD	A program which manages remote procedure call (RPC) connections
procps	Standalone apps/libraries	3.2.8	GPLv2	System and process monitoring utilities
psmisc	Standalone apps/libraries	22.2	BSD	Utilities for managing processes on your system
python	Standalone apps/libraries	2.4.3	PSF	An interpreted, interactive, object- oriented programming language
python26	Standalone apps/libraries	2.6.5	PSF	An interpreted, interactive, object- oriented programming language
python26-libs	Standalone apps/libraries	2.6.5	PSF	An interpreted, interactive, object- oriented programming language
python-bloom	OSS libraries in interpreted scripts	0.1.12	BSD-like	Pythonimplementationofbloom filter
python-boto	OSS libraries in interpreted scripts	2.32.1	MIT	A simple, lightweight interface to Amazon Web Services (AWS)
python- elementtree	OSS libraries in interpreted scripts	1.2.6	PSF	Fast XML parser and writer
python-imaging	OSS libraries in interpreted scripts	1.1.5	Distributable	Python's own image processing library
python-sqlite	Shared library linkage	1.1.7	Public Domain	Python bindings for SQLite
python-urlgrabb er	OSS libraries in interpreted scripts	3.1.0	LGPLv2.1	A high-level cross-protocol URL-grabber
rcs	Standalone apps/libraries	5.7	GPLv2	Revision control system (RCS) file version management tools
readline	OSS Shared library linkage	5.1	GPLv2	A library for editing typed command lines
redhat-logos		4.9.8		Red Hat-related icons and pictures
reportlab	OSS libraries in interpreted scripts	2.2	BSD	Python PDF generation library
rootfiles	Standalone apps/libraries	8.1	Distributable	The basic required files for the root user's directory
rpm	Standalone apps/libraries	4.4.2	GPLv2	The Route Processing Module (RPM) packagemanagementsystem
rpm-libs	Standalone apps/libraries	4.4.2	GPLv2	Libraries for manipulating Route Processing Module (RPM) packages

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
rpm-python	OSS libraries in interpreted scripts	4.4.2	GPLv2	Python bindings for apps which will manipulate Route Processing Module (RPM) packages
samba-common	Standalone apps	3.0.33	GPLv2	Files used by both Samba servers and clients
scrub	Standalone apps/libraries	2.1	GPLv2	Disk scrubbing program
sed	Standalone apps/libraries	4.1.5	GPLv2	A GNU stream text editor
setup		2.5.58	Public Domain	A set of system configuration and setup files
shadow-utils	Standalone apps/libraries	4.0.17	BSD	Utilities for managing accounts and shadow password files
smartmontools	Standalone apps/libraries	5.39	GPLv2	S.M.A.R.T. utility toolkit
snappy	Shared library linkage	1.0.1	Apache 2.0	High-speed compression and decompression library
sqlite	Shared library linkage	3.6.12	Public Domain	Library that implements an embeddable SQLite in-process database engine
sshpass	Standalone apps/libraries	1.05	BSD	Non-interactive SSH password provider
sysfsutils	Standalone apps/libraries	2.0.0	GPLv2	Shared library for interfacing with the Linux sysfs virtual file system
sysklogd	Standalone apps/libraries	1.4.1	GPLv2	System logging and kernel message trapping daemons
syslinux	Standalone apps/libraries	3.11	GPL	Simple kernel loader which boots from a FAT file system
syslog-ng	Standalone apps/libraries	3.2.5	GPLv2 LGPLv2	Syslog replacement daemon
tar	Standalone apps/libraries	1.15.1	GPLv2	A GNU file archiving program
tcpdump	Standalone apps/libraries	3.9.4	BSD	A network traffic monitoring tool
termcap	Configuration Files	5.5	Public Domain	The terminal feature database used by certain applications
tftp	Standalone apps/libraries	0.48	BSD	The client for Trivial FTP (TFTP)
tftp-server	Standalone apps/libraries	0.48	BSD	The server for Trivial FTP (TFTP)
traceroute	Standalone apps/libraries	2.0.1	GPLv2	Traces the route taken by packets over an IPv4/IPv6 network
tzdata	Configuration files	2011	Public domain	Time-zone data
udev	Standalone apps/libraries	127	GPLv2	Device manager for devicenodes and user space events (improved functionality over devfs)

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
util-linux	Standalone apps/libraries	2.13	GPLv2	Acollection of basic system utilities
vconfig		1.9	GPL	Linux 802.1q VLAN configuration utility
vim-minimal	Standalone apps/libraries	7.0.109	Charityware	Aminimalversion of VIsual editor iMproved (VIM)
virt-what	Standalone apps/libraries	1.3	GPLv2	Detect if we are running in a virtual machine
vixie-cron	Standalone apps/libraries	4.1	ISC	The Vixie cron daemon for executing scheduled commands
wget	Standalone apps/libraries	1.12	GPLv3	A utility for retrieving files using the HTTP or FTP protocols
wmi	Standalone apps	1.3.13	GPLv2	WMI client
xdelta		1.1.3	GPL	A binary file delta generator and an RCS replacement library
xdelta3	Standalone apps/libraries	3.0t	GPLv2	A binary file delta generator
xe-guest-utilitie s	Standalone apps/libraries	6.1.0	GPL/LGPL	Virtual Machine Monitoring Scripts
xe-guest-utilitie s- xenstore	Standalone apps/libraries	6.1.0	GPL/LGPL	Virtual Machine XenStore utilities
xinetd	Standalone apps/libraries	2.3.14	Distributable	A secure replacement for inetd
xz-libs	OSS Shared library linkage	4.999.9	LGPLv2	Libraries for decoding LZMA compression
zlib	Shared library linkage	1.2.3	BSD	The zlib compression and decompression library

PAN-OS 6.1 Open Source Software (OSS) Listing

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
MAKEDEV	Standalone apps/libraries	3.23	GPLv2	A program used for creating the device files in /dev
SysVinit	Standalone apps/libraries	2.86	GPLv2	Programs which control basic system processes
acpid	Standalone apps/libraries	1.0.10	GPLv2	ACPI Event Daemon
basesystem		8	Public Domain	The skeleton package which defines a simple Red Hat Linux system
bash	Standalone apps/libraries	3.1	GPLv2	The GNU Bourne Again shell (bash) version 3.1
beecrypt	OSS Shared library linkage	4.1.2	LGPLv2.1	An open source cryptography library
bind-libs	OSS Shared library linkage	9.3.3	ISC	Libraries used by the BIND DNS packages
bind-utils	Standalone apps/libraries	9.3.3	ISC	Utilitiesforquerying DNS name servers
bonnie++	Standalone apps/libraries	1.03d	GPLv2	A program for benchmarking hard drives and file systems
bzip2	Standalone apps/libraries	1.0.3	BSD	A file compression utility
bzip2-libs	OSS Shared library linkage	1.0.3	BSD	Libraries for applications using bzip2
chkconfig	Standalone apps/libraries	1.3.30.1	GPLv2	A system tool for maintaining the /etc/rc*.d hierarchy
coreutils	Standalone apps/libraries	5.97	GPLv2	The GNU core utilities: a set of tools commonly used in shell scripts
cpio	Standalone apps/libraries	2.6	GPLv2	A GNU archiving program
срр	Standalone apps/libraries	4.1.1	GPLv2	The C Preprocessor
cracklib	OSS Shared library linkage	2.8.9	Artistic	A password-checking library
cracklib-dicts	Dictionaries used by cracklib	2.8.9	Artistic	The standard CrackLib password- checking dictionaries
crontabs	Root crontab files, used by system utilities	1.1	Public Domain	Root crontab files used to schedule the execution of programs
curl	Standalone apps/libraries	7.20.1	MIT	Get and send files to a FTP, HTTP, TFTP, SSH or other servers
dhclient	Standalone apps/libraries	3.0.5	Distributable	The ISC DHCP client for configuring network interfaces

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
dhcp	Standalone apps/libraries	3.0.5	Distributable	DHCP (Dynamic Host Configuration Protocol) server and relay agent
diffutils	Standalone apps/libraries	2.8.1	GPLv2	A GNU collection of diff utilities
dmidecode	Standalone apps/libraries	2.11	GPLv2	Tool to analyze BIOS DMI data
e2fsprogs	Standalone apps/libraries	1.39	GPLv2	Utilities for managing the second extended (ext2) file system
e2fsprogs-libs	OSS Shared library linkage	1.39	GPLv2	Ext2/3 file-system-specific static libraries and headers
e4fsprogs	Standalone apps/libraries	1.41.12	GPLv2	Utilities for managing the fourth extended (ext4) file system
e4fsprogs-libs	OSS Shared library linkage	1.41.12	GPLv2	Ext4 file-system-specific static libraries and headers
elfutils-libelf	OSS Shared library linkage	0.128	GPLv2	Library to read and write ELF files
ethtool	Standalone apps/libraries	5	GPLv2	Ethernet settings tool for PCI ethernet cards
eventlog	OSS Shared library linkage	0.2.12	BSD	event log library
expat	OSS Shared library linkage	1.95.8	BSD	A library for parsing XML
fastlz	Shared library linkage	0.1.0	FastLZ	A real-time compression library
file	Standalone apps/libraries	5.04	Distributable	A utility for determining file types
file-libs	Standalone apps/libraries	5.04	Distributable	Libraries for applications using the LibMagic Perl interface
filesystem	Standalone apps/libraries	2.4.0	Distributable	The basic directory layout for a Linux system
findutils	Standalone apps/libraries	4.2.27	GPLv2	The GNU versions of find utilities (find and xargs)
fipscheck	Standalone apps/libraries	1.2.0	FreeBSD	Alibraryfor integrity verification of FIPS validated modules
fipscheck-lib	Standalone apps/libraries	1.2.0	FreeBSD	Library files for fipscheck
flashrom	Standalone apps/libraries	0.9.4	GPLv2	Flashrom flash utility
gawk	Standalone apps/libraries	3.1.5	GPLv2	The GNU version of the awk text processing utility
gdb	Standalone apps/libraries	6.8	GPLv3+	A GNU source-level debugger for C, C++, Java and other languages
glib	OSS Shared library linkage	2.12.9	LGPLv2	glib library
glib2	OSS Shared library linkage	2.12.3	LGPLv2	A library of useful utility functions
glibc	Shared library linkage	2.5	LGPLv2	The GNU libc libraries

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
glibc-common	Shared library linkage	2.5	LGPLv2	Common binaries and locale data for glibc
gmp	OSS Shared library linkage	4.3.1	LGPLv3	A GNU arbitrary precision library
gnupg	Standalone apps/libraries	1.4.5	GPLv2	A GNU utility for secure communication and data storage
gperftools	OSS Shared library linkage	2	BSD	Performance Tools for C++
grep	Standalone apps/libraries	2.5.1	GPLv2	The GNU versions of grep pattern matching utilities
grub	Standalone apps/libraries	6.0.97	GPL	GRUB - the Grand Unified Boot Loader
gzip	Standalone apps/libraries	1.3.5	GPLv2	The GNU data compression program
inetutils	Standalone apps/libraries	1.5	GPLv3	Internet utilities
info	Standalone apps/libraries	4.8	GPLv2	A stand-alone TTY-based reader for GNU Texinfo documentation
initscripts	Standalone apps/libraries + startup and shutdown scripts	8.45.15	GPLv2	The inittab file and the /etc/init.d scripts
iproute	Standalone apps/libraries	2.6.18	GPLv2	Advanced IP routing and network device configuration tools
iptables	Standalone apps/libraries	1.3.5	GPLv2	Tools for managing Linux kernel packet filtering capabilities
iptables-ipv6	Standalone apps/libraries	1.3.5	GPLv2	IPv6 support for IP tables
iputils	Standalone apps/libraries	20020927	GPLv2	Network monitoring tools including ping
irqbalance	Standalone apps/libraries	1.13	GPLv2	IRQ balancing daemon
krb5-libs	Shared library linkage	1.8.1	MIT	The shared libraries used by Kerberos 5
krb5-workstatio n	Standalone apps/libraries	1.8.1	MIT	Kerberos 5 programs for use on workstations
less	Standalone apps/libraries	394	GPLv2	A text file browser similar to more, but better
leveldb	Shared library linkage	1.15.0	BSD	LevelDB library
libacl	OSS Shared library linkage	2.2.39	LGPLv2.1	Dynamic library for access control list support
libattr	OSS Shared library linkage	2.4.32	LGPLv2.1	Dynamic library for extended attribute support
libcurl4	Shared library linkage	7.20.1	MIT	The cURL library

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
libevent	OSS Shared library linkage	2.0.19	GPLv2	Abstract asynchronous event notification library
libgcc	Shared library linkage	4.1.1	LGPLv2	GCC version 4.1 shared support library
libgssapi	OSS Shared library linkage	0.1	BSD-like	Generic Security Services Application Programming Interface Library
libjpeg	OSS Shared library linkage	6b	IJG	A library for manipulating JPEG image format files
libmcrypt	OSS Shared library linkage	2.5.8	LGPLv2	Encryption algorithms library
libpcap	Shared library linkage	0.9.4	BSD	A system-independent interface for user-level packet capture
libpng	Shared library linkage	1.2.44	OSI Certified (Zlib)	A library of functions for manipulating PNG image format files
libsmbclient		3.0.33	GPLv2	The SMB client library
libstdc++	Shared library linkage	4.1.1	GPL	GNU Standard C++ Library
libsysfs	OSS Shared library linkage	2.0.0	LGPLv2	Shared library for interfacing with the Linux sysfs virtual file system
libtecla	Shared library linkage	1.6.1	MIT/X11	The Tecla command-line editing library
libtermcap	Configuration Files	2.0.8	Public Domain	A basic system library for accessing the termcap database
libunwind	OSS Shared library linkage	1.1	BSD	Unwind Library
libuser	OSS Shared library linkage	0.54.7	LGPLv2	A user and group account administration library
libvolume_id	OSS Shared library linkage	127	GPLv2	Dynamic libraries to get volume IDs
libxml2	Shared library linkage	2.6.30	MIT	Library providing XML and HTML support
libxml2-python	Standalone apps/libraries	2.6.30	PSF	Python bindings for the libxml2 library
libxslt	Shared library linkage	1.1.22	MIT	Library providing the Gnome XSLT engine
lm_sensors	Standalone apps/libraries	2.10.7	GPLv2	Hardware monitoring tools
lockdev	Standalone apps/libraries	1.0.1	LGPLv2.1	A library for locking devices
logrotate	Standalone apps/libraries	3.7.4	GPLv2	Rotates, compresses, removes and mails system log files
lunasa	Shared library linkage, Standalone apps/libraries	1	Commercial	Client software for SafeNet Luna SA hardware security module (HSM)

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
m2crypto	Standalone apps/libraries	0.16	BSD	Support for using OpenSSL in python scripts
mailx	Standalone apps/libraries	8.1.1	BSD	The /bin/mail program for sending quick email messages
mdadm		2.6.9	GPL	Linux utility used to manage and monitor software RAID devices
mingetty	Standalone apps/libraries	1.07	GPLv2	A compact getty program for virtual consoles only
minicom	Standalone apps/libraries	2.1	GPLv2	A text-based modem control and terminal emulation program
mkinitrd		5.1.19.6	GPL	Creates an initial image for preloading block device modules (such as SCSI and RAID)
mktemp	Standalone apps/libraries	1.5	BSD	A small utility for safely making .TMP files
module-init-tool	Standalone apps/libraries	3.3	GPLv2	Kernel module management utilities
mtdutils		1.0.0	GPL	Memory Technology Device Utilities
nash		5.1.19.6	GPL	nash shell
ncurses	Shared library linkage	5.5	Distributable	A terminal handling library
net-snmp	Standalone apps/libraries	5.4.4	BSD	Tools and servers for the SNMP protocol
net-tools	Standalone apps/libraries	1.6	GPLv2	Basic networking tools
nfast	Shared library linkage, Standalone apps/libraries	1	Commercial	Client software for Thales hardware security module (HSM)
nfs-utils	Standalone apps/libraries	1.0.9	GPLv2	Network File System (NFS) utilities and supporting clients and daemons for the kernel NFS server
nfs-utils-lib	OSS Shared library linkage	1.0.8	GPLv2	Network File System (NFS) Support Library
ntp	Standalone apps/libraries	4.2.8	Distributable	The Network Time Protocol (NTP) daemon and utilities
ntp-dp	Standalone apps/libraries	4.2.8	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
ntpdate	Standalone apps/libraries	4.2.8	Distributable	Utility to set the date and time via Network Time Protocol (NTP)
openIdap	Shared library linkage	2.4.23	OpenLDAP	Theconfigurationfiles, libraries, and documentation for OpenLDAP
openIdap-clients	Standalone apps/libraries	2.4.23	OpenLDAP	Client programs for OpenLDAP

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
openssh	Standalone apps/libraries	5.2p1	BSD	Anopensourceimplementation of SSH protocol versions 1 and 2
openssh-clients	Standalone apps/libraries	5.2p1	BSD	An open source SSH client application
openssh-server	Standalone apps/libraries	5.2p1	BSD	An open source SSH server daemon
openssl	Shared library linkage	0.9.8p	OpenSSL	A general purpose cryptography library with TLS implementation
pam	Shared library linkage	1.0.2	BSD	A security tool which provides authentication for applications
pam_krb5	Standalone apps/libraries	2.2.14	MIT	A pluggable authentication module (PAM) for Kerberos 5
pam_ldap	OSS Shared library linkage	1.8.4	LGPLv3	A pluggable authentication module (PAM) for use with LDAP servers
panos-release	Base Linux OS version info for our systems	2	GPLv2	PAN-OS Linux release file
passwd	Standalone apps/libraries	0.73	GPLv2	The passwd utility for setting/changing passwords using PAM
pcre	Shared library linkage	6.6	BSD	Perl-compatible regular expression library
pexpect	OSS libraries in interpreted scripts	2.3	MIT	Pexpect is a Pure Python Expect-like module
php	Standalone apps/libraries	5.3.17	PHP v3.01	The PHP server-side scripting language
php-cli	Standalone apps/libraries	5.3.17	PHP v3.01	Command-line interface for PHP server- side scripting language
php-ext	Standalone apps/libraries	5.3.17	PHP v3.01	Shared PHP-Ext open source widget library for PHP 4 and PHP 5 server-side scripting language
popt	OSS Shared library linkage	1.12	MIT	A C library for parsing command line parameters
portmap	Standalone apps/libraries	4	BSD	A program which manages remote procedure call (RPC) connections
procps	Standalone apps/libraries	3.2.7	GPLv2	System and process monitoring utilities
psmisc	Standalone apps/libraries	22.2	BSD	Utilities for managing processes on your system
python	Standalone apps/libraries	2.4.3	PSF	An interpreted, interactive, object- oriented programming language

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
python-bloom	OSS libraries in interpreted scripts	0.1.12	BSD-like	Pythonimplementationofbloom filter
python- elementtree	OSS libraries in interpreted scripts	1.2.6	PSF	Fast XML parser and writer
python-imaging	OSS libraries in interpreted scripts	1.1.5	Distributable	Python's own image processing library
python-sqlite	Shared library linkage	1.1.7	Public Domain	Python bindings for SQLite
python-urlgrabb er	OSS libraries in interpreted scripts	3.1.0	LGPLv2.1	A high-level cross-protocol URL-grabber
rcs	Standalone apps/libraries	5.7	GPLv2	Revision control system (RCS) file version management tools
readline	OSS Shared library linkage	5.1	GPLv2	A library for editing typed command lines
redhat-logos		4.9.8		Red Hat-related icons and pictures
reportlab	OSS libraries in interpreted scripts	2.2	BSD	Python PDF generation library
rootfiles	Standalone apps/libraries	8.1	Distributable	The basic required files for the root user's directory
rpm	Standalone apps/libraries	4.4.2	GPLv2	The Route Processing Module (RPM) package management system
rpm-libs	Standalone apps/libraries	4.4.2	GPLv2	Libraries for manipulating Route Processing Module (RPM) packages
rpm-python	OSS libraries in interpreted scripts	4.4.2	GPLv2	Python bindings for apps which will manipulate Route Processing Module (RPM) packages
samba-common	Standalone apps	3.0.33	GPLv2	Files used by both Samba servers and clients
scrub	Standalone apps/libraries	2.1	GPLv2	Disk scrubbing program
sed	Standalone apps/libraries	4.1.5	GPLv2	A GNU stream text editor
setup		2.5.58	Public Domain	A set of system configuration and setup files
shadow-utils	Standalone apps/libraries	4.0.17	BSD	Utilities for managing accounts and shadow password files
smartmontools	Standalone apps/libraries	5.39	GPLv2	S.M.A.R.T. utility toolkit
snappy	Shared library linkage	1.0.1	Apache 2.0	High-speed compression and decompression library
sqlite	Shared library linkage	3.6.12	Public Domain	Library that implements an embeddable SQLite in-process database engine

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
sshpass	Standalone apps/libraries	1.05	BSD	Non-interactive SSH password provider
sysfsutils	Standalone apps/libraries	2.0.0	GPLv2	Shared library for interfacing with the Linux sysfs virtual file system
sysklogd	Standalone apps/libraries	1.4.1	GPLv2	System logging and kernel message trapping daemons
syslinux	Standalone apps/libraries	3.11	GPL	Simple kernel loader which boots from a FAT file system
syslog-ng	Standalone apps/libraries	3.2.5	GPLv2 LGPLv2	Syslog replacement daemon
tar	Standalone apps/libraries	1.15.1	GPLv2	A GNU file archiving program
tcpdump	Standalone apps/libraries	3.9.4	BSD	A network traffic monitoring tool
termcap	Configuration Files	5.5	Public Domain	The terminal feature database used by certain applications
tftp	Standalone apps/libraries	0.48	BSD	The client for Trivial FTP (TFTP)
tftp-server	Standalone apps/libraries	0.48	BSD	The server for Trivial FTP (TFTP)
traceroute	Standalone apps/libraries	2.0.1	GPLv2	Traces the route taken by packets over an IPv4/IPv6 network
tzdata	Configuration files	2011	Public domain	Time-zone data
udev	Standalone apps/libraries	127	GPLv2	Device manager for devicenodes and user space events (improved functionality over devfs)
util-linux	Standalone apps/libraries	2.13	GPLv2	Acollection of basic system utilities
vconfig		1.9	GPL	Linux 802.1q VLAN configuration utility
vim-minimal	Standalone apps/libraries	7.0.109	Charityware	Aminimalversion of VIsual editor iMproved (VIM)
virt-what	Standalone apps/libraries	1.3	GPLv2	Detect if we are running in a virtual machine
vixie-cron	Standalone apps/libraries	4.1	ISC	The Vixie cron daemon for executing scheduled commands
wget	Standalone apps/libraries	1.12	GPLv3	A utility for retrieving files using the HTTP or FTP protocols
wmi	Standalone apps	1.3.13	GPLv2	WMI client
xdelta		1.1.3	GPL	A binary file delta generator and an RCS replacement library
xdelta3	Standalone apps/libraries	3.0t	GPLv2	A binary file delta generator
xe-guest-utilitie s	Standalone apps/libraries	6.1.0	GPL/LGPL	Virtual Machine Monitoring Scripts

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
xe-guest-utilitie s- xenstore	Standalone apps/libraries	6.1.0	GPL/LGPL	Virtual Machine XenStore utilities
xinetd	Standalone apps/libraries	2.3.14	Distributable	A secure replacement for inetd
zlib	Shared library linkage	1.2.3	BSD	The zlib compression and decompression library

PAN-OS 6.0 Open Source Software (OSS) Listing

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
MAKEDEV	Standalone apps/libraries	3.23	GPLv2	A program used for creating the device files in /dev
SysVinit	Standalone apps/libraries	2.86	GPLv2	Programs which control basic system processes
basesystem		8	Public Domain	The skeleton package which defines a simple Red Hat Linux system
bash	Standalone apps/libraries	3.1	GPLv2	The GNU Bourne Again shell (bash) version 3.1
beecrypt	OSS Shared library linkage	4.1.2	LGPLv2.1	An open source cryptography library
bind-libs	OSS Shared library linkage	9.3.3	ISC	Libraries used by the BIND DNS packages
bind-utils	Standalone apps/libraries	9.3.3	ISC	Utilitiesfor querying DNS name servers
bonnie++	Standalone apps/libraries	1.03d	GPLv2	A program for benchmarking hard drives and file systems
bzip2	Standalone apps/libraries	1.0.3	BSD	A file compression utility
bzip2-libs	OSS Shared library linkage	1.0.3	BSD	Libraries for applications using bzip2
chkconfig	Standalone apps/libraries	1.3.30.1	GPLv2	A system tool for maintaining the /etc/rc*.d hierarchy
coreutils	Standalone apps/libraries	5.97	GPLv2	The GNU core utilities: a set of tools commonly used in shell scripts
cpio	Standalone apps/libraries	2.6	GPLv2	A GNU archiving program
срр	Standalone apps/libraries	4.1.1	GPLv2	The C Preprocessor
cracklib	OSS Shared library linkage	2.8.9	Artistic	A password-checking library
cracklib-dicts	Dictionaries used by cracklib	2.8.9	Artistic	The standard CrackLib password- checking dictionaries
crontabs	Root crontab files, used by system utilities	1.1	Public Domain	Root crontab files used to schedule the execution of programs
curl	Standalone apps/libraries	7.20.1	MIT	Get and send files to a FTP, HTTP, TFTP, SSH or other servers
dhclient	Standalone apps/libraries	3.0.5	Distributable	The ISC DHCP client for configuring network interfaces
dhcp	Standalone apps/libraries	3.0.5	Distributable	DHCP (Dynamic Host Configuration Protocol) server and relay agent

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
diffutils	Standalone apps/libraries	2.8.1	GPLv2	A GNU collection of diff utilities
dmidecode	Standalone apps/libraries	2.11	GPLv2	Tool to analyze BIOS DMI data
e2fsprogs	Standalone apps/libraries	1.39	GPLv2	Utilities for managing the second extended (ext2) file system
e2fsprogs-libs	OSS Shared library linkage	1.39	GPLv2	Ext2/3 file-system-specific static libraries and headers
e4fsprogs	Standalone apps/libraries	1.41.12	GPLv2	Utilities for managing the fourth extended (ext4) file system
e4fsprogs-libs	OSS Shared library linkage	1.41.12	GPLv2	Ext4 file-system-specific static libraries and headers
elfutils-libelf	OSS Shared library linkage	0.128	GPLv2	Library to read and write ELF files
ethtool	Standalone apps/libraries	5	GPLv2	Ethernet settings tool for PCI ethernet cards
eventlog	OSS Shared library linkage	0.2.12	BSD	event log library
expat	OSS Shared library linkage	1.95.8	BSD	A library for parsing XML
fastlz	Shared library linkage	0.1.0	FastLZ	A real-time compression library
file	Standalone apps/libraries	5.04	Distributable	A utility for determining file types
file-libs	Standalone apps/libraries	5.04	Distributable	Libraries for applications using the LibMagic Perl interface
filesystem	Standalone apps/libraries	2.4.0	Distributable	The basic directory layout for a Linux system
findutils	Standalone apps/libraries	4.2.27	GPLv2	The GNU versions of find utilities (find and xargs)
fipscheck	Standalone apps/libraries	1.2.0	FreeBSD	Alibrary for integrity verification of FIPS validated modules
fipscheck-lib	Standalone apps/libraries	1.2.0	FreeBSD	Library files for fipscheck
flashrom	Standalone apps/libraries	0.9.4	GPLv2	Flashrom flash utility
gawk	Standalone apps/libraries	3.1.5	GPLv2	The GNU version of the awk text processing utility
gdb	Standalone apps/libraries	6.8	GPLv3+	A GNU source-level debugger for C, C++, Java and other languages
glib	OSS Shared library linkage	2.12.9	LGPLv2	glib library
glib2	OSS Shared library linkage	2.12.3	LGPLv2	A library of useful utility functions
glibc	Shared library linkage	2.5	LGPLv2	The GNU libc libraries
glibc-common	Shared library linkage	2.5	LGPLv2	Common binaries and locale data for glibc
gmp	OSS Shared library linkage	4.3.1	LGPLv3	A GNU arbitrary precision library

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
gnupg	Standalone apps/libraries	1.4.5	GPLv2	A GNU utility for secure communication and data storage
grep	Standalone apps/libraries	2.5.1	GPLv2	The GNU versions of grep pattern matching utilities
grub	Standalone apps/libraries	6.0.97	GPL	GRUB - the Grand Unified Boot Loader
gzip	Standalone apps/libraries	1.3.5	GPLv2	The GNU data compression program
inetutils	Standalone apps/libraries	1.5	GPLv3	Internet utilities
info	Standalone apps/libraries	4.8	GPLv2	A stand-alone TTY-based reader for GNU Texinfo documentation
initscripts	Standalone apps/libraries + startup and shutdown scripts	8.45.15	GPLv2	The inittab file and the /etc/init.d scripts
iproute	Standalone apps/libraries	2.6.18	GPLv2	Advanced IP routing and network device configuration tools
iptables	Standalone apps/libraries	1.3.5	GPLv2	Tools for managing Linux kernel packet filtering capabilities
iptables-ipv6	Standalone apps/libraries	1.3.5	GPLv2	IPv6 support for IP tables
iputils	Standalone apps/libraries	20020927	GPLv2	Network monitoring tools including ping
irqbalance	Standalone apps/libraries	1.13	GPLv2	IRQ balancing daemon
krb5-libs	Shared library linkage	1.8.1	MIT	The shared libraries used by Kerberos 5
krb5-workstatio n	Standalone apps/libraries	1.8.1	MIT	Kerberos 5 programs for use on workstations
less	Standalone apps/libraries	394	GPLv2	A text file browser similar to more, but better
leveldb	Shared library linkage	1.2	BSD	LevelDB library
libacl	OSS Shared library linkage	2.2.39	LGPLv2.1	Dynamic library for access control list support
libattr	OSS Shared library linkage	2.4.32	LGPLv2.1	Dynamic library for extended attribute support
libcurl4	Shared library linkage	7.20.1	MIT	The cURL library
libevent	OSS Shared library linkage	2.0.19	GPLv2	Abstract asynchronous event notification library
libgcc	Shared library linkage	4.1.1	LGPLv2	GCC version 4.1 shared support library

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
libgssapi	OSS Shared library linkage	0.1	BSD-like	Generic Security Services Application Programming Interface Library
libjpeg	OSS Shared library linkage	6b	IJĞ	A library for manipulating JPEG image format files
libmcrypt	OSS Shared library linkage	2.5.8	LGPLv2	Encryption algorithms library
libpcap	Shared library linkage	0.9.4	BSD	A system-independent interface for user-level packet capture
libpng	Shared library linkage	1.2.44	OSI Certified (Zlib)	A library of functions for manipulating PNG image format files
libsmbclient		3.0.33	GPLv2	The SMB client library
libstdc++	Shared library linkage	4.1.1	GPL	GNU Standard C++ Library
libsysfs	OSS Shared library linkage	2.0.0	LGPLv2	Shared library for interfacing with the Linux sysfs virtual file system
libtecla	Shared library linkage	1.6.1	MIT/X11	The Tecla command-line editing library
libtermcap	Configuration Files	2.0.8	Public Domain	A basic system library for accessing the termcap database
libunwind	OSS Shared library linkage	1.1	BSD	Unwind Library
libuser	OSS Shared library linkage	0.54.7	LGPLv2	A user and group account administration library
libvolume_id	OSS Shared library linkage	127	GPLv2	Dynamic libraries to get volume IDs
libxml2	Shared library linkage	2.6.30	MIT	Library providing XML and HTML support
libxml2-python	Standalone apps/libraries	2.6.30	PSF	Python bindings for the libxml2 library
libxslt	Shared library linkage	1.1.22	MIT	Library providing the Gnome XSLT engine
lm_sensors	Standalone apps/libraries	2.10.7	GPLv2	Hardware monitoring tools
lockdev	Standalone apps/libraries	1.0.1	LGPLv2.1	A library for locking devices
logrotate	Standalone apps/libraries	3.7.4	GPLv2	Rotates, compresses, removes and mails system log files
lunasa	Shared library linkage, Standalone apps/libraries	1	Commercial	Client software for SafeNet Luna SA hardware security module (HSM)
m2crypto	Standalone apps/libraries	0.16	BSD	Support for using OpenSSL in python scripts
mailx	Standalone apps/libraries	8.1.1	BSD	The /bin/mail program for sending quick email messages

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
mdadm		2.6.9	GPL	Linux utility used to manage and monitor software RAID devices
mingetty	Standalone apps/libraries	1.07	GPLv2	A compact getty program for virtual consoles only
minicom	Standalone apps/libraries	2.1	GPLv2	A text-based modem control and terminal emulation program
mktemp	Standalone apps/libraries	1.5	BSD	A small utility for safely making .TMP files
module-init-tool	Standalone apps/libraries	3.3	GPLv2	Kernel module management utilities
mtdutils		1.0.0	GPL	Memory Technology Device Utilities
ncurses	Shared library linkage	5.5	Distributable	A terminal handling library
net-snmp	Standalone apps/libraries	5.4.4	BSD	Tools and servers for the SNMP protocol
net-tools	Standalone apps/libraries	1.6	GPLv2	Basic networking tools
nfast	Shared library linkage, Standalone apps/libraries	1	Commercial	Client software for Thales hardware security module (HSM)
nfs-utils	Standalone apps/libraries	1.0.9	GPLv2	Network File System (NFS) utilities and supporting clients and daemons for the kernel NFS server
nfs-utils-lib	OSS Shared library linkage	1.0.8	GPLv2	Network File System (NFS) Support Library
ntp	Standalone apps/libraries	4.2.2p1	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
ntp-dp	Standalone apps/libraries	4.2.2p1	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
openIdap	Shared library linkage	2.4.23	OpenLDAP	The configuration files, libraries, and documentation for OpenLDAP
openIdap-clients	Standalone apps/libraries	2.4.23	OpenLDAP	Client programs for OpenLDAP
openssh	Standalone apps/libraries	5.2p1	BSD	Anopensourceimplementation of SSH protocol versions 1 and 2
openssh-clients	Standalone apps/libraries	5.2p1	BSD	An open source SSH client application
openssh-server	Standalone apps/libraries	5.2p1	BSD	An open source SSH server daemon
openssl	Shared library linkage	0.9.8p	OpenSSL	A general purpose cryptography library with TLS implementation
pam	Shared library linkage	1.0.2	BSD	A security tool which provides authentication for applications

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
pam_krb5	Standalone apps/libraries	2.2.14	MIT	A pluggable authentication module (PAM) for Kerberos 5
pam_ldap	OSS Shared library linkage	1.8.4	LGPLv3	A pluggable authentication module (PAM) for use with LDAP servers
panos-release	Base Linux OS version info for our systems	2	GPLv2	PAN-OS Linux release file
passwd	Standalone apps/libraries	0.73	GPLv2	The passwd utility for setting/changing passwords using PAM
pcre	Shared library linkage	6.6	BSD	Perl-compatible regular expression library
pexpect	OSS libraries in interpreted scripts	2.3	MIT	Pexpect is a Pure Python Expect-like module
php	Standalone apps/libraries	5.3.17	PHP v3.01	The PHP server-side scripting language
php-cli	Standalone apps/libraries	5.3.17	PHP v3.01	Command-line interface for PHP server- side scripting language
php-ext	Standalone apps/libraries	5.3.17	PHP v3.01	Shared PHP-Ext open source widget library for PHP 4 and PHP 5 server-side scripting language
popt	OSS Shared library linkage	1.12	MIT	A C library for parsing command line parameters
portmap	Standalone apps/libraries	4	BSD	A program which manages remote procedure call (RPC) connections
procps	Standalone apps/libraries	3.2.7	GPLv2	System and process monitoring utilities
psmisc	Standalone apps/libraries	22.2	BSD	Utilities for managing processes on your system
python	Standalone apps/libraries	2.4.3	PSF	An interpreted, interactive, object- oriented programming language
python-bloom	OSS libraries in interpreted scripts	0.1.12	BSD-like	Pythonimplementationofbloom filter
python- elementtree	OSS libraries in interpreted scripts	1.2.6	PSF	Fast XML parser and writer
python-imaging	OSS libraries in interpreted scripts	1.1.5	Distributable	Python's own image processing library
python-sqlite	Shared library linkage	1.1.7	Public Domain	Python bindings for SQLite
python-urlgrabb er	OSS libraries in interpreted scripts	3.1.0	LGPLv2.1	A high-level cross-protocol URL-grabber

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
rcs	Standalone apps/libraries	5.7	GPLv2	Revision control system (RCS) file version management tools
readline	OSS Shared library linkage	5.1	GPLv2	A library for editing typed command lines
redhat-logos		4.9.8		Red Hat-related icons and pictures
reportlab	OSS libraries in interpreted scripts	2.2	BSD	Python PDF generation library
rootfiles	Standalone apps/libraries	8.1	Distributable	The basic required files for the root user's directory
rpm	Standalone apps/libraries	4.4.2	GPLv2	The Route Processing Module (RPM) packagemanagementsystem
rpm-libs	Standalone apps/libraries	4.4.2	GPLv2	Libraries for manipulating Route Processing Module (RPM) packages
rpm-python	OSS libraries in interpreted scripts	4.4.2	GPLv2	Python bindings for apps which will manipulate Route Processing Module (RPM) packages
samba-common	Standalone apps	3.0.33	GPLv2	Files used by both Samba servers and clients
scrub	Standalone apps/libraries	2.1	GPLv2	Disk scrubbing program
sed	Standalone apps/libraries	4.1.5	GPLv2	A GNU stream text editor.
setup		2.5.58	Public Domain	A set of system configuration and setup files
shadow-utils	Standalone apps/libraries	4.0.17	BSD	Utilities for managing accounts and shadow password files
smartmontools	Standalone apps/libraries	5.39	GPLv2	S.M.A.R.T. utility toolkit
snappy	Shared library linkage	1.0.1	Apache 2.0	High-speed compression and decompression library
sqlite	Shared library linkage	3.6.12	Public Domain	Library that implements an embeddable SQLite in-process database engine
sshpass	Standalone apps/libraries	1.05	BSD	Non-interactive SSH password provider
sysfsutils	Standalone apps/libraries	2.0.0	GPLv2	Shared library for interfacing with the Linux sysfs virtual file system
sysklogd	Standalone apps/libraries	1.4.1	GPLv2	System logging and kernel message trapping daemons
syslinux	Standalone apps/libraries	3.11	GPL	Simple kernel loader which boots from a FAT file system
syslog-ng	Standalone apps/libraries	3.2.5	GPLv2 LGPLv2	Syslog replacement daemon

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
tar	Standalone apps/libraries	1.15.1	GPLv2	A GNU file archiving program
tcpdump	Standalone apps/libraries	3.9.4	BSD	A network traffic monitoring tool
termcap	Configuration Files	5.5	Public Domain	The terminal feature database used by certain applications
tftp	Standalone apps/libraries	0.48	BSD	The client for Trivial FTP (TFTP)
tftp-server	Standalone apps/libraries	0.48	BSD	The server for Trivial FTP (TFTP)
traceroute	Standalone apps/libraries	2.0.1	GPLv2	Traces the route taken by packets over an IPv4/IPv6 network
tzdata	Configuration files	2011	Public domain	Time-zone data
udev	Standalone apps/libraries	127	GPLv2	Device manager for devicenodes and user space events (improved functionality over devfs)
util-linux	Standalone apps/libraries	2.13	GPLv2	Acollection of basic system utilities
vconfig		1.9	GPL	Linux 802.1q VLAN configuration utility
vim-minimal	Standalone apps/libraries	7.0.109	Charityware	Aminimalversion of VIsual editor iMproved (VIM)
vixie-cron	Standalone apps/libraries	4.1	ISC	The Vixie cron daemon for executing scheduled commands
wget	Standalone apps/libraries	1.12	GPLv3	A utility for retrieving files using the HTTP or FTP protocols
wmi	Standalone apps	1.3.13	GPLv2	WMI client
xdelta		1.1.3	GPL	A binary file delta generator and an RCS replacement library
xdelta3	Standalone apps/libraries	3.0t	GPLv2	A binary file delta generator
xe-guest-utilitie s	Standalone apps/libraries	6.1.0	GPL/LGPL	Virtual Machine Monitoring Scripts
xe-guest-utilitie s- xenstore	Standalone apps/libraries	6.1.0	GPL/LGPL	Virtual Machine XenStore utilities
xinetd	Standalone apps/libraries	2.3.14	Distributable	A secure replacement for inetd
zlib	Shared library linkage	1.2.3	BSD	The zlib compression and decompression library

PAN-OS 5.1 Open Source Software (OSS) Listing

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
MAKEDEV	Standalone apps/libraries	3.23	GPLv2	A program used for creating the device files in /dev
SysVinit	Standalone apps/libraries	2.86	GPLv2	Programs which control basic system processes
basesystem		8	Public Domain	The skeleton package which defines a simple Red Hat Linux system
bash	Standalone apps/libraries	3.1	GPLv2	The GNU Bourne Again shell (bash) version 3.1
beecrypt	OSS Shared library linkage	4.1.2	LGPLv2.1	An open source cryptography library
bind-libs	OSS Shared library linkage	9.3.3	ISC	Libraries used by the BIND DNS packages
bind-utils	Standalone apps/libraries	9.3.3	ISC	Utilities for querying DNS name servers
bonnie++	Standalone apps/libraries	1.03d	GPLv2	A program for benchmarking hard drives and file systems
bzip2	Standalone apps/libraries	1.0.3	BSD	A file compression utility
bzip2-libs	OSS Shared library linkage	1.0.3	BSD	Libraries for applications using bzip2
chkconfig	Standalone apps/libraries	1.3.30.1	GPLv2	A system tool for maintaining the /etc/rc*.d hierarchy
coreutils	Standalone apps/libraries	5.97	GPLv2	The GNU core utilities: a set of tools commonly used in shell scripts
cpio	Standalone apps/libraries	2.6	GPLv2	A GNU archiving program
срр	Standalone apps/libraries	4.1.1	GPLv2	The C Preprocessor
cracklib	OSS Shared library linkage	2.8.9	Artistic	A password-checking library
cracklib-dicts	Dictionaries used by cracklib	2.8.9	Artistic	The standard CrackLib password- checking dictionaries
crontabs	Root crontab files, used by system utilities	1.1	Public Domain	Root crontab files used to schedule the execution of programs
curl	Standalone apps/libraries	7.20.1	MIT	Get and send files to a FTP, HTTP, TFTP, SSH or other servers
dhclient	Standalone apps/libraries	3.0.5	Distributable	The ISC DHCP client for configuring network interfaces
diffutils	Standalone apps/libraries	2.8.1	GPLv2	A GNU collection of diff utilities
dmidecode	Standalone apps/libraries	2.11	GPLv2	Tool to analyze BIOS DMI data

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
e2fsprogs	Standalone apps/libraries	1.39	GPLv2	Utilities for managing the second extended (ext2) file system
e2fsprogs-libs	OSS Shared library linkage	1.39	GPLv2	Ext2/3 file-system-specific static libraries and headers
elfutils-libelf	OSS Shared library linkage	0.128	GPLv2	Library to read and write ELF files
ethtool	Standalone apps/libraries	5	GPLv2	Ethernet settings tool for PCI ethernet cards
expat	OSS Shared library linkage	1.95.8	BSD	A library for parsing XML
fastlz	Shared library linkage	0.1.0	FastLZ	A real-time compression library
file	Standalone apps/libraries	5.04	Distributable	A utility for determining file types
file-libs	Standalone apps/libraries	5.04	Distributable	Libraries for applications using libmagic
filesystem	Standalone apps/libraries	2.4.0	Distributable	The basic directory layout for a Linux system
findutils	Standalone apps/libraries	4.2.27	GPLv2	The GNU versions of find utilities (find and xargs)
fipscheck	Standalone apps/libraries	1.2.0	FreeBSD	Alibrary for integrity verification of FIPS validated modules
fipscheck-lib	Standalone apps/libraries	1.2.0	FreeBSD	Library files for fipscheck
flashrom	Standalone apps/libraries	0.9.4	GPLv2	Flashrom flash utility
gawk	Standalone apps/libraries	3.1.5	GPLv2	The GNU version of the awk text processing utility
gdb	Standalone apps/libraries	6.8	GPLv3+	A GNU source-level debugger for C, C++, Java and other languages
glib2	OSS Shared library linkage	2.12.3	LGPLv2	A library of useful utility functions
glibc	Shared library linkage	2.5	LGPLv2	The GNU libc libraries
glibc-common	Shared library linkage	2.5	LGPLv2	Common binaries and locale data for glibo
gmp	OSS Shared library linkage	4.3.1	LGPLv3	A GNU arbitrary precision library
gnupg	Standalone apps/libraries	1.4.5	GPLv2	A GNU utility for secure communication and data storage
grep	Standalone apps/libraries	2.5.1	GPLv2	The GNU versions of grep pattern matching utilities
grub	Standalone apps/libraries	6.0.97	GPL	GRUB - the Grand Unified Boot Loader
gzip	Standalone apps/libraries	1.3.5	GPLv2	The GNU data compression program

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
inetutils	Standalone apps/libraries	1.5	GPLv3	Internet utilities
info	Standalone apps/libraries	4.8	GPLv2	A stand-alone TTY-based reader for GNU Texinfo documentation
initscripts	Standalone apps/libraries + startup and shutdown scripts	8.45.15	GPLv2	The inittab file and the /etc/init.d scripts
iproute	Standalone apps/libraries	2.6.18	GPLv2	Advanced IP routing and network device configuration tools
iptables	Standalone apps/libraries	1.3.5	GPLv2	Tools for managing Linux kernel packet filtering capabilities
iptables-ipv6	Standalone apps/libraries	1.3.5	GPLv2	IPv6 support for IP tables
iputils	Standalone apps/libraries	20020927	GPLv2	Network monitoring tools including ping
irqbalance	Standalone apps/libraries	1.13	GPLv2	IRQ balancing daemon
krb5-libs	Shared library linkage	1.8.1	MIT	The shared libraries used by Kerberos 5
krb5-workstatio n	Standalone apps/libraries	1.8.1	MIT	Kerberos 5 programs for use on workstations
less	Standalone apps/libraries	394	GPLv2	A text file browser similar to more, but better
libacl	OSS Shared library linkage	2.2.39	LGPLv2.1	Dynamic library for access control list support
libattr	OSS Shared library linkage	2.4.32	LGPLv2.1	Dynamic library for extended attribute support
libcurl4	Shared library linkage	7.20.1	MIT	The cURL library
libevent	OSS Shared library linkage	2.0.19	GPLv2	Abstract asynchronous event notification library
libgcc	Shared library linkage	4.1.1	LGPLv2	GCC version 4.1 shared support library
libgssapi	OSS Shared library linkage	0.1	BSD-like	Generic Security Services Application Programming Interface Library
libjpeg	OSS Shared library linkage	6b	IJĠ	A library for manipulating JPEG image format files
libmcrypt	OSS Shared library linkage	2.5.8	LGPLv2	Encryption algorithms library
libpcap	Shared library linkage	0.9.4	BSD	A system-independent interface for user-level packet capture
libpng	Shared library linkage	1.2.44	OSI certified/ZI	A library of functions for manipulating PNG image format files

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
libsmbclient		3.0.33	GPLv2	The SMB client library
libstdc++	Shared library linkage	4.1.1	GPL	GNU Standard C++ Library
libsysfs	OSS Shared library linkage	2.0.0	LGPLv2	Shared library for interfacing with the Linux sysfs virtual file system
libtecla	Shared library linkage	1.6.1	MIT/X11	The Tecla command-line editing library
libtermcap	Configuration Files	2.0.8	Public Domain	A basic system library for accessing the termcap database
libuser	OSS Shared library linkage	0.54.7	LGPLv2	A user and group account administration library
libvolume_id	OSS Shared library linkage	127	GPLv2	Dynamic libraries to get volume IDs
libxml2	Shared library linkage	2.6.30	MIT	Library providing XML and HTML support
libxml2-python	Standalone apps/libraries	2.6.30	PSF	Python bindings for the libxml2 library
libxslt	Shared library linkage	1.1.22	MIT	Library providing the Gnome XSLT engine
lockdev	Standalone apps/libraries	1.0.1	LGPLv2.1	A library for locking devices
logrotate	Standalone apps/libraries	3.7.4	GPLv2	Rotates, compresses, removes and mails system log files
m2crypto	Standalone apps/libraries	0.16	BSD	Support for using OpenSSL in python scripts
mailx	Standalone apps/libraries	8.1.1	BSD	The /bin/mail program for sending quick email messages
mdadm		2.6.9	GPL	Linux utility used to manage and monitor software RAID devices
mingetty	Standalone apps/libraries	1.07	GPLv2	A compact getty program for virtual consoles only
minicom	Standalone apps/libraries	2.1	GPLv2	A text-based modem control and terminal emulation program
mktemp	Standalone apps/libraries	1.5	BSD	A small utility for safely making .TMP files
module-init-tool	Standalone apps/libraries	3.3	GPLv2	Kernel module management utilities
mtdutils		1.0.0	GPL	Memory Technology Device Utilities
ncurses	Shared library linkage	5.5	Distributable	A terminal handling library
net-snmp	Standalone apps/libraries	5.4.4	BSD	Tools and servers for the SNMP protocol

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
net-tools	Standalone apps/libraries	1.6	GPLv2	Basic networking tools
nfs-utils	Standalone apps/libraries	1.0.9	GPLv2	Network File System (NFS) utilities and supporting clients and daemons for the kernel NFS server
nfs-utils-lib	OSS Shared library linkage	1.0.8	GPLv2	Network File System (NFS) Support Library
ntp	Standalone apps/libraries	4.2.2p1	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
ntp-dp	Standalone apps/libraries	4.2.2p1	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
openIdap	Shared library linkage	2.4.23	OpenLDAP	The configuration files, libraries, and documentation for OpenLDAP
openIdap-clients	Standalone apps/libraries	2.4.23	OpenLDAP	Client programs for OpenLDAP
openssh	Standalone apps/libraries	5.2p1	BSD	Anopensourceimplementation of SSH protocol versions 1 and 2
openssh-clients	Standalone apps/libraries	5.2p1	BSD	An open source SSH client application
openssh-server	Standalone apps/libraries	5.2p1	BSD	An open source SSH server daemon
openssl	Shared library linkage	0.9.8p	OpenSSL	A general purpose cryptography library with TLS implementation
pam	Shared library linkage	1.0.2	BSD	A security tool which provides authentication for applications
pam_krb5	Standalone apps/libraries	2.2.14	MIT	A pluggable authentication module (PAM) for Kerberos 5
pam_ldap	OSS Shared library linkage	1.8.4	LGPLv3	A pluggable authentication module (PAM) for use with LDAP servers
panos-release	Base Linux OS version info for our systems	2	GPLv2	PAN-OS Linux release file
passwd	Standalone apps/libraries	0.73	GPLv2	The passwd utility for setting/changing passwords using PAM
pcre	Shared library linkage	6.6	BSD	Perl-compatible regular expression library
pexpect	OSS libraries in interpreted scripts	2.3	MIT	Pexpect is a Pure Python Expect-like module
php	Standalone apps/libraries	5.3.17	PHP v3.01	The PHP server-side scripting language
php-cli	Standalone apps/libraries	5.3.17	PHP v3.01	Command-line interface for PHP server- side scripting language

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
popt	OSS Shared library linkage	1.12	MIT	A C library for parsing command line parameters
portmap	Standalone apps/libraries	4	BSD	A program which manages remote procedure call (RPC) connections
procps	Standalone apps/libraries	3.2.7	GPLv2	System and process monitoring utilities
psmisc	Standalone apps/libraries	22.2	BSD	Utilities for managing processes on your system
python	Standalone apps/libraries	2.4.3	PSF	An interpreted, interactive, object- oriented programming language
python-bloom	OSS libraries in interpreted scripts	0.1.12	BSD-like	Pythonimplementationofbloom filter
python- elementtree	OSS libraries in interpreted scripts	1.2.6	PSF	Fast XML parser and writer
python-imaging	OSS libraries in interpreted scripts	1.1.5	Distributable	Python's own image processing library
python-sqlite	Shared library linkage	1.1.7	Public Domain	Python bindings for SQLite
python-urlgrabb er	OSS libraries in interpreted scripts	3.1.0	LGPLv2.1	A high-level cross-protocol URL-grabber
rcs	Standalone apps/libraries	5.7	GPLv2	Revision control system (RCS) file version management tools
readline	OSS Shared library linkage	5.1	GPLv2	A library for editing typed command lines
redhat-logos		4.9.8		Red Hat-related icons and pictures
reportlab	OSS libraries in interpreted scripts	2.2	BSD	Python PDF generation library
rootfiles	Standalone apps/libraries	8.1	Distributable	The basic required files for the root user's directory
rpm	Standalone apps/libraries	4.4.2	GPLv2	The Route Processing Module (RPM) package management system
rpm-libs	Standalone apps/libraries	4.4.2	GPLv2	Libraries for manipulating Route Processing Module (RPM) packages
rpm-python	OSS libraries in interpreted scripts	4.4.2	GPLv2	Python bindings for apps which will manipulate Route Processing Module (RPM) packages
samba-common	Standalone apps	3.0.33	GPLv2	Files used by both Samba servers and clients
scrub	Standalone apps/libraries	2.1	GPLv2	Disk scrubbing program
sed	Standalone apps/libraries	4.1.5	GPLv2	A GNU stream text editor

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
setup		2.5.58	Public Domain	A set of system configuration and setup files
shadow-utils	Standalone apps/libraries	4.0.17	BSD	Utilities for managing accounts and shadow password files
smartmontools	Standalone apps/libraries	5.39	GPLv2	S.M.A.R.T. utility toolkit
snappy	Shared library linkage	1.0.1	Apache 2.0	High-speed compression and decompression library
sqlite	Shared library linkage	3.6.12	Public Domain	Library that implements an embeddable SQLite in-process database engine
sshpass	Standalone apps/libraries	1.05	BSD	Non-interactive SSH password provider
sysfsutils	Standalone apps/libraries	2.0.0	GPLv2	Shared library for interfacing with the Linux sysfs virtual file system
sysklogd	Standalone apps/libraries	1.4.1	GPLv2	System logging and kernel message trapping daemons
tar	Standalone apps/libraries	1.15.1	GPLv2	A GNU file archiving program
tcpdump	Standalone apps/libraries	3.9.4	BSD	A network traffic monitoring tool
termcap	Configuration Files	5.5	Public Domain	The terminal feature database used by certain applications
tftp	Standalone apps/libraries	0.48	BSD	The client for Trivial FTP (TFTP)
tftp-server	Standalone apps/libraries	0.48	BSD	The server for Trivial FTP (TFTP)
traceroute	Standalone apps/libraries	2.0.1	GPLv2	Traces the route taken by packets over an IPv4/IPv6 network
tzdata	Configuration files	2011	Public domain	Time-zone data
udev	Standalone apps/libraries	127	GPLv2	Device manager for devicenodes and user space events (improved functionality over devfs)
util-linux	Standalone apps/libraries	2.13	GPLv2	Acollection of basic system utilities
vconfig		1.9	GPL	Linux 802.1q VLAN configuration utility
vim-minimal	Standalone apps/libraries	7.0.109	Charityware	Aminimalversion of VIsual editor iMproved (VIM)
vixie-cron	Standalone apps/libraries	4.1	ISC	The Vixie cron daemon for executing scheduled commands
wget	Standalone apps/libraries	1.12	GPLv3	A utility for retrieving files using the HTTP or FTP protocols
wmi	Standalone apps	1.3.13	GPLv2	WMI client

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
xdelta		1.1.3	GPL	A binary file delta generator and an RCS replacement library
xdelta3	Standalone apps/libraries	3.0t	GPLv2	A binary file delta generator
xinetd	Standalone apps/libraries	2.3.14	Distributable	A secure replacement for inetd
zlib	Shared library linkage	1.2.3	BSD	The zlib compression and decompression library

PAN-OS 5.0 Open Source Software (OSS) Listing

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
MAKEDEV	Standalone apps/libraries	3.23	GPLv2	A program used for creating the device files in /dev
SysVinit	Standalone apps/libraries	2.86	GPLv2	Programs which control basic system processes
basesystem		8	Public Domain	The skeleton package which defines a simple Red Hat Linux system
bash	Standalone apps/libraries	3.1	GPLv2	The GNU Bourne Again shell (bash) version 3.1
beecrypt	OSS Shared library linkage	4.1.2	LGPLv2.1	An open source cryptography library
bind-libs	OSS Shared library linkage	9.3.3	ISC	Libraries used by the BIND DNS packages
bind-utils	Standalone apps/libraries	9.3.3	ISC	Utilities for querying DNS name servers
bonnie++	Standalone apps/libraries	1.03d	GPLv2	A program for benchmarking hard drives and file systems
bzip2	Standalone apps/libraries	1.0.3	BSD	A file compression utility
bzip2-libs	OSS Shared library linkage	1.0.3	BSD	Libraries for applications using bzip2
chkconfig	Standalone apps/libraries	1.3.30.1	GPLv2	A system tool for maintaining the /etc/rc*.d hierarchy
coreutils	Standalone apps/libraries	5.97	GPLv2	The GNU core utilities: a set of tools commonly used in shell scripts
cpio	Standalone apps/libraries	2.6	GPLv2	A GNU archiving program
срр	Standalone apps/libraries	4.1.1	GPLv2	The C Preprocessor
cracklib	OSS Shared library linkage	2.8.9	Artistic	A password-checking library
cracklib-dicts	Dictionaries used by cracklib	2.8.9	Artistic	The standard CrackLib password- checking dictionaries
crontabs	Root crontab files, used by system utilities	1.1	Public Domain	Root crontab files used to schedule the execution of programs
curl	Standalone apps/libraries	7.20.1	MIT	Get and send files to a FTP, HTTP, TFTP, SSH or other servers
dhclient	Standalone apps/libraries	3.0.5	Distributable	The ISC DHCP client for configuring network interfaces
diffutils	Standalone apps/libraries	2.8.1	GPLv2	A GNU collection of diff utilities
dmidecode	Standalone apps/libraries	2.11	GPLv2	Tool to analyze BIOS DMI data

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
e2fsprogs	Standalone apps/libraries	1.39	GPLv2	Utilities for managing the second extended (ext2) file system
e2fsprogs-libs	OSS Shared library linkage	1.39	GPLv2	Ext2/3 file-system-specific static libraries and headers
elfutils-libelf	OSS Shared library linkage	0.128	GPLv2	Library to read and write ELF files
ethtool	Standalone apps/libraries	5	GPLv2	Ethernet settings tool for PCI ethernet cards
expat	OSS Shared library linkage	1.95.8	BSD	A library for parsing XML
fastlz	Shared library linkage	0.1.0	FastLZ	A real-time compression library
file	Standalone apps/libraries	4.17	Distributable	A utility for determining file types
filesystem	Standalone apps/libraries	2.4.0	Distributable	The basic directory layout for a Linux system
findutils	Standalone apps/libraries	4.2.27	GPLv2	The GNU versions of find utilities (find and xargs)
fipscheck	Standalone apps/libraries	1.2.0	FreeBSD	Alibrary for integrity verification of FIPS validated modules
fipscheck-lib	Standalone apps/libraries	1.2.0	FreeBSD	Library files for fipscheck
flashrom	Standalone apps/libraries	0.9.4	GPLv2	Flashrom flash utility
gawk	Standalone apps/libraries	3.1.5	GPLv2	The GNU version of the awk text processing utility
gdb	Standalone apps/libraries	6.8	GPLv3+	A GNU source-level debugger for C, C++, Java and other languages
glib2	OSS Shared library linkage	2.12.3	LGPLv2	A library of useful utility functions
glibc	Shared library linkage	2.5	LGPLv2	The GNU libc libraries
glibc-common	Shared library linkage	2.5	LGPLv2	Common binaries and locale data for glibo
gmp	OSS Shared library linkage	4.3.1	LGPLv3	A GNU arbitrary precision library
gnupg	Standalone apps/libraries	1.4.5	GPLv2	A GNU utility for secure communication and data storage
grep	Standalone apps/libraries	2.5.1	GPLv2	The GNU versions of grep pattern matching utilities
grub	Standalone apps/libraries	6.0.97	GPL	GRUB - the Grand Unified Boot Loader
gzip	Standalone apps/libraries	1.3.5	GPLv2	The GNU data compression program
inetutils	Standalone apps/libraries	1.5	GPLv3	Internet utilities

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
info	Standalone apps/libraries	4.8	GPLv2	A stand-alone TTY-based reader for GNU Texinfo documentation
initscripts	Standalone apps/libraries + startup and shutdown scripts	8.45.15	GPLv2	The inittab file and the /etc/init.d scripts
iproute	Standalone apps/libraries	2.6.18	GPLv2	Advanced IP routing and network device configuration tools
iptables	Standalone apps/libraries	1.3.5	GPLv2	Tools for managing Linux kernel packet filtering capabilities
iptables-ipv6	Standalone apps/libraries	1.3.5	GPLv2	IPv6 support for IP tables
iputils	Standalone apps/libraries	20020927	GPLv2	Network monitoring tools including ping
irqbalance	Standalone apps/libraries	1.13	GPLv2	IRQ balancing daemon
krb5-libs	Shared library linkage	1.8.1	MIT	The shared libraries used by Kerberos 5
krb5-workstatio n	Standalone apps/libraries	1.8.1	MIT	Kerberos 5 programs for use on workstations
less	Standalone apps/libraries	394	GPLv2	A text file browser similar to more, but better
libacl	OSS Shared library linkage	2.2.39	LGPLv2.1	Dynamic library for access control list support
libattr	OSS Shared library linkage	2.4.32	LGPLv2.1	Dynamic library for extended attribute support
libcurl4	Shared library linkage	7.20.1	MIT	The cURL library
libevent	OSS Shared library linkage	2.0.19	GPLv2	Abstract asynchronous event notification library
libgcc	Shared library linkage	4.1.1	LGPLv2	GCC version 4.1 shared support library
libgssapi	OSS Shared library linkage	0.1	BSD-like	Generic Security Services Application Programming Interface Library
libjpeg	OSS Shared library linkage	6b	IJĞ	A library for manipulating JPEG image format files
libpcap	Shared library linkage	0.9.4	BSD	A system-independent interface for user-level packet capture
libpng	Shared library linkage	1.2.44	OSI Certified (Zlib)	A library of functions for manipulating PNG image format files
libsmbclient		3.0.33	GPLv2	The SMB client library
libstdc++	Shared library linkage	4.1.1	GPL	GNU Standard C++ Library

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
libsysfs	OSS Shared library linkage	2.0.0	LGPLv2	Shared library for interfacing with the Linux sysfs virtual file system
libtecla	Shared library linkage	1.6.1	MIT/X11	The Tecla command-line editing library
libtermcap	Configuration Files	2.0.8	Public Domain	A basic system library for accessing the termcap database
libuser	OSS Shared library linkage	0.54.7	LGPLv2	A user and group account administration library
libvolume_id	OSS Shared library linkage	127	GPLv2	Dynamic libraries to get volume IDs
libxml2	Shared library linkage	2.6.30	MIT	Library providing XML and HTML support
libxml2-python	Standalone apps/libraries	2.6.30	PSF	Python bindings for the libxml2 library
libxslt	Shared library linkage	1.1.22	MIT	Library providing the Gnome XSLT engine
lockdev	Standalone apps/libraries	1.0.1	LGPLv2.1	A library for locking devices
logrotate	Standalone apps/libraries	3.7.4	GPLv2	Rotates, compresses, removes and mails system log files
m2crypto	Standalone apps/libraries	0.16	BSD	Support for using OpenSSL in python scripts
mailx	Standalone apps/libraries	8.1.1	BSD	The /bin/mail program for sending quick email messages
mdadm		2.6.9	GPL	Linux utility used to manage and monitor software RAID devices
mingetty	Standalone apps/libraries	1.07	GPLv2	A compact getty program for virtual consoles only
minicom	Standalone apps/libraries	2.1	GPLv2	A text-based modem control and terminal emulation program
mktemp	Standalone apps/libraries	1.5	BSD	A small utility for safely making .TMP files
module-init-tool	Standalone apps/libraries	3.3	GPLv2	Kernel module management utilities
mtdutils		1.0.0	GPL	Memory Technology Device Utilities
ncurses	Shared library linkage	5.5	Distributable	A terminal handling library
net-snmp	Standalone apps/libraries	5.4.4	BSD	Tools and servers for the SNMP protocol
net-tools	Standalone apps/libraries	1.6	GPLv2	Basic networking tools

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
nfs-utils	Standalone apps/libraries	1.0.9	GPLv2	Network File System (NFS) utilities and supporting clients and daemons for the kernel NFS server
nfs-utils-lib	OSS Shared library linkage	1.0.8	GPLv2	Network File System (NFS) Support Library
ntp	Standalone apps/libraries	4.2.2p1	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
ntp-dp	Standalone apps/libraries	4.2.2p1	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
openidap	Shared library linkage	2.4.23	OpenLDAP	The configuration files, libraries, and documentation for OpenLDAP
openIdap-clients	Standalone apps/libraries	2.4.23	OpenLDAP	Client programs for OpenLDAP
openssh	Standalone apps/libraries	5.2p1	BSD	Anopensourceimplementation of SSH protocol versions 1 and 2
openssh-clients	Standalone apps/libraries	5.2p1	BSD	An open source SSH client application
openssh-server	Standalone apps/libraries	5.2p1	BSD	An open source SSH server daemon
openssl	Shared library linkage	0.9.8p	OpenSSL	A general purpose cryptography library with TLS implementation
pam	Shared library linkage	1.0.2	BSD	A security tool which provides authentication for applications
pam_krb5	Standalone apps/libraries	2.2.14	MIT	A pluggable authentication module (PAM) for Kerberos 5
pam_ldap	OSS Shared library linkage	1.8.4	LGPLv3	A pluggable authentication module (PAM) for use with LDAP servers
panos-release	Base Linux OS version info for our systems	2	GPLv2	PAN-OS Linux release file
passwd	Standalone apps/libraries	0.73	GPLv2	The passwd utility for setting/changing passwords using PAM
pcre	Shared library linkage	6.6	BSD	Perl-compatible regular expression library
pexpect	OSS libraries in interpreted scripts	2.3	MIT	Pexpect is a Pure Python Expect-like module
php-cli	Standalone apps/libraries	5.3.9	PHP v3.01	Command-line interface for PHP server- side scripting language
popt	OSS Shared library linkage	1.12	MIT	A C library for parsing command line parameters
portmap	Standalone apps/libraries	4	BSD	A program which manages remote procedure call (RPC) connections

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
procps	Standalone apps/libraries	3.2.7	GPLv2	System and process monitoring utilities
psmisc	Standalone apps/libraries	22.2	BSD	Utilities for managing processes on your system
python	Standalone apps/libraries	2.4.3	PSF	An interpreted, interactive, object- oriented programming language
python-bloom	OSS libraries in interpreted scripts	0.1.12	BSD-like	Pythonimplementationofbloom filter
python- elementtree	OSS libraries in interpreted scripts	1.2.6	PSF	Fast XML parser and writer
python-imaging	OSS libraries in interpreted scripts	1.1.5	Distributable	Python's own image processing library
python-sqlite	Shared library linkage	1.1.7	Public Domain	Python bindings for SQLite
python-urlgrabb er	OSS libraries in interpreted scripts	3.1.0	LGPLv2.1	A high-level cross-protocol URL-grabber
rcs	Standalone apps/libraries	5.7	GPLv2	Revision control system (RCS) file version management tools
readline	OSS Shared library linkage	5.1	GPLv2	A library for editing typed command lines
redhat-logos		4.9.8		Red Hat-related icons and pictures
reportlab	OSS libraries in interpreted scripts	2.2	BSD	Python PDF generation library
rootfiles	Standalone apps/libraries	8.1	Distributable	The basic required files for the root user's directory
rpm	Standalone apps/libraries	4.4.2	GPLv2	The Route Processing Module (RPM) package managementsystem
rpm-libs	Standalone apps/libraries	4.4.2	GPLv2	Libraries for manipulating Route Processing Module (RPM) packages
rpm-python	OSS libraries in interpreted scripts	4.4.2	GPLv2	Python bindings for apps which will manipulate Route Processing Module (RPM) packages
samba-common	Standalone apps	3.0.33	GPLv2	Files used by both Samba servers and clients
scrub	Standalone apps/libraries	2.1	GPLv2	Disk scrubbing program
sed	Standalone apps/libraries	4.1.5	GPLv2	A GNU stream text editor
setup		2.5.58	Public Domain	A set of system configuration and setup files
shadow-utils	Standalone apps/libraries	4.0.17	BSD	Utilities for managing accounts and shadow password files

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
smartmontools	Standalone apps/libraries	5.39	GPLv2	S.M.A.R.T. utility toolkit
snappy	Shared library linkage	1.0.1	Apache 2.0	High-speed compression and decompression library
sqlite	Shared library linkage	3.6.12	Public Domain	Library that implements an embeddable SQLite in-process database engine
sshpass	Standalone apps/libraries	1.05	BSD	Non-interactive SSH password provider
sysfsutils	Standalone apps/libraries	2.0.0	GPLv2	Shared library for interfacing with the Linux sysfs virtual file system
sysklogd	Standalone apps/libraries	1.4.1	GPLv2	System logging and kernel message trapping daemons
tar	Standalone apps/libraries	1.15.1	GPLv2	A GNU file archiving program
tcpdump	Standalone apps/libraries	3.9.4	BSD	A network traffic monitoring tool
termcap	Configuration Files	5.5	Public Domain	The terminal feature database used by certain applications
tftp	Standalone apps/libraries	0.48	BSD	The client for Trivial FTP (TFTP)
tftp-server	Standalone apps/libraries	0.48	BSD	The server for Trivial FTP (TFTP)
traceroute	Standalone apps/libraries	2.0.1	GPLv2	Traces the route taken by packets over an IPv4/IPv6 network
tzdata	Configuration files	2011	Public domain	Time-zone data
udev	Standalone apps/libraries	127	GPLv2	Device manager for devicenodes and user space events (improved functionality over devfs)
util-linux	Standalone apps/libraries	2.13	GPLv2	Acollection of basic system utilities
vconfig		1.9	GPL	Linux 802.1q VLAN configuration utility
vim-minimal	Standalone apps/libraries	7.0.109	Charityware	AminimalversionofVIsualeditor iMproved (VIM)
vixie-cron	Standalone apps/libraries	4.1	ISC	The Vixie cron daemon for executing scheduled commands
wget	Standalone apps/libraries	1.12	GPLv3	A utility for retrieving files using the HTTP or FTP protocols
wmi	Standalone apps	1.3.13	GPLv2	WMI client
xdelta		1.1.3	GPL	A binary file delta generator and an RCS replacement library
xdelta3	Standalone apps/libraries	3.0t	GPLv2	A binary file delta generator
xinetd	Standalone apps/libraries	2.3.14	Distributable	A secure replacement for inetd

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
zlib	Shared library linkage	1.2.3	BSD	The zlib compression and decompression library

PAN-OS 4.1 Open Source Software (OSS) Listing

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
MAKEDEV	Standalone apps/libraries	3.23	GPLv2	A program used for creating the device files in /dev
SysVinit	Standalone apps/libraries	2.86	GPLv2	Programs which control basic system processes
basesystem		8	Public Domain	The skeleton package which defines a simple Red Hat Linux system
bash	Standalone apps/libraries	3.1	GPLv2	The GNU Bourne Again shell (bash) version 3.1
beecrypt	OSS Shared library linkage	4.1.2	LGPLv2.1	An open source cryptography library
bonnie++	Standalone apps/libraries	1.03d	GPLv2	A program for benchmarking hard drives and file systems
bzip2	Standalone apps/libraries	1.0.3	BSD	A file compression utility
bzip2-libs	OSS Shared library linkage	1.0.3	BSD	Libraries for applications using bzip2
chkconfig	Standalone apps/libraries	1.3.30.1	GPLv2	A system tool for maintaining the /etc/rc*.d hierarchy
coreutils	Standalone apps/libraries	5.97	GPLv2	The GNU core utilities: a set of tools commonly used in shell scripts
cpio	Standalone apps/libraries	2.6	GPLv2	A GNU archiving program
срр	Standalone apps/libraries	4.1.1	GPLv2	The C Preprocessor
cracklib	OSS Shared library linkage	2.8.9	Artistic	A password-checking library
cracklib-dicts	Dictionaries used by cracklib	2.8.9	Artistic	The standard CrackLib password- checking dictionaries
crontabs	Root crontab files, used by system utilities	1.1	Public Domain	Root crontab files used to schedule the execution of programs
curl	Standalone apps/libraries	7.20.1	MIT	Get and send files to a FTP, HTTP, TFTP, SSH or other servers
dhclient	Standalone apps/libraries	3.0.5	Distributable	The ISC DHCP client for configuring network interfaces
diffutils	Standalone apps/libraries	2.8.1	GPLv2	A GNU collection of diff utilities
e2fsprogs	Standalone apps/libraries	1.39	GPLv2	Utilities for managing the second extended (ext2) file system
e2fsprogs-libs	OSS Shared library linkage	1.39	GPLv2	Ext2/3 file-system-specific static libraries and headers
elfutils-libelf	OSS Shared library linkage	0.128	GPLv2	Library to read and write ELF files
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NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
ethtool	Standalone apps/libraries	5	GPLv2	Ethernet settings tool for PCI ethernet cards
expat	OSS Shared library linkage	1.95.8	BSD	A library for parsing XML
fastiz	Shared library linkage	0.1.0	FastLZ	A real-time compression library
file	Standalone apps/libraries	4.17	Distributable	A utility for determining file types
filesystem	Standalone apps/libraries	2.4.0	Distributable	The basic directory layout for a Linux system
findutils	Standalone apps/libraries	4.2.27	GPLv2	The GNU versions of find utilities (find and xargs)
fipscheck	Standalone apps/libraries	1.2.0	FreeBSD	Alibrary for integrity verification of FIPS validated modules
fipscheck-lib	Standalone apps/libraries	1.2.0	FreeBSD	Library files for fipscheck
flashrom	Standalone apps/libraries	0.9.4	GPLv2	Flashrom flash utility
gawk	Standalone apps/libraries	3.1.5	GPLv2	The GNU version of the awk text processing utility
gdb	Standalone apps/libraries	7.0.1	GPLv3+	A GNU source-level debugger for C, C++, Java and other languages
glib2	OSS Shared library linkage	2.12.3	LGPLv2	A library of useful utility functions
glibc	Shared library linkage	2.5	LGPLv2	The GNU libc libraries
glibc-common	Shared library linkage	2.5	LGPLv2	Common binaries and locale data for glibo
gmp	OSS Shared library linkage	4.3.1	LGPLv3	A GNU arbitrary precision library
gnupg	Standalone apps/libraries	1.4.5	GPLv2	A GNU utility for secure communication and data storage
grep	Standalone apps/libraries	2.5.1	GPLv2	The GNU versions of grep pattern matching utilities
grub	Standalone apps/libraries	6.0.97	GPL	GRUB - the Grand Unified Boot Loader
gzip	Standalone apps/libraries	1.3.5	GPLv2	The GNU data compression program
inetutils	Standalone apps/libraries	1.5	GPLv3	Internet utilities
info	Standalone apps/libraries	4.8	GPLv2	A stand-alone TTY-based reader for GNU Texinfo documentation
initscripts	Standalone apps/libraries + startup and shutdown scripts	8.45.15	GPLv2	The inittab file and the /etc/init.d scripts
iproute	Standalone apps/libraries	2.6.18	GPLv2	Advanced IP routing and network device configuration tools

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
iptables	Standalone apps/libraries	1.3.5	GPLv2	Tools for managing Linux kernel packet filtering capabilities
iptables-ipv6	Standalone apps/libraries	1.3.5	GPLv2	IPv6 support for IP tables
iputils	Standalone apps/libraries	20020927	GPLv2	Network monitoring tools including ping
krb5-libs	Shared library linkage	1.8.1	MIT	The shared libraries used by Kerberos 5
less	Standalone apps/libraries	394	GPLv2	A text file browser similar to more, but better
libacl	OSS Shared library linkage	2.2.39	LGPLv2.1	Dynamic library for access control list support
libattr	OSS Shared library linkage	2.4.32	LGPLv2.1	Dynamic library for extended attribute support
libcurl4	Shared library linkage	7.20.1	MIT	The cURL library
libevent	OSS Shared library linkage	1.1a	GPLv2	Abstract asynchronous event notification library
libgcc	Shared library linkage	4.3.3	LGPLv2	GCC version 4.1 shared support library
libgssapi	OSS Shared library linkage	0.1	BSD-like	Generic Security Services Application Programming Interface Library
libjpeg	OSS Shared library linkage	6b	IJG	A library for manipulating JPEG image format files
libpcap	Shared library linkage	0.9.4	BSD	A system-independent interface for user-level packet capture
libpng	Shared library linkage	1.2.44	OSI Certified (Zlib)	A library of functions for manipulating PNG image format files
libstdc++	Shared library linkage	4.3.3	GPL	GNU Standard C++ Library
libsysfs	OSS Shared library linkage	2.0.0	LGPLv2	Shared library for interfacing with the Linux sysfs virtual file system
libtecla	Shared library linkage	1.6.1	MIT/X11	The Tecla command-line editing library
libtermcap	Configuration Files	2.0.8	Public Domain	A basic system library for accessing the termcap database
libuser	OSS Shared library linkage	0.54.7	LGPLv2	A user and group account administration library
libvolume_id	OSS Shared library linkage	127	GPLv2	Dynamic libraries to get volume IDs
libxml2	Shared library linkage	2.6.30	MIT	Library providing XML and HTML support

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
libxml2-python	Standalone apps/libraries	2.6.30	PSF	Python bindings for the libxml2 library
libxslt	Shared library linkage	1.1.22	MIT	Library providing the GNOME XSLT engine
lockdev	Standalone apps/libraries	1.0.1	LGPLv2.1	A library for locking devices
logrotate	Standalone apps/libraries	3.7.4	GPLv2	Rotates, compresses, removes and mails system log files
m2crypto	Standalone apps/libraries	0.16	BSD	Support for using OpenSSL in python scripts
mailx	Standalone apps/libraries	8.1.1	BSD	The /bin/mail program for sending quick email messages
mdadm		2.6.9	GPL	Linux utility used to manage and monitor software RAID devices
mingetty	Standalone apps/libraries	1.07	GPLv2	A compact getty program for virtual consoles only
minicom	Standalone apps/libraries	2.1	GPLv2	A text-based modem control and terminal emulation program
mktemp	Standalone apps/libraries	1.5	BSD	A small utility for safely making .TMP files
module-init-tool	Standalone apps/libraries	3.3	GPLv2	Kernel module management utilities
mtdutils		1.0.0	GPL	Memory Technology Device Utilities
ncurses	Shared library linkage	5.5	Distributable	A terminal handling library
net-snmp	Standalone apps/libraries	5.4.4	BSD	Tools and servers for the SNMP protocol
net-tools	Standalone apps/libraries	1.6	GPLv2	Basic networking tools
nfs-utils	Standalone apps/libraries	1.0.9	GPLv2	Network File System (NFS) utilities and supporting clients and daemons for the kernel NFS server
nfs-utils-lib	OSS Shared library linkage	1.0.8	GPLv2	Network File System (NFS) Support Library
ntp	Standalone apps/libraries	4.2.2p1	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
ntp-dp	Standalone apps/libraries	4.2.2p1	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
openIdap	Shared library linkage	2.4.23	OpenLDAP	The configuration files, libraries, and documentation for OpenLDAP
openIdap-clients	Standalone apps/libraries	2.4.23	OpenLDAP	Client programs for OpenLDAP

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
openssh	Standalone apps/libraries	5.2p1	BSD	Anopensourceimplementation of SSH protocol versions 1 and 2
openssh-clients	Standalone apps/libraries	5.2p1	BSD	An open source SSH client application
openssh-server	Standalone apps/libraries	5.2p1	BSD	An open source SSH server daemon
openssl	Shared library linkage	0.9.8p	OpenSSL	A general purpose cryptography library with TLS implementation
pam	Shared library linkage	1.0.2	BSD	A security tool which provides authentication for applications
pam_krb5	Standalone apps/libraries	2.2.14	MIT	A pluggable authentication module (PAM) for Kerberos 5
pam_ldap	OSS Shared library linkage	1.8.4	LGPLv3	A pluggable authentication module (PAM) for use with LDAP servers
panos-release	Base Linux OS version info for our systems	2	GPLv2	PAN-OS Linux release file
passwd	Standalone apps/libraries	0.73	GPLv2	The passwd utility for setting/changing passwords using PAM
pcre	Shared library linkage	6.6	BSD	Perl-compatible regular expression library
pexpect	OSS libraries in interpreted scripts	2.3	MIT	Pexpect is a Pure Python Expect-like module
php-cli	Standalone apps/libraries	5.3.9	PHP v3.01	Command-line interface for PHP server- side scripting language
popt	OSS Shared library linkage	1.12	MIT	A C library for parsing command line parameters
portmap	Standalone apps/libraries	4	BSD	A program which manages remote procedure call (RPC) connections
procps	Standalone apps/libraries	3.2.7	GPLv2	System and process monitoring utilities
psmisc	Standalone apps/libraries	22.2	BSD	Utilities for managing processes on your system
python	Standalone apps/libraries	2.4.3	PSF	An interpreted, interactive, object- oriented programming language
python-bloom	OSS libraries in interpreted scripts	0.1.12	BSD-like	Pythonimplementationofbloom filter
python- elementtree	OSS libraries in interpreted scripts	1.2.6	PSF	Fast XML parser and writer

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
python-imaging	OSS libraries in interpreted scripts	1.1.5	Distributable	Python's own image processing library
python-sqlite	Shared library linkage	1.1.7	Public Domain	Python bindings for SQLite
python-urlgrabb er	OSS libraries in interpreted scripts	3.1.0	LGPLv2.1	A high-level cross-protocol URL-grabber
rcs	Standalone apps/libraries	5.7	GPLv2	Revision control system (RCS) file version management tools
readline	OSS Shared library linkage	5.1	GPLv2	A library for editing typed command lines.
redhat-logos		4.9.8		Red Hat-related icons and pictures
reportlab	OSS libraries in interpreted scripts	2.2	BSD	Python PDF generation library
rootfiles	Standalone apps/libraries	8.1	Distributable	The basic required files for the root user's directory
rpm	Standalone apps/libraries	4.4.2	GPLv2	The Route Processing Module (RPM) packagemanagementsystem
rpm-libs	Standalone apps/libraries	4.4.2	GPLv2	Libraries for manipulating Route Processing Module (RPM) packages
rpm-python	OSS libraries in interpreted scripts	4.4.2	GPLv2	Python bindings for apps which will manipulate Route Processing Module (RPM) packages
scrub	Standalone apps/libraries	2.1	GPLv2	Disk scrubbing program
sed	Standalone apps/libraries	4.1.5	GPLv2	A GNU stream text editor
setup		2.5.58	Public Domain	A set of system configuration and setup files
shadow-utils	Standalone apps/libraries	4.0.17	BSD	Utilities for managing accounts and shadow password files
smartmontools	Standalone apps/libraries	5.39	GPLv2	S.M.A.R.T. utility toolkit
snappy	Shared library linkage	1.0.1	Apache 2.0	High-speed compression and decompression library
sqlite	Shared library linkage	3.6.12	Public Domain	Library that implements an embeddable SQLite in-process database engine
sysfsutils	Standalone apps/libraries	2.0.0	GPLv2	Shared library for interfacing with the Linux sysfs virtual file system
sysklogd	Standalone apps/libraries	1.4.1	GPLv2	System logging and kernel message trapping daemons
tar	Standalone apps/libraries	1.15.1	GPLv2	A GNU file archiving program
tcpdump	Standalone apps/libraries	3.9.4	BSD	A network traffic monitoring tool

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
termcap	Configuration Files	5.5	Public Domain	The terminal feature database used by certain applications
tftp	Standalone apps/libraries	0.48	BSD	The client for Trivial FTP (TFTP)
tftp-server	Standalone apps/libraries	0.48	BSD	The server for Trivial FTP (TFTP)
traceroute	Standalone apps/libraries	2.0.1	GPLv2	Traces the route taken by packets over an IPv4/IPv6 network
tzdata	Configuration files	2011	Public domain	Time-zone data
udev	Standalone apps/libraries	127	GPLv2	Device manager for device nodes and user space events (improved functionality over devfs)
util-linux	Standalone apps/libraries	2.13	GPLv2	Acollection of basic system utilities
vconfig		1.9	GPL	Linux 802.1q VLAN configuration utility
vim-minimal	Standalone apps/libraries	7.0.109	Charityware	Aminimalversion of VI sualeditor iMproved (VIM)
vixie-cron	Standalone apps/libraries	4.1	ISC	The Vixie cron daemon for executing scheduled commands
wget	Standalone apps/libraries	1.12	GPLv3	A utility for retrieving files using the HTTP or FTP protocols
xdelta		1.1.3	GPL	A binary file delta generator and an RCS replacement library
xdelta3	Standalone apps/libraries	3.0t	GPLv2	A binary file delta generator
xinetd	Standalone apps/libraries	2.3.14	Distributable	A secure replacement for inetd
zlib	Shared library linkage	1.2.3	BSD	The zlib compression and decompression library

PAN-OS 4.0 Open Source Software (OSS) Listing

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
MAKEDEV	Standalone apps/libraries	3.23	GPLv2	A program used for creating the device files in /dev
SysVinit	Standalone apps/libraries	2.86	GPLv2	Programs which control basic system processes
appweb		2.4.2		Mbedthis AppWeb Embeddable HTTP Web Server
basesystem		8	Public Domain	The skeleton package which defines a simple Red Hat Linux system
bash	Standalone apps/libraries	3.1	GPLv2	The GNU Bourne Again shell (bash) version 3.1
beecrypt	OSS Shared library linkage	4.1.2	LGPLv2.1	An open source cryptography library
bonnie++	Standalone apps/libraries	1.03d	GPLv2	A program for benchmarking hard drives and file systems
bzip2	Standalone apps/libraries	1.0.3	BSD	A file compression utility
bzip2-libs	OSS Shared library linkage	1.0.3	BSD	Libraries for applications using bzip2
chkconfig	Standalone apps/libraries	1.3.30.1	GPLv2	A system tool for maintaining the /etc/rc*.d hierarchy
coreutils	Standalone apps/libraries	5.97	GPLv2	The GNU core utilities: a set of tools commonly used in shell scripts
cpio	Standalone apps/libraries	2.6	GPLv2	A GNU archiving program
срр	Standalone apps/libraries	4.1.1	GPLv2	The C Preprocessor
cracklib	OSS Shared library linkage	2.8.9	Artistic	A password-checking library
cracklib-dicts	Dictionaries used by cracklib	2.8.9	Artistic	The standard CrackLib password- checking dictionaries
crontabs	Root crontab files, used by system utilities	1.1	Public Domain	Root crontab files used to schedule the execution of programs
curl	Standalone apps/libraries	7.20.1	MIT	Get and send files to a FTP, HTTP, TFTP, SSH or other servers
dhclient	Standalone apps/libraries	3.0.5	Distributable	Development headers and libraries for interfacing to the DHCP server
diffutils	Standalone apps/libraries	2.8.1	GPLv2	A GNU collection of diff utilities
e2fsprogs	Standalone apps/libraries	1.39	GPLv2	Utilities for managing the second extended (ext2) file system

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
e2fsprogs-libs	OSS Shared library linkage	1.39	GPLv2	Ext2/3 file-system-specific static libraries and headers
elfutils-libelf	OSS Shared library linkage	0.128	GPLv2	Library to read and write ELF files
ethtool	Standalone apps/libraries	5	GPLv2	Ethernet settings tool for PCI ethernet cards
expat	OSS Shared library linkage	1.95.8	BSD	A library for parsing XML
file	Standalone apps/libraries	4.17	Distributable	A utility for determining file types
filesystem	Standalone apps/libraries	2.4.0	Distributable	The basic directory layout for a Linux system
findutils	Standalone apps/libraries	4.2.27	GPLv2	The GNU versions of find utilities (find and xargs)
fipscheck	Standalone apps/libraries	1.2.0	FreeBSD	Alibraryforintegrityverification of FIPS validated modules
fipscheck-lib	Standalone apps/libraries	1.2.0	FreeBSD	Library files for fipscheck
flashrom	Standalone apps/libraries	0.9.4	GPLv2	Flashrom flash utility
gawk	Standalone apps/libraries	3.1.5	GPLv2	The GNU version of the awk text processing utility
gdb	Standalone apps/libraries	6.8	GPLv3+	A GNU source-level debugger for C, C++, Java and other languages
glib2	OSS Shared library linkage	2.12.3	LGPLv2	A library of useful utility functions
glibc	Shared library linkage	2.5	LGPLv2	The GNU libc libraries
glibc-common	Shared library linkage	2.5	LGPLv2	Common binaries and locale data for glibc
gmp	OSS Shared library linkage	4.3.1	LGPLv3	A GNU arbitrary precision library
gnupg	Standalone apps/libraries	1.4.5	GPLv2	A GNU utility for secure communication and data storage
grep	Standalone apps/libraries	2.5.1	GPLv2	The GNU versions of grep pattern matching utilities
grub	Standalone apps/libraries	6.0.97	GPL	GRUB - the Grand Unified Boot Loader
gzip	Standalone apps/libraries	1.3.5	GPLv2	The GNU data compression program
inetutils	Standalone apps/libraries	1.5	GPLv3	Internet utilities
info	Standalone apps/libraries	4.8	GPLv2	A stand-alone TTY-based reader for GNU Texinfo documentation
initscripts	Standalone apps/libraries + startup and shutdown scripts	8.45.15	GPLv2	The inittab file and the /etc/init.d scripts

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
iproute	Standalone apps/libraries	2.6.18	GPLv2	Advanced IP routing and network device configuration tools
iptables	Standalone apps/libraries	1.3.5	GPLv2	Tools for managing Linux kernel packet filtering capabilities
iptables-ipv6	Standalone apps/libraries	1.3.5	GPLv2	IPv6 support for IP tables
iputils	Standalone apps/libraries	20020927	GPLv2	Network monitoring tools including ping
krb5-libs	Shared library linkage	1.8.1	MIT	The shared libraries used by Kerberos 5
less	Standalone apps/libraries	394	GPLv2	A text file browser similar to more, but better
libacl	OSS Shared library linkage	2.2.39	LGPLv2.1	Dynamic library for access control list support
libattr	OSS Shared library linkage	2.4.32	LGPLv2.1	Dynamic library for extended attribute support
libcurl4	Shared library linkage	7.20.1	MIT	The cURL library
libevent	OSS Shared library linkage	1.1a	GPLv2	Abstract asynchronous event notification library
libgcc	Shared library linkage	4.3.3	LGPLv2	GCC version 4.1 shared support library
libgssapi	OSS Shared library linkage	0.1	BSD-like	Generic Security Services Application Programming Interface Library
libjpeg	OSS Shared library linkage	6b	IJĞ	A library for manipulating JPEG image format files
libpcap	Shared library linkage	0.9.4	BSD	A system-independent interface for user-level packet capture
libstdc++	Shared library linkage	4.3.3	GPL	GNU Standard C++ Library
libsysfs	OSS Shared library linkage	2.0.0	LGPLv2	Shared library for interfacing with the Linux sysfs virtual file system
libtecla	Shared library linkage	1.6.1	MIT/X11	The Tecla command-line editing library
libtermcap	Configuration Files	2.0.8	Public Domain	A basic system library for accessing the termcap database
libuser	OSS Shared library linkage	0.54.7	LGPLv2	A user and group account administration library
libvolume_id	OSS Shared library linkage	127	GPLv2	Dynamic libraries to get volume IDs
libxml2	Shared library linkage	2.6.30	MIT	Library providing XML and HTML support

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
libxml2-python	Standalone apps/libraries	2.6.30	PSF	Python bindings for the libxml2 library
libxslt	Shared library linkage	1.1.22	MIT	Library providing the GNOME XSLT engine
lockdev	Standalone apps/libraries	1.0.1	LGPLv2.1	A library for locking devices
logrotate	Standalone apps/libraries	3.7.4	GPLv2	Rotates, compresses, removes and mails system log files
m2crypto	Standalone apps/libraries	0.16	BSD	Support for using OpenSSL in python scripts
mailx	Standalone apps/libraries	8.1.1	BSD	The /bin/mail program for sending quick email messages
mdadm		2.6.9	GPL	Linux utility used to manage and monitor software RAID devices
mingetty	Standalone apps/libraries	1.07	GPLv2	A compact getty program for virtual consoles only
minicom	Standalone apps/libraries	2.1	GPLv2	A text-based modem control and terminal emulation program
mktemp	Standalone apps/libraries	1.5	BSD	A small utility for safely making .TMP files
module-init-tool	Standalone apps/libraries	3.3	GPLv2	Kernel module management utilities
mtdutils		1.0.0	GPL	Memory Technology Device Utilities
ncurses	Shared library linkage	5.5	Distributable	A terminal handling library
net-snmp	Standalone apps/libraries	5.4.4	BSD	Tools and servers for the SNMP protocol
net-tools	Standalone apps/libraries	1.6	GPLv2	Basic networking tools
nfs-utils	Standalone apps/libraries	1.0.9	GPLv2	Network File System (NFS) utilities and supporting clients and daemons for the kernel NFS server
nfs-utils-lib	OSS Shared library linkage	1.0.8	GPLv2	Network File System (NFS) Support Library
ntp	Standalone apps/libraries	4.2.2p1	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
ntp-dp	Standalone apps/libraries	4.2.2p1	Distributable	Synchronizes system time using the Network Time Protocol (NTP)
openIdap	Shared library linkage	2.4.12	OpenLDAP	Theconfiguration files, libraries, and documentation for OpenLDAP
openssh	Standalone apps/libraries	5.2p1	BSD	Anopensourceimplementation of SSH protocol versions 1 and 2

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
openssh-clients	Standalone apps/libraries	5.2p1	BSD	An open source SSH client application
openssh-server	Standalone apps/libraries	5.2p1	BSD	An open source SSH server daemon
openssl	Shared library linkage	0.9.8p	OpenSSL	A general purpose cryptography library with TLS implementation
pam	Shared library linkage	1.0.2	BSD	A security tool which provides authentication for applications
pam_krb5	Standalone apps/libraries	2.2.14	MIT	A pluggable authentication module (PAM) for Kerberos 5
pam_ldap	OSS Shared library linkage	1.8.4	LGPLv3	A pluggable authentication module (PAM) for use with LDAP servers
panos-release	Base Linux OS version info for our systems	2	GPLv2	PAN-OS Linux release file
passwd	Standalone apps/libraries	0.73	GPLv2	The passwd utility for setting/changing passwords using PAM
pcre	Shared library linkage	6.6	BSD	Perl-compatible regular expression library
pexpect	OSS libraries in interpreted scripts	2.3	MIT	Pexpect is a Pure Python Expect-like module
php-cli	Standalone apps/libraries	5.3.2	PHP v3.01	Command-line interface for PHP server- side scripting language
popt	OSS Shared library linkage	1.12	MIT	A C library for parsing command line parameters
portmap	Standalone apps/libraries	4	BSD	A program which manages remote procedure call (RPC) connections
procps	Standalone apps/libraries	3.2.7	GPLv2	System and process monitoring utilities
psmisc	Standalone apps/libraries	22.2	BSD	Utilities for managing processes on your system
python	Standalone apps/libraries	2.4.3	PSF	An interpreted, interactive, object- oriented programming language
python-bloom	OSS libraries in interpreted scripts	0.1.12	BSD-like	Pythonimplementationofbloom filter
python- elementtree	OSS libraries in interpreted scripts	1.2.6	PSF	Fast XML parser and writer
python-imaging	OSS libraries in interpreted scripts	1.1.5	Distributable	Python's own image processing library
python-sqlite	Shared library linkage	1.1.7	Public Domain	Python bindings for SQLite

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
python-urlgrabb er	OSS libraries in interpreted scripts	3.1.0	LGPLv2.1	A high-level cross-protocol URL-grabber
rcs	Standalone apps/libraries	5.7	GPLv2	Revision control system (RCS) file version management tools
readline	OSS Shared library linkage	5.1	GPLv2	A library for editing typed command lines
redhat-logos		4.9.8		Red Hat-related icons and pictures
reportlab	OSS libraries in interpreted scripts	2.2	BSD	Python PDF generation library
rootfiles	Standalone apps/libraries	8.1	Distributable	The basic required files for the root user's directory
rpm	Standalone apps/libraries	4.4.2	GPLv2	The Route Processing Module (RPM) packagemanagementsystem
rpm-libs	Standalone apps/libraries	4.4.2	GPLv2	Libraries for manipulating Route Processing Module (RPM) packages
rpm-python	OSS libraries in interpreted scripts	4.4.2	GPLv2	Python bindings for apps which will manipulate Route Processing Module (RPM) packages
scrub	Standalone apps/libraries	2.1	GPLv2	Disk scrubbing program
sed	Standalone apps/libraries	4.1.5	GPLv2	A GNU stream text editor
setup		2.5.58	Public Domain	A set of system configuration and setup files
shadow-utils	Standalone apps/libraries	4.0.17	BSD	Utilities for managing accounts and shadow password files
smartmontools	Standalone apps/libraries	5.39	GPLv2	S.M.A.R.T. utility toolkit
sqlite	Shared library linkage	3.6.12	Public Domain	Library that implements an embeddable SQLite in-process database engine
sysfsutils	Standalone apps/libraries	2.0.0	GPLv2	Shared library for interfacing with the Linux sysfs virtual file system
sysklogd	Standalone apps/libraries	1.4.1	GPLv2	System logging and kernel message trapping daemons
tar	Standalone apps/libraries	1.15.1	GPLv2	A GNU file archiving program
tcpdump	Standalone apps/libraries	3.9.4	BSD	A network traffic monitoring tool
termcap	Configuration Files	5.5	Public Domain	The terminal feature database used by certain applications
tftp	Standalone apps/libraries	0.48	BSD	The client for Trivial FTP (TFTP)
tftp-server	Standalone apps/libraries	0.48	BSD	The server for Trivial FTP (TFTP)

NAME	HOW INTEGRATED	VERSION	LICENSE TYPE	USAGE
traceroute	Standalone apps/libraries	2.0.1	GPLv2	Traces the route taken by packets over an IPv4/IPv6 network
tzdata	Configuration files	2009u	Public domain	Time-zone data
udev	Standalone apps/libraries	127	GPLv2	Device manager for devicenodes and user space events (improved functionality over devfs)
util-linux	Standalone apps/libraries	2.13	GPLv2	Acollection of basic system utilities
vconfig		1.9	GPL	Linux 802.1q VLAN configuration utility
vim-minimal	Standalone apps/libraries	7.0.109	Charityware	Aminimalversion of VI sualeditor iMproved (VIM)
vixie-cron	Standalone apps/libraries	4.1	ISC	The Vixie cron daemon for executing scheduled commands
wget	Standalone apps/libraries	1.12	GPLv3	A utility for retrieving files using the HTTP or FTP protocols
xdelta		1.1.3	GPL	A binary file delta generator and an RCS replacement library
xdelta3	Standalone apps/libraries	3.0t	GPLv2	A binary file delta generator
xinetd	Standalone apps/libraries	2.3.14	Distributable	A secure replacement for inetd
zlib	Shared library linkage	1.2.3	BSD	The zlib compression and decompression library