9   Select **Client Analytics** to display analytic level data for connected wireless clients. This data is the same client analytic data available at the system level of the user interface, only displayed for the selected RF Domain as opposed to the entire system. For more information on client analytics, see *System Analytics on page 16-1*.

> ✓ **NOTE:** When trending client analytics, be sure to select the **Search** button adjacent to the **Search for Wireless Client** parameter to ensure the tables are populated with detected wireless clients. Client analytics are trended every 75 minutes.
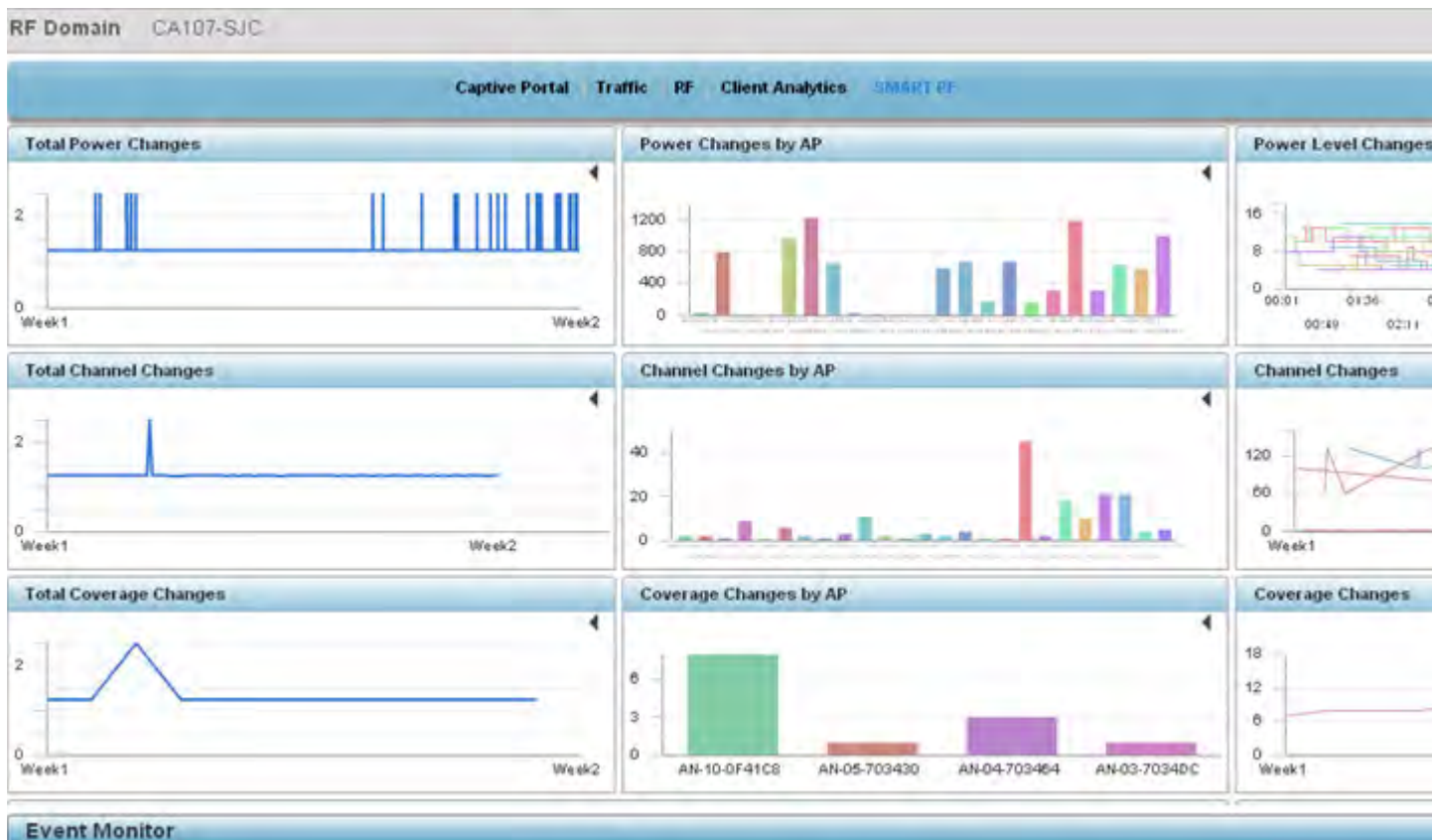
10   Select **Smart RF**.

Figure 16-9 *RF Domain Analytics - Smart RF screen*

11   Refer to the following RF Domain power level, channel and coverage adjustment **Smart RF** analytics:

Total Power Changes	Lists the total trended number of power compensations required by RF Domain member radios to account for the power load requirements of offline or poor performing radios.
Total Channel Changes	Lists the total trended number of channel compensations required by RF Domain member radios to account for the channel support requirements offline or poor performing radios.
Total Coverage Changes	Displays the total trended number of coverage compensations required by RF Domain member radios to account for the load requirements of offline or poor performing radios.
Power Changes by AP	Lists the total trended number of power compensations made by individual RF domain member Access Points to account for the power load requirements of offline or poor performing radios.

Channel Changes by AP	Lists the total trended number of channel compensations made by individual RF domain member Access Points to account for the channel support requirements of offline or poor performing radios.
Coverage changes by AP	Displays the total trended number of coverage compensations made by individual RF domain member Access Points to account for the load requirements of offline or poor performing radios.
Power Level Changes	Lists all the power level changes made by RF Domain member radios separately within the same to graph help administrators assess periods of power compensations by numerous devices within the same RF Domain.
Channel Changes	Provides a timeline (using the selected trending period) when channel changes occur amongst RF Domain member connected clients. Use this data to assess whether multiple device channel changes occur at the same time and whether the channel ch nag es are to the same channel. RF Domain channel analytics are trended every 90 minutes.
Coverage Changes	Provides a timeline (using the selected trending period) when coverage changes occur amongst RF Domain member connected clients. Use this data to assess whether multiple device coverage changes occur at the same time.
Channel Distribution	Displays a chart for both the 2.4 and 5 GHz radio bands showing the channels currently being utilized by RF Domain member devices. This is helpful to assess whether devices are utilizing channels properly spaced to avoid interference. RF Domain channel analytics are trended every 90 minutes.
Coverage Changes by Client	Lists the factory encoded MAC addresses of connected clients that have made Smart RF initiated coverage changes with RF Domain member devices.

16.3 Wireless Controller Analytics

Refined analytics are available at the individual controller or service platform level of the user interface for trending data for specific controllers or service platforms undergoing configuration updates. Wireless controller analytics are trended every 75 minutes. For information on monitoring analytic events, refer to *Analytic Event Monitoring*.

A facility is also available for the comparison of configuration files to assess the specific updates made to configurations.

To review analytics for individual controllers or service platforms:

1   Select **Statistics** from the Web UI.

2   Select the **Analytics** menu item directly to the right of the System menu item within Statistics.

3   Expand the System hierarchy on the left-hand side of the user interface, expand a RF Domain and select a wireless controller.
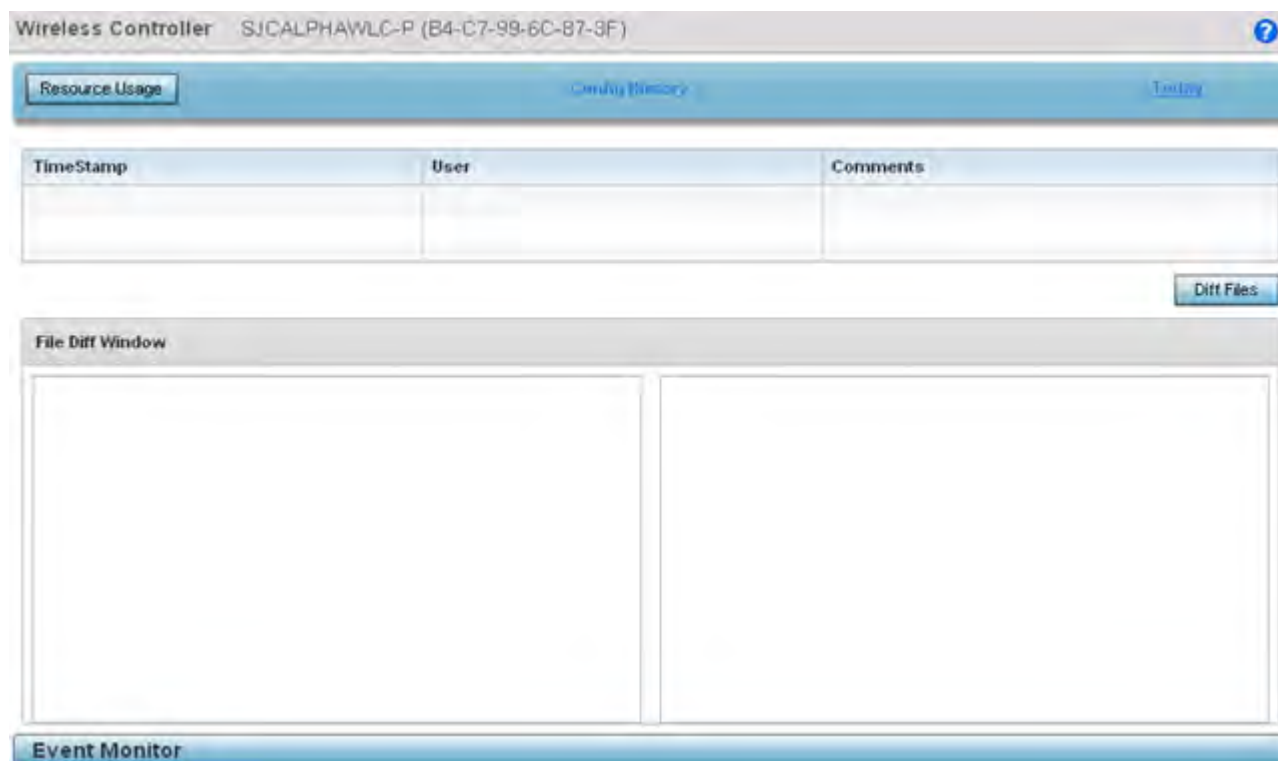
Figure 16-10 *Wireless Controller Analytics screen*

4 Optionally select the **Resource Usage** button to display a subscreen trending the service platform's **RAM Usage** (in MB) and **Disk Usage** (in GB). Periodically revisit the service platform's resource usage to assess whether resources are jeopardized at certain times of the day or repeatable patterns are observable that can assist in administration.

5 Refer to the following analytic data trended for the selected controller or service platform:

Timestamp	Displays a timestamp when an update was made to the selected controller or service platform's configuration.
User	Lists the user name initiating the controller update.
Comments	Lists any comments made relative to a configuration update.

6 Select the **Diff Files** button to display the updates made to the selected controller or service platform's configuration versus the previous configuration utilized.

16.4 Access Point Analytics

Refined analytics are available at the individual Access Point level of the user interface for trending data for specific Access Points. For information on monitoring analytic events, refer to *Analytic Event Monitoring*.

To review analytics for individual Access Points:

1 Select **Statistics** from the Web UI.

2 Select the **Analytics** menu item directly to the right of the System menu item within Statistics.

3 Expand the System hierarchy on the left-hand side of the user interface, expand a RF Domain and select an member Access Point.

The Access Point analytics screen displays with **Traffic** tab displayed by default.

4 Use the **Radio** drop-down menu to refine whether traffic statistics are reported an Access Point's 2.4 or 5 GHz radio.

Refer to the arrow icon located in the top, right-hand, side of each panel to define whether the display is in Chart format, a Table or whether you would like the output for that parameter saved as a PDF report at a user specified location.
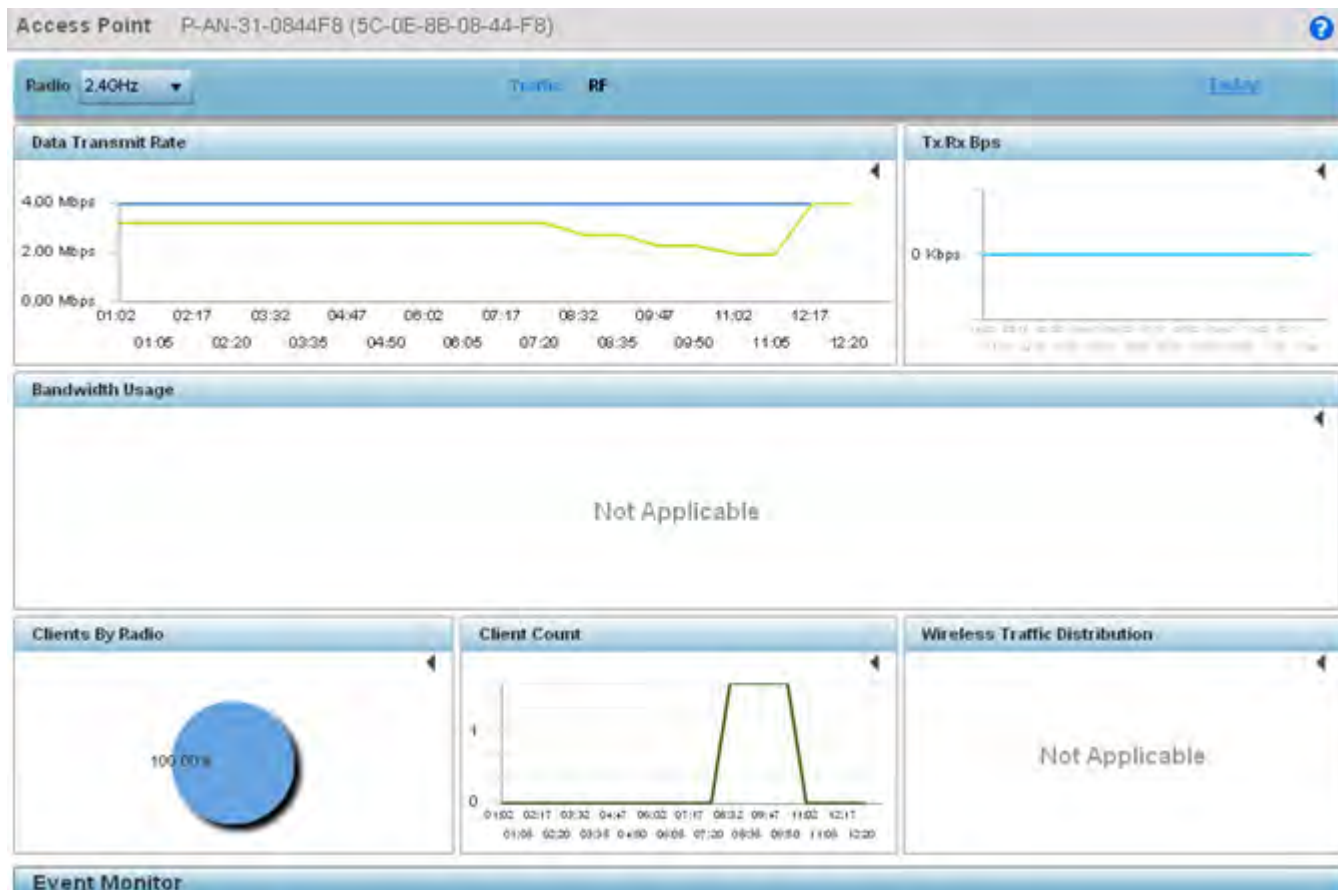

Figure 16-11 *Access Point Analytics - Traffic screen*

5 Refer to the upper, right-hand, portion of the analytics interface and define the trending period for the data displayed. Options include *Last 1 Day*, *Last 3 Days*, *Last 1 Week*, *Last 2 Weeks*, *Last 3 Weeks, Last 1 Month*, *Last 2 Months* or *Last 3 Months*. Today is the default setting for trending analytics data.

6 Refer to the following **Traffic** analytic data trended for the selected Access Point:

Data Transmit Rate	Lists the selected Access Point's throughput (in Mbps) as an indicator of RF traffic activity on the selected 2.4 or 5 GHz radio.
Tx/Rx BPs	Displays *transmit* and *receive* data (in Bps) for the selected Access Point radio over the defined trending period.
Bandwidth Usage	Lists Access Point radio bandwidth utilization (in Kbps) to help an administrator assess periods os sustainable versus unsustainable activity for the selected 2.4 or 5 GHz Access Point radio.

Clients by Radio	Displays a pie chart depicting the ratio of clients operating on different 802.11 bands (11BGN, 11AN etc.). This client data is trended every 75 minutes.
Client Count	Lists the selected Access Point's connected client count. Use this trending data to assess periods of high versus low client connection activity, and whether this particular Access Point is properly load balanced.
Wireless Traffic Distribution	Displays a chart depicting the ratio of unicast versus management frames transmitted by the selected Access Point.

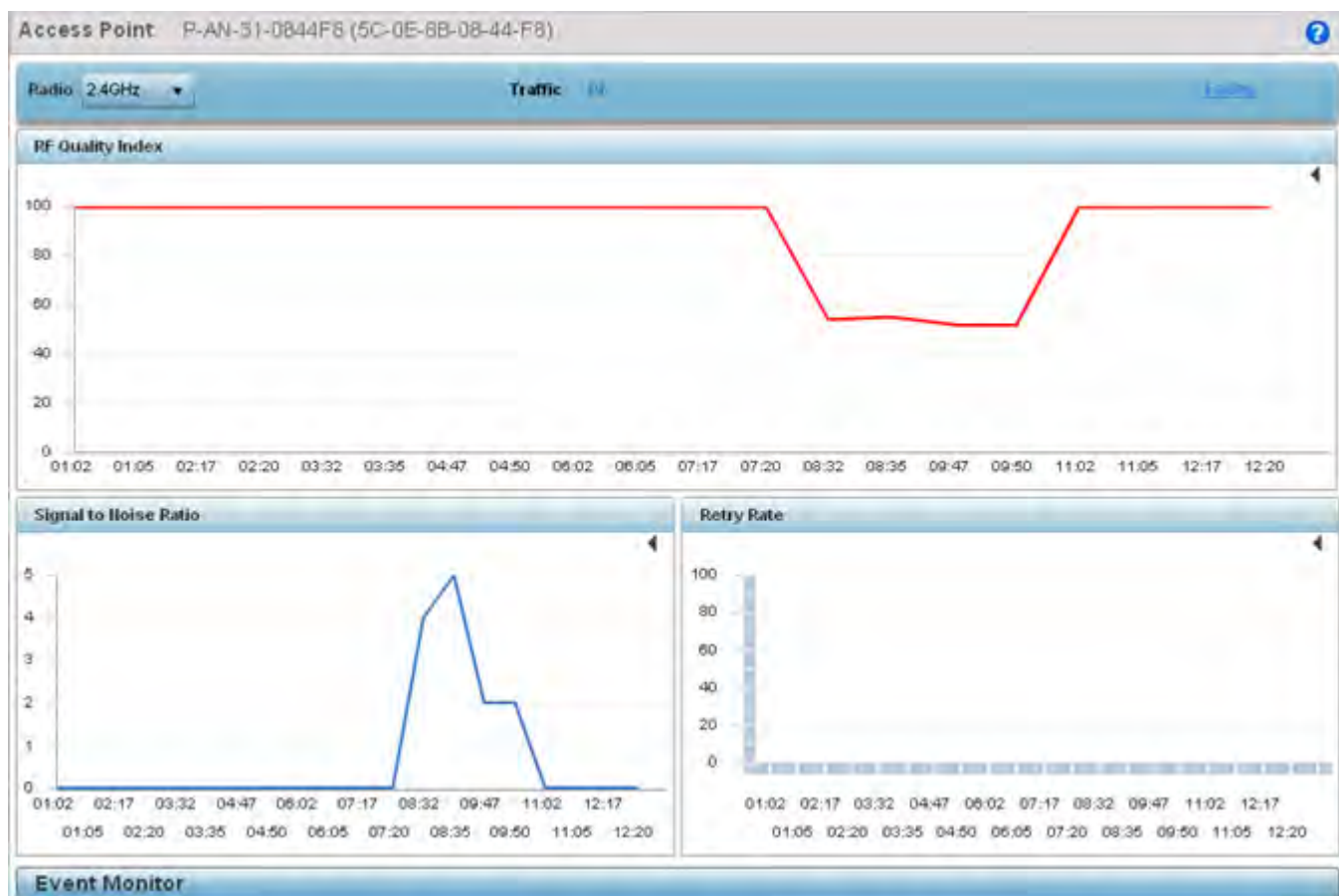7   Select **RF** to display Access Point RF quality analytics.

Figure 16-12 *Access Point Analytics - RF screen*

8   Refer to the following **RF** analytics trended for a selected Access Point:

RF Quality Index	Displays the trended graph of the effectiveness of a selected Access Point's RF environment as a percentage of the connect rate in both directions. The RF quality index value can be interpreted as: 0 – 20 *(Very low utilization)*
	20 – 40 *(Low utilization)*
	40 – 60 *(Moderate utilization)*
	60 and above *(High utilization)*.
Signal to Noise Ratio	Displays a selected Access Point's connected client *signal to noise ratio* (SNR) and a time stamp of its reporting. A high SNR could warrant power compensation to account for poorly performing Access Point radios.

Retry Rate	Lists the number of retry attempts for requesting client connections to the selected Access Point's radios.

16.5 Analytic Event Monitoring

Display the **Event Monitor** on the bottom portion of the analytic display, at any time or place in the user interface hierarchy, to review individual analytic events by their severity, originating device, reporting module and timestamp (occurrence).

Figure 16-13 *Analytic Event Monitor*

Review the following within the Event Monitor to assess if an individual event requires further administration to improve network performance:

Severity	Lists the severity for each analytic event. Severity levels include *Emergency*, *Alert, Critical*, *Errors, Warning, Notice, Info* and *Debug*.
Message	Displays an event description to assist the administrator in assessing the significance of the event and (in conjunction with the severity) whether corrective action is immediately needed.
From	Displays the hardware encoded MAC address of the device impacted by the listed event.
Module	Lists the module from which analytic events are tracked and reported.
Mnemonic	Lists the service platform or controller mnemonic that translates the listed event into a string that's meaningful to the network administrator.
Time	Displays the date and time when each listed event was detected within the network.

17 WiNG Events

WiNG outputs an event message for configuration changes and status updates to enable an administrator to assess the success or failure of specific configuration activities. Use the information in this chapter to review system generated event messages and their descriptions.

Each listed event can have customized notification settings defined and saved as part of an event policy. Thus, policies can be configured and administrated in respect to specific sets of client association, authentication/encryption and performance events. Once policies are defined, they can be mapped to device profiles strategically as the likelihood of an event applies to particular devices. By default, there's no enabled event policy and one needs to be created and implemented.

For more information on the UI's descriptions of events, refer to *Fault Management on page 13-1*.

17.1 Event Messages

To review event history messages:

1 Select **Configuration** > **Diagnostics** > **Fault Management** > **Event History** to display the Event History screen.

2 Select **Fetch Historical Events** to display the diagnostic events in the Event History table.

3 Refer to the following (read only) information to assess logged diagnostic events.

ADOPT-SERVICESNMP_SUCCESS6	SNMP framework success
ADOPT-SERVICESNMP_FAILURE6	SNMP framework failure
ADOPT-SERVICETUT_TEMPERATURE_ALARM_RAISED ([str])	Temperature alarm raised on sensor
ADOPT-SERVICETUT_TEMPERATURE_ALARM_CLEARED([str])	Temperature alarm cleared on sensor
ADOPT-SERVICETUT_TEMPERATURE_ALARM_CLEARED([str])	Temperature alarm cleared on sensor
ADOPT-SERVICETUT_FAN_ALARM_CLEARED5IPX ([str])	Fan alarm cleared on ID
ADOPT-SERVICETUT_PWRCTRL_ALARM_RAISED5IPX ([str])	Power controller alarm raised
ADOPT-SERVICETUT_PWRCTRL_ALARM_CLEARED5IPX ([str])	Power controller alarm cleared
ADOPT-SERVICETUT_LINE_POWER_ALARM_RAISED5IPX ([str]) Line power alarm raised on id [str]	Line power alarm raised
ADOPT-SERVICETUT_LINE_POWER_ALARM_CLEARED5IPX ([str]) Line power alarm cleared on id [str]	Line power alarm cleared
ADOPT-SERVICETUT_WLAN_CLIENT_ASSOC6IPX ([str]) Client [str] on interface index [str] associated	Client associated

ADOPT-SERVICETUT_WLAN_CLIENT_DISASSOC6IPX ([str]) Client [str] on interface index [str] disassociated with status code [str], [str]	Client disassociated
ADOPT-SERVICETUT_WLAN_CLIENT_ASSOC_FAILURE3IPX ([str]) Association failed for Client [str] on interface index [str] with status code [str], [str]	Association failed for client on specified interface index
ADOPT-SERVICETUT_WLAN_CLIENT_AUTH6IPX ([str])	Client on interface index authenticated
ADOPT-SERVICETUT_WLAN_CLIENT_DEAUTH6 IPX ([str])	Client on interface index deauthenticated with status code
ADOPT-SERVICETUT_WLAN_CLIENT_AUTH_FAILURE3IPX ([str])	Authentication failed for client on interface index with status code
ADOPT-SERVICETUT_RADIO_ADAPTIVE_POWER_CHANGE5 IPX ([str])	Interface with operational status and power levels
ADOPT-SERVICETUT_RF_MONITOR_MODE_CHANGE5 IPX ([str])	RF monitor status changed to on interface
ADOPT-SERVICEIPX_EVENT_FAILURE3IPX ([str])	Failed to raise WiNG event
AP NO_IMAGE_FILE [str] firmware image is not present on controller	Access Point firmware not on controller
AP IMAGE_PARSE_FAILURE Format of [str] firmware image on controller is invalid	Invalid Access Point firmware file
AP LEGACY_AUTO_UPDATE Legacy Access Point [str] [mac] being updated	Legacy Access Point updated
AP AP_ADOPTED [str] [mac] adopted	Access Point adopted
AP AP_UNADOPTED [str] [mac] un-adopted	Access Point unadopted
AP AP_RESET_DETECTED 6 [str] [mac] reset itself	Access Point reset detected
AP AP_RESET_REQUEST 6 [str] [mac] reset request	Access Point user requested reset
AP AP_TIMEOUT 6 str] [mac] timed out, reset sent to AP	Access Point timed out
AP ADOPTED Access Point([qstr]/[qstr]/[dev]) at rf-domain:[qstr] adopted and configured. Radios: Count=[str], Bss: [str]	Access Point adopted and configured
AP UNADOPTED Access Point([qstr]/[qstr]/[dev]) at rf-domain:[qstr] unadopted. Radios: Count=[str], Bss: [str]	Access Point unadopted
APADOPTED_TO_CONTROLLER Joined successfully with controller [qstr]([str])	Access Point adopted to controller
APONLINE Access Point [dev] is now online. Offline Reason is [str]. Offline count is [int]	Access Point online
APOFFLINE Access Point [dev] is now offline. Offline Reason is [str]. Offline count is [int]	Access Point offline

APOFFLINE Device [dev]([str]) is offline, last seen:[int] minutes ago on switchport [str]	Adopted device offline
APRESET Reset Access Point mac [dev], [str]	Access Point reset
APADOPTION_REDIRECTED Access Point([qstr]/[qstr]/[dev]) cdp:[qstr] lldp:[qstr] redirected to the controller host/pair [qstr] - [qstr]	Access Point redirected
APAP_AUTOUP_TIMEOUT4 AUTOUPGRADE: [str] mac [str] Autoupgrade timed out	Time out while auto upgrading an AP
APAP_AUTOUP_REBOOT5 AUTOUPGRADE: [str] mac [str] Autoupgrade rebooting	Rebooting AP after upgrade
APAP_AUTOUP_NO_NEED6 AUTOUPGRADE: [str] mac [str] ver [str] Autoupgrade not required or not available	Auto upgrade not initiated
APAP_AUTOUP_NEEDED6 AUTOUPGRADE: [str] mac [str] ver [str] Autoupgrade will be applied	Auto upgrade is initiated on AP
APAP_AUTOUP_DONE5 AUTOUPGRADE: [str] mac [str] Autoupgrade complete	Auto upgrade successful
APAP_AUTOUP_FAIL4 AUTOUPGRADE: [str] mac [str] Autoupgrade failed	Failed auto upgrade attempt
APAP_AUTOUP_VER6 AUTOUPGRADE: version [str] available for [str] equipment	Available Access Point firmware versions for auto upgrade
AAA RADIUS_DISCON_MSG Received Radius dynamic authorization Disconnect Message for [qstr] from server [qstr]	Received RADIUS disconnect request
AAA RADIUS_VLAN_UPDATE6 Assigning Radius server specified vlan [uint] to client [qstr] on wlan [qstr]	Client VLAN updated by RADIUS
AAA RADIUS_SESSION_NOT_STARTED5 Radius server indicates session time has not started for client [qstr]	Start time from RADIUS resource not yet valid
AAA RADIUS_SESSION_EXPIRED5 Radius server indicates session has already expired for client [qstr]	Session time from RADIUS resource already expired
ADV-WIPS ADV-WIPS-EVENT-14 Detected DoS Deauthentication attack against [mac] [str]	DoS Deauthentication attack
ADV-WIPSADV-WIPS-EVENT-24 Detected DoS Disassociation attack against [mac] [str]	DoS disassociation attack
ADV-WIPSADV-WIPS-EVENT-34 Detected DoS EAP failure spoof attack by [mac] [str]	EAP failure spoof attack
ADV-WIPSADV-WIPS-EVENT-104 Detected ID-Theft out of sequence attack for [mac] [str]	ID theft out of sequence attack
ADV-WIPSADV-WIPS-EVENT-114 Detected possible ID-Theft EAPoL Success spoof attack by [mac] [str]	Possible ID theft EAPoL success spoof attack
ADV-WIPSADV-WIPS-EVENT-124 Detected possible WLAN-Jack attack by [mac] [str]	Possible WLAN jack attack
ADV-WIPSADV-WIPS-EVENT-134 Detected possible ESSID-Jack attack against [mac] [str]	Possible ESSID jack attack

ADV-WIPSADV-WIPS-EVENT-144 Detected possible Monkey-Jack attack by [mac] [str]	Possible monkey jack attack
ADV-WIPSADV-WIPS-EVENT-164 Detected possible NULL Probe Response attack by [mac] [str]	Possible NULL probe response attack
ADV-WIPSADV-WIPS-EVENT-1054 Sanctioned MU [mac] detected associated with unsanctioned/neighboring AP [str]	Sanctioned MU detected associated with unsanctioned/neighboring AP
ADV-WIPSADV-WIPS-EVENT-1094 Multicast all systems traffic found from [mac] [str]	Multicast all systems traffic
ADV-WIPSADV-WIPS-EVENT-11044 Multicast all routers traffic found from [mac] [str]	Multicast all routers traffic
ADV-WIPSADV-WIPS-EVENT-1114 Multicast OSPF all traffic found from [mac] [str]	Multicast OSPF all traffic
ADV-WIPSADV-WIPS-EVENT-1124 Multicast OSPF Deisgnated Routers traffic found from [mac] [str]	Multicast OSPF designated routers traffic
ADV-WIPSADV-WIPS-EVENT-1134 Multicast RIP-2 Routers traffic found from [mac] [str]	Multicast RIP 2 routers traffic
ADV-WIPSADV-WIPS-EVENT-1144 Multicast IGRP Routers traffic found from [mac] [str]	Multicast IGRP routers traffic
ADV-WIPSADV-WIPS-EVENT-1154 Multicast DHCP Server Relay Agent traffic found from [mac] [str]	Multicast DHCP server relay agent traffic
ADV-WIPSADV-WIPS-EVENT-1164 Multicast VRRP Agent traffic found from [mac] [str]	Multicast VRRP agent traffic
ADV-WIPSADV-WIPS-EVENT-1174 Multicast HSRP Agent traffic found from [mac] [str]	Multicast HSRP agent traffic
ADV-WIPSADV-WIPS-EVENT-1184 Multicast IGMP traffic found from [mac] [str]	Multicast IGMP traffic
ADV-WIPSADV-WIPS-EVENT-1194 Detected NETBIOS traffic from [mac] [str]	Detected NETBIOS traffic
ADV-WIPSADV-WIPS-EVENT-1204 Detected STP traffic from [mac] [str]	Detected STP traffic
ADV-WIPSADV-WIPS-EVENT-1134 Multicast RIP-2 Routers traffic found from [mac] [str]	Multicast RIP 2 routers traffic
ADV-WIPSADV-WIPS-EVENT-1214 Detected IPX traffic from [mac] [str]	Detected IPX traffic
ADV-WIPSADV-WIPS-EVENT-1424 Detected possible Probe Response attack by [mac] [str]	Possible probe response attack
ADV-WIPSADV-WIPS-EVENT-2214 Detected Invalid Management Frames from [mac] [str]	Invalid management frames
ADV-WIPSADV-WIPS-EVENT-264 Detected DoS RTS flood attack against [mac] [str]	DoS RTS flood attack
ADV-WIPSADV-WIPS-EVENT-2224 Detected Invalid Channel Advertisement for [mac] [str]	Invalid channel advertisement
ADV-WIPSADV-WIPS-EVENT-634 Detected Windows ZERO Configuration Memory Leak on [mac] [str]	Windows ZERO configuration memory leak

ADV-WIPSADV-WIPS-EVENT-2204 Detected Unauthorized Bridge [mac] [str]	Unauthorized bridge
APSW_CONN_LOST0 Lost connectivity with controller after config update. Rebooting and reverting to older working configuration	Controller connectivity lost
AAARADIUS_DISCON_MSG5 Received Radius dynamic authorization Disconnect Message for [qstr] from server [qstr]	Received RADIUS disconnect request
AAA RADIUS_VLAN_UPDATE6 Assigning Radius server specified vlan [uint] to client [qstr] on wlan [qstr]	Client VLAN updated by RADIUS resource
AAA RADIUS_SESSION_NOT_STARTED5 Radius server indicates session time has not started for client [qstr]	Start time from RADIUS resource not yet valid
AAA RADIUS_SESSION_EXPIRED5 Radius server indicates session has already expired for client [qstr]	Session time from RADIUS resource already expired
CAPTIVE-PORTAL AUTH_SUCCESS6 Captive-portal authentication success for client [mu] ([qstr-ip]) user [qstr]	Authentication success
ADV-WIPSADV-WIPS-EVENT-264 Detected DoS RTS flood attack against [mac] [str]	DoS RTS flood attack
ADV-WIPSADV-WIPS-EVENT-2224 Detected Invalid Channel Advertisement for [mac] [str]	Invalid channel advertisement
ADV-WIPSADV-WIPS-EVENT-634 Detected Windows ZERO Configuration Memory Leak on [mac] [str]	Windows ZERO configuration memory leak
ADV-WIPSADV-WIPS-EVENT-2204 Detected Unauthorized Bridge [mac] [str]	Unauthorized bridge
APSW_CONN_LOST0 Lost connectivity with controller after config update. Rebooting and reverting to older working configuration	Controller connectivity lost
AAA RADIUS_DISCON_MSG5 Received Radius dynamic authorization Disconnect Message for [qstr] from server [qstr]	Received RADIUS resource disconnect request
AAA RADIUS_VLAN_UPDATE6 Assigning Radius server specified vlan [uint] to client [qstr] on wlan [qstr]	Client VLAN updated by RADIUS
AAA RADIUS_SESSION_NOT_STARTED5 Radius server indicates session time has not started for client [qstr]	Start time from RADIUS resource not yet valid
AAA RADIUS_SESSION_EXPIRED5 Radius server indicates session has already expired for client [qstr]	Session time from RADIUS resource already expired
CAPTIVE-PORTAL AUTH_SUCCESS6 Captive-portal authentication success for client [mu] ([qstr-ip]) user [qstr]	Authentication success
CAPTIVE-PORTAL AUTH_FAILED6 Captive-portal authentication failed for client [mu] ([qstr-ip])	Authentication failed
CAPTIVE-PORTAL SESSION_TIMEOUT6 Captive-portal session timed out for client [mu] ([qstr-ip])	Session timed out

CAPTIVE-PORTAL CLIENT_DISCONNECT6 Captive-portal session disconnected for client [mu] ([qstr-ip])	Client disconnected
CAPTIVE-PORTAL PURGE_CLIENT6 Captive-portal: Purge client [mu] by new client [mu] for user [qstr]	Client purged
CAPTIVE-PORTAL FLEX_LOG_ACCESS6 [qstr]: [qstr] allowed access for client [mu] ([qstr-ip])	Flex log access granted for client
CAPTIVE-PORTAL INACTIVITY_TIMEOUT6 Captive-portal session cleared for client [mu] ([qstr-ip]) after inactivity timeout	Client timed out due to inactivity
CAPTIVE-PORTAL ALLOW_ACCESS6 Captive-portal allow access for client [mu] ([qstr-ip])	Client allowed access
CAPTIVE-PORTAL CLIENT_REMOVED6 Captive-portal session removed for client [mu] ([qstr-ip]) on policy change/admin action	Client removed due to admin changes
CAPTIVE-PORTAL PAGE_CRE_FAILED3 Page creation failed for policy [qstr], file [qstr], Error [qstr]	Page creation failure
CAPTIVE-PORTAL DATA_LIMIT_EXCEED6 Data limit exceed, Usage:[int] KBytes, Action:[str], client [mu] ([ip])	Client data limit exceeded
CAPTIVE-PORTAL VLAN_SWITCH6 Client [mu] ([ip]) switching from vlan [int] to vlan [int]	Client VLAN switch
CAPTIVE-PORTAL SERVER_MONITOR_STATE_CHANGE6 Captive-portal policy [qstr]: service monitor [str] server status changing from [qstr] to [qstr]	Captive portal server monitor state changed
CAPTIVE-PORTAL NO_SERVICE_PAGE_SENT6 Captive-portal sent no service page to client [mu] ([ip]) as [str] server is down	No service page sent to client
CERTMGRRSA_KEY_ACTIONS_SUCCESS6 [str] of RSA key [str] successful	Successful completion of RSA key related actions (import, export etc.)
CERTMGRRSA_KEY_ACTIONS_FAILURE3 [str] of RSA key [str] failed: [str]	Failure of RSA key related actions (import, export etc.)
CERTMGRCA_CERT_ACTIONS_SUCCESS6 [str] of CA certificate for trustpoint [str] successful	Successful completion of CA certificate related actions (import, export etc.)
CERTMGRCA_CERT_ACTIONS_FAILURE3 [str] of CA certificate for trustpoint [str] failed: [str]	Failure of CA certificate actions (import, export etc.)
CERTMGRSRV_CERT_ACTIONS_SUCCESS6 [str] of Server Certificate of trustpoint [str] successful	Successful completion of server certificate actions (import, export etc.)
CERTMGRSVR_CERT_ACTIONS_FAILURE3 [str] of Server Certificate of trustpoint [str] failed: [str]	Failure of server certificate actions (import, export etc.)
CERTMGRCSR_EXPORT_SUCCESS6 Export of Certificate Signing Request for [str] successful	Successful export of certificate signing request
CERTMGRCSR_EXPORT_FAILURE3 Export of Certificate Signing Request for [str] failed: [str]	Failed to export certificate signing request
CERTMGRCRL_ACTIONS_SUCCESSS6 [str] of CRL for trustpoint [str] successful	Successful completion of certificate revocation list action

CERTMGRCRL_ACTIONS_FAILURE3 [str] of CRL for trustpoint [str] failed: [str]	Certificate revocation list action failure
CERTMGRDELETE_TRUSTPOINT_ACTION6 Deletion of trustpoint [str] successful	Deletion of trustpoint
CERTMGRIMPORT_TRUSTPOINT6 Import of Trustpoint [str] [str]	Import of trustpoint
CERTMGREXPORT_TRUSTPOINT6 Export of Trustpoint [str] [str]//	Export of trustpoint
CERTMGRCERT_EXPIRY4 [str] certificate for trustpoint [str] [str]	Certificate expiration
CERTMGRCA_KEY_ACTIONS_SUCCESS6 [str] of CA private key for trustpoint [str] successful	Successful completion of CA private key actions
CERTMGRCA_KEY_ACTIONS_FAILURE3 [str] of CA private key for trustpoint [str] failed: [str]	Failure of CA private key actions
CLUSTERCMASTER_CFG_UPDATE_FAIL3 Cluster master config update to [str] failed, Err: [str]	Cluster master config update failed
CLUSTERMAX_EXCEEDED4 Max cluster members ([uint]) exceeded, clustering will not function properly until corrected	Max cluster count exceeded
CLUSTERSTATE_CHANGE4 Active cluster member changed. Present active [str]. Previous active [str].	Active cluster membership change
CLUSTERSTATE_CHANGE_INACTIVE4 Member [str] (load[int]) changing state from Active to Standby. New member [str] standby load [int].	Cluster member change from active to standby
CLUSTERSTATE_CHANGE_ACTIVE4 Member [str] (load[int]) changing state from Standby to Active. New member [str] standby load [int]	Cluster member change from standby to active
CLUSTERSTATE_RETAIN_ACTIVE4 Member [str] (load[int]) retaining Active state. New member [str] standby load [int]	Cluster member retaining active state
CRM CRITICAL_RESOURCE_UP5 Critical Resource [str] is UP	Critical resource is up
CRM CRITICAL_RESOURCE_DOWN 5 Critical Resource [str] is DOWN	Critical resource is down
CERTMGR-LITE INVALIDCACERT5 CA Certificate imported for the trustpoint [str] is invalid	CA certificate is invalid
CERTMGR-LITE INVALIDSERVCERT5 Server Certificate imported for the trustpoint [str] is invalid	Server certificate is invalid
CERTMGR-LITE INVALIDCERTCRL5 Certificate Crl Imported for trustpoint [str] is invalid	CRL is invalid
CERTMGR-LITE CERTEXPIRED5 [str] Certificate of trustpoint [str] is expired//	Certificate is expired
CERTMGR-LITE INVALIDCERTKEY5 Private key imported for trustpoint [str] is not valid	Private key is invalid
CERTMGR-LITE INVALIDRSAKEY5 Rsakey imported is not valid [str] is invalid//	RSA key import operation

CERTMGR-LITE KEYDECRYPTFAILE4 Rsakey cannot be decrypted with the password provided	RSA key cannot be decrypted with provided password
CERTMGR-LITE CERTIMPORTED6 [str] Certificate imported for the trustpoint [str]	Certificate imported for trustpoint
CERTMGR-LITE CERTKEYIMPORTED6 Private key imported for the trustpoint [str]	Private key imported for trustpoint
CERTMGR-LITE RSAKEYIMPORTED6 Rsakey imported with the name [str]	RSA key imported
CERTMGR-LITE DELETETRUSTPOINT6Trustpoint [str] is deleted	Trustpoint deleted
CERTMGR-LITE DELETERSAKEY6 Rsakey [str] is deleted	RSA Key deleted
CERTMGR-LITE CERTREQUESTGEN6 Certificate request generated for the trustpoint [str]	Certificate requested generated
CERTMGR-LITE CERTSELFSIGNEDGEN6 Selfsigned certificate generated for the trustpoint [str]	Self signed certificate generated
CERTMGR-LITE RSAKEYGEN6 Rsa key [str] generated	RSA key generated
CERTMGR-LITE ERROR5 [str]	Certificate manager general error
CERTMGR-LITE CERT_EXPIRY4 [str] certificate for trustpoint [str] [str]	Certificate about to expire
CERTMGR CERT_RENEW_FAILED1 Certificate renew in field failed reason [str]	Certificate renew failure reason
DHCPSVRDHCPSVR_STOP6 DHCP server is stopped	DHCP server stopped
DIAGWD_RESET_SYS2 The system has been RESET by the Watchdog	Log watchdog reset
DIAGCPU_USAGE_TOO_HIGH4 CPU Usage too high. Limit of [int]*(0.1%) exceeded. Current CPU usage is [int]*(0.1%)	Log CPU load detected as too high
DIAGCPU_USAGE_TOO_HIGH_RECOVER4 CPU Usage too high recover. Limit is [int]*(0.1%)	Current CPU usage is too high
DIAGCPU_LOAD4 [str] minute average load limit exceeded, value is [str]% limit is [str]% (top processes: [str])	CPU average load limit exceeded
DIAGRAM_USAGE6 [str], pid [uint], has exceeded ram usage limit [uint].[uint]%, now using [uint].[uint]%	Log processor RAM usage has exceeded RAM limit
DIAGMEM_USAGE_TOO_HIGH6 Memory Usage too high. Current Usage is [int]*(0.1%). Memory Usage Threshold is [int]*(0.1%)	Memory usage too high
DIAGMEM_USAGE_TOO_HIGH_RECOVER6 Memory Usage too high recover. Current Usage is [int]*(0.1%). Memory Usage Threshold is [int]*(0.1%)	Memory usage detected as too high
DIAGBUF_USAGE6 [uint] byte buffer usage greater than expected, [uint] used, warning level [uint]	Log buffer usage greater than anticipated

DIAGHEAD_CACHE_USAGE6 socket buffer head cache usage is greater than expected, usage [uint], warning level [uint]	Log head cache usage greater than anticipated
DIAGIP_DEST_USAGE6 IP destination cache usage is greater than expected, usage [uint], warning level [uint]	Log destination cache usage greater than anticipated
DIAGFREE_RAM6 Free RAM, [str]% is less than limit [str]%. Top Memory process: [str]/[uint] using [uint].[uint]% , [str]/[uint] using [uint].[uint]%, [str]/[uint] using [uint].[uint]%	Log RAM space less than limit
DIAGFREE_FLASH_DISK4 Free [str] file system space, [str]% is less than limit [str]%	Log free disk space less than limit
DIAGDISK_USAGE4 Disk usage too high	Log disk usage too high
DIAGNEW_LED_STATE6 LED state message [str] from module [str]	Log LED message from module
DIAGFREE_FLASH_INODES4 [uint] Free INodes on [str] file system is less than limit [uint]	Log INodes less than system limit
DIAGFREE_NVRAM_DISK4 Free [str] file system space, [str]% is less than limit [str]%	Log file system space less than limit
DIAGFREE_NVRAM_INODES4 [uint] Free INodes on [str] file system is less than limit [uint]	Log free INodes on file system less than limit
DIAGFREE_RAM_DISK4 Free [str] file system space, [str]% is less than limit [str]%	Log free file system space less than limit
DIAGFREE_RAM_INODES4 [uint] Free INodes on [str] file system is less than limit [uint]	LOG_FREE_VARFS_INODES
DIAGFD_COUNT4 FD Usage [uint] is over limit [uint]	HUMM
DIAGDISK_USAGE4 Disk usage too high	Log disk utilization usage too high
DIAGNEW_LED_STATE6 LED state message [str] from module [str]]	Log LED state message from module
DIAGLED_IDENTIFY6 LED identify sequence [str]	Log identification sequence
DHCPSVRRELAY_NO_IFACE4 Dhcp relay cannot be allowed on interface [str] as it does not exist	No interface for DHCP relay
DHCPSVRRELAY_IFACE_NO_IP4 Dhcp relay cannot be allowed on interface [str] as it does not have an IP address	No IP address on DHCP relay interface
DHCPSVRRELAY_START6 DHCP relay agent started on [str]	DHCP relay agent started
DHCPSVRRELAY_STOP6 DHCP relay agent stopped	DHCP relay agent stopped
DHCPSVRDHCPSVR_START6 DHCP server is started	DHCP server started
DIAGFAN_UNDERSPEED4 Fan [str] under speed: [uint] RPM is under limit [uint] RPM	Fan speed under set RPM limit
DIAGELAPSED_TIME7 Elapsed time since last diag run appears to be zero	Log elapsed time since last diagnostic run
DIAGAUTOGEN_TECH_SPRT6 Auto generated tech-support dump file [str] [str]	Log generation of tech support dump file

DIAGPOE_INIT_FAIL3 Could not initialize the PoE manager	Log PoE manager intialization failure
DIAGPOE_POWER_LEVEL4 POE power consumption is [uint]W which exceeds [uint]% of [uint]W power budget	Log power consumption exceeds power budget limit
DIAGPOE_READ_FAIL3 Could not read from the PoE	Log PoE read failure
DIAGPOE_STATE_CHANGE4 port [uint] POE state changed to [str]	Log PoE state change
DIAGRAID_DEGRADED4 RAID array is degraded	Log RAID array degraded
DIAGRAID_ERROR4 RAID array management error [uint]	Log RAID array management error
DIAGPWRSPLY_FAIL4 Power supply failure, no longer redundant	Log power supply failure
DIAGHDD_FAILING4 HDD is failing	Log HDD failure
DIAGUNDER_VOLTAGE4 Voltage [str]V under low limit [str]V	Log voltage sensor under low limit
DIAGOVER_VOLTAGE4 Voltage [str]V over high limit [str]V	Log voltage sensor over high limit
DIAGLOW_TEMP6 Temp sensor [str] [str]C under low limit [str]C	Log temperature sensor under low limit
DIAGHIGH_TEMP4 Temp sensor [str] [str]C over high limit [str]C	Log temperature sensor over high limit
DIAGOVER_TEMP0 Temp sensor [str] [str]C over maximum limit [str]C Shutdown switch	Log temperature sensor over max limit
DIAGWD_STATE_CHANGE6 Watchdog is now [str]	Log watchdog state
DOT1X DOT1X_SUCCESS 6 Client [qstr] 802.1x/EAP authentication success on interface [qstr]//802.1x authentication successful	802.1X authentication successful
DOT1X DOT1X_FAILED 5 Client [qstr] failed 802.1x/EAP authentication on interface [qstr]//802.1x authentication failure	802.1X authentication failed
DOT11COUNTRY_CODE 5 Country of operation configured to [str]	Country of operation configured
DOT11 COUNTRY_CODE_ERROR 1 Error setting country of operation. [str]	Error setting country of operation
DOT11CLIENT_ASSOCIATED 6 Client [qstr] associated to wlan [qstr] ssid [qstr] on radio [qstr]	Client associated event
DOT11CLIENT_DISASSOCIATED 6 Client [qstr] disassociated from wlan [qstr] radio [qstr]: [str] (reason code:[uint])	Client disassociated
DOT11CLIENT_DENIED_ASSOC 5 Client [qstr] denied association on radio [qstr] [str]: [str]	Client denied association
DOT11CLIENT_ASSOC_IGNORED 6 Client [qstr] ignored association on radio [qstr] [str]: [str]	Client ignored association
DOT11WPA_WPA2_SUCCESS 6 Client [qstr] completed [str] handshake on wlan [qstr] radio [qstr]	Client completed WPA/WPA2 handshake

DOT11WPA_WPA2_FAILED 5 Client [qstr] failed [str] handshake on wlan [qstr] radio [qstr]	Client failed WPA/WPA2 handshake
DOT11WPA_WPA2_KEY_ROTN 6 Rotating wpa/wpa2 group keys on wlan [qstr] /	Rotating WPA/WPA2 group keys on WLAN
DOT11TKIP_MIC_FAIL_REPORT 5 TKIP message integrity check failure reported by [mac] on wlan [qstr]	TKIP MIC failure report
DOT11TKIP_MIC_FAILURE 5 TKIP message integrity check failed in packet from [mac] on wlan [qstr]	TKIP MIC check failed
DOT11TKIP_CNTRMEAS_START 4 Initiating TKIP countermeasures on wlan [qstr] ssid [qstr]	TKIP countermeasures initiated
DOT11TKIP_CNTRMEAS_END 4 TKIP countermeasures ended on wlan [qstr] ssid [qstr] //	TKIP countermeasures ended
DOT11EAP_SUCCESS 6 Client [qstr] 802.1x/EAP (type:[str]) authentication success on wlan [qstr] radio [qstr] username [str]	EAP authentication success
DOT11EAP_FAILED 5 Client [qstr] failed 802.1x/EAP authentication on wlan [qstr] radio [qstr]	EAP authentication failure
DOT11EAP_CLIENT_TIMEOUT 5 Client [qstr] timeout attempting 802.1x/EAP authentication on wlan [qstr] radio [qstr]	EAP authentication timed out
DOT11EAP_SERVER_TIMEOUT 5 Radius server [str] timeout authenticating client [qstr] on wlan [qstr] radio [qstr]	RADIUS server timed out
DOT11EAP_CACHED_KEYS 6 Key Cache used for client [qstr] on wlan [qstr] radio [qstr]. Skipping 802.1x	Key cache used for authentication
DOT11EAP_OPP_CACHED_KEYS 6 Opportunistic Key Cache used for client [qstr] on wlan [qstr] radio [qstr]. Skipping 802.1x.	Opportunistic key caching used for authentication
DOT11EAP_PREAUTH_SUCCESS 6 Client [qstr] 802.1x/EAP (type:[str]) pre-authentication success on wlan [qstr] bss [mac]	EAP pre authentication success
DOT11EAP_PREAUTH_FAILED 5 Client [qstr] failed 802.1x/EAP pre-authentication on wlan [qstr] bss [mac]	EAP pre-authentication failed
DOT11EAP_PREAUTH_CLIENT_TIMEOUT 5 Client [qstr] timeout attempting 802.1x/EAP pre-authentication on wlan [qstr]	EAP pre-authentication client timeout detected
DOT11EAP_PREAUTH_SERVER_TIMEOUT 5 Radius server [qstr] timeout pre-authenticating client [qstr] on wlan [qstr]	EAP pre-authentication server timeout detected
DOT11 FT_ROAM_SUCCESS 6 Client [qstr] fast bss transition roam to wlan [qstr] ssid [qstr] on radio [qstr]	Client fast BSS transition roam to WLAN SSD ID on radio
DOT11 GAL_RX_REQUEST 6 Received request to validate [qstr] on global assoc-list [qstr] from [qstr] on rf-domain [qstr]	Received request to validate global association request for RF Domain

DOT11 GAL_TX_RESPONSE 6 Sending global assoc-list [qstr] response for [qstr] to [qstr] on rf-domain [qstr], result: [str]	Sending global association response for RF Domain
DOT11 GAL_VALIDATE_REQ 6 Sending global assoc-list validation request to controller for [qstr]	Sending global association list validation to controller
DOT11 GAL_VALIDATE_FAILED 6 Received global assoc-list validation failure for [qstr]	Received global association list validation failures
DOT11 GAL_VALIDATE_SUCCESS 6 Received global assoc-list validation success for [qstr]	Received global association list validation successes
FWUFWUDONE6Firmware update successful, new version is [str]	Update successfully completed
FWUFWUABORTED6Firmware update aborted	Update aborted
FWUFWUNONEED6Firmware update not required, running and update versions same [str]	Update not required, running and update version are the same
FWUFWUSYSERR3Firmware update unsuccessful, system cmd [str] failed	Update unsuccessful, system cmd failed
FWUFWUBADCONFIG3Firmware update unsuccessful, unable to read configuration file	Update unsuccessful, unable to read config file
FWUFWUSERVERUNDEF3Firmware update unsuccessful, update server undefined	Update unsuccessful, server undefined
FWUFWUFILEUNDEF3Firmware update unsuccessful, update file undefined	Update unsuccessful, update file undefined
FWUFWUSERVERUNREACHABLE3 Firmware update unsuccessful, server [str] unreachable	Update unsuccessful, server unreachable
FWUFWUCOULDNTGETFILE3 Firmware update unsuccessful, couldn't get file, [str] //	Update unsuccessful, could not get file
FWUFWUVERMISMATCH3 Firmware update unsuccessful, version mismatch, expected [str], actual [str] //	Update unsuccessful, version mismatch
FWUFWUPRODMISMATCH3 Firmware update unsuccessful, product mismatch, expected [str], actual [str]	Update unsuccessful, product mismatch
FWUFWUCORRUPTEDFILE3 Firmware update unsuccessful, corrupted firmware file	Update unsuccessful, corrupted file
FWUFWUSIGNMISMATCH3 Firmware update unsuccessful, signature mismatch, [str]	Update unsuccessful, signature mismatch
FWUFWUUNSUPPORTEDHW 3 Firmware update unsuccessful, unsupported hardware	Update unsuccessful, unsupported hardware version
FWU FWUUNSUPPORTEDMODELNUM 3 Firmware update unsuccessful, unsupported FIPS model number	Update unsuccessful, unsupported FIPS model number
ISDN_EMERG 0 Emergency: [str]	ISDN emergency
ISDN_ALERT 1 Alert: [str]	ISDN alert
ISDN_CRIT 2 Critical: [str]	ISDN critical
ISDN_ERR 3 Error: [str]	ISDN error

ISDN_WARNING 4 Warning: [str]	ISDN warning
ISDN_NOTICE 5 Notice: [str]	ISDN notice
ISDN_INFO 6 Info: [str]	ISDN information
ISDN_DEBUG 7 Debug: [str]	ISDN debug
L2TPV3 L2TPV3_TUNNEL_UP 5 L2TPV3 tunnel [str] is UP	L2TPV3 tunnel is up
L2TPV3 L2TPV3_TUNNEL_DOWN 5 L2TPV3 tunnel [str] is DOWN	L2TPV3 tunnel is down
LICMGRLIC_INSTALLED6 [str] license installed	License installation
LICMGRLIC_INSTALL_DEFAULT6 [str] default license installed, count: [int]	Default license installation
LICMGRLIC_INSTALL_COUNT6 [str] license installed, count: [int]	License count
LICMGRLIC_REMOVED6 [str] license removed	License removed
LICMGRLIC_INVALID3 [str] license invalid Error: [str]	License installation failed
MESH MESH_LINK_UP 5 Mesh link up between radio [qstr] and radio [qstr]	Mesh link up
MESH MESH_LINK_DOWN 5 Mesh link down between radio [qstr] and radio [qstr]	Mesh link down
MGMTLOG_KEY_DELETED 4 Rsakey [str] associated with ssh is deleted so ssh is restarted with default rsa key	RSA key associated with SSH is deleted
MGMTLOG_KEY_RESTORED6Rsakey [str] associated with ssh is added so ssh is restarted with new key	RSA key associated with SSH is added
MGMTLOG_TRUSTPOINT_DELETED4 Trustpoint [str] associated with https is deleted or expired so https is restarted with default trustpoint	Trustpoint associated with HTTPS is deleted
MGMTLOG_HTTP_START5 [str] started in external mode	Web server started in external mode
MGMTLOG_HTTP_LOCAL_START5 thttpd started in localhost mode	Web server started in local mode
MGMTLOG_HTTPS_START5 stunnel started	Secure Web server started
MGMTLOG_HTTPS_WAIT5 waiting for thttpd to start	Waiting for Web server to start
MGMTLOG_HTTP_INIT5[str] status started is [uint] and external mode is [uint]	Web server started
MESH MESHPOINT_LOOP_PREVENT_ON 4 Meshpoint [qstr] loop prevention on (port [str]), wired traffic is blocked	Wired traffic is blocked
MESH MESHPOINT_LOOP_PREVENT_OFF 4 Meshpoint loop prevention off (port [str]), all wired traffic is allowed	Wired traffic is allowed
MESH MESHPOINT_ROOT_CHANGE 6 Meshpoint [qstr] root changed from [mac] to [mac] via next hop [mac]	Meshpoint root changed

MESH MESHPOINT_PATH_CHANGE 6 Meshpoint [qstr] next hop changed from [mac] to [mac] for [mac]	Meshpoint next hop changed
NSM IFUP4 Interface [str] is up	Interface up
NSM IFDOWN4 Interface [str] is down	Interface down
NSM DHCPIP6 Interface [str] acquired IP address [ip]/[uint] via DHC	Interface assigned DHCP IP address
NSM DHCPDEFRT6 Default route with gateway [ip] learnt via DHC	Default route learnt via DHCP
NSM DHCPIPCHG5 Interface [str] changed DHCP IP - old IP: [ip]/[uint], new IP: [ip]/[uint]	DHCP Interface IP changed
NSM DHCPNODEFRT5 Interface [str] lost its DHCP default route	Interface no default route
NSM IFIPCFG3 Interface [str] IP address [str] Interface [str]	Interface IP address
NSM DHCPC_ERR3 Both, DHCP client and server are configured for interface [str]. DHCP Client has been enabled on the interface and dhcp server is shut down	DHCP server-client config conflict
NSM DHCPIPNOADD5 Interface [str] lost its DHCP IP address to interface [str]'s overlapping static configured IP address	DHCP IP overlaps static IP address
NSM DHCPLSEXP5 Interface [str] lost its DHCP IP address [ip] due to lease expiration	Interace DHCP lease expired
NSM DHCPNAK5 Interface [str] lost its DHCP IP address [ip], DHCP NAK response from server	DHCP Server returned DHCP NAK response
NSM NSM_NTP6 Look up host [str] [str]//	Translate host name
NSM IF_FAILOVER5 Interface [str] failover to Interface [str]	Interface failover
NSM IF_FAILBACK5 Interface [str] failback to Interface [str]	Interface failback
PM PROCSTART6 Starting process [str]	Process started
PM PROCRSTRT3 Process str]"is not responding. Restarting process	Process restarted
PM PROCMAXRSTRT1 Process [str] reached its maximum number of allowed restarts	Process reached max number of restarts
PM PROCSYSRSTRT0 Process [str] reached its maximum number of allowed restarts. Rebooting the system.	Process reached max restarts. Rebooting system.
PM PROCSTOP5 Process [str] has been stopped	Process has been stopped
PM PROCID5 Process [str] changed its PID from [int] to [int]	Process changed PID
PM STARTUPCOMPLETE5 System startup complete	System startup completed
PM PROCNORESP4Process [str] is not responding ([uint]/[uint])	Process is not responding

RADCONFRADIUSDSTART6 Radius Server Started	RADIUS server started
RADCONFRADIUSDSTOP6 Radius Server Stopped	RADIUS server stopped
RADCONF COULD_NOT_STOP_RADIUSD3 radiusd could not be stopped	RADIUS server failed to stop
RADIORADIO_STATE_CHANGE 5 Radio [qstr] changing state from [qstr] to [qstr]	Radio state changed
RADIORADAR_SCAN_STARTED 6 Radar scan on primary channel [uint] freq [uint] MHz for a duration [uint] secs on radio [qstr]	Radar scan started
RADIORADAR_SCAN_COMPLETED 6 Radar scan done on primary channel [uint] freq [uint] MHz on radio [qstr]	Radar scan completed
RADIORADAR_DETECTED 4 Radar found on channel [uint] freq [uint] MHz	Radar detected
RADIORADAR_DET_INFO 4 Radar info: Radio: [qstr]. New channel: [uint] freq [uint] MHz. Scan time: [uint] secs	Radar info
RADIORESUME_HOME_CHANNEL 6 Operation on home channel [uint] freq [uint] MHz resumes on radio [qstr] after earlier radar detect	Radio resuming on home channel
RADIO ACS_SCAN_STARTED 6 ACS scan started on radio [qstr]	ACS scan started
RADIO ACS_SCAN_COMPLETE 6 ACS scan done, channel [uint] selected on radio [qstr]	ACS scan complete
RADIO_ANTENNA_ERROR 3 antenna type [str] in is not supported on radio [uint] of device [str]	Invalid (unsupported) antenna detected on this radio
RADIOCHANNEL_COUNTRY_MISMATCH3 Channel [str] not valid in country of operation [str] for [str] [str]	Channel and country of operation mismatch
SYSTEM HTTP_ERR3 [str] did not start	Web server did not start
SYSTEMLOGIN_FAIL_BAD_ROLE3 Log-in failed - [qstr] is an undefined user role - user [qstr] from [qstr]	Failed login attempt - no such user role
SYSTEMLOGOUT6 Logged out user [qstr] with privilege [qstr] from [qstr]	Logout event
SYSTEMWARM_START6 System Warm Start Reason : [str] Timestamp: [str]	System warm start
SYSTEMWARM_START_RECOVER6 Warm Start Recover. Reason: [str] Timestamp: [str]	System wam start recovery
SYSTEMCOLD_START6 System Cold start. System came up at [str]	System cold start
SYSTEMSERVER_UNREACHABLE5 Server not reachable, trying authentication using local database.	Authentication using the local database
SYSTEMPERIODIC_HEART_BEAT3Periodic Heart Beat. Interval:[int]. Ip address [str].	Periodic heartbeat detected

SYSTEMCONFIG_COMMIT6Configuration commit by user [qstr] ([str]) from [qstr]	Configuration commit
SYSTEMCONFIG_REVISION6Configuration revision updated to [str] from [str]	Configuration updated
SYSTEMSYSTEM_AUTOUP_ENABLE6 Autoupgrade enabled for [str]	Auto upgrade module is enabled
SYSTEMSYSTEM_AUTOUP_DISABLE6 Autoupgrade disabled for [str]	Auto upgrade module is disabled
SYSTEMMAAT_LIGHT5MAAT Light module [str]	Notice on action on RIM radio(s) from Maat Light module
SYSTEMDEVUP_RFD_FAIL4Upgrade failed on mac [str] in RF domain [str]	Upgrade for device failed on rf-domain manager
SMTPNOT SMTPAUTH5 Authentication failure for user: [str] on server [str].//	User authentication failure
SMTPNOT NET 5 Network error contacting server: [str].	Cannot contact server
SMTPNOT SMTPINFO6[str].	SMTP information notice
SMTPNOT CFG5 Error reading configuration file.	Cannot read configuration
SMTPNOT CFGINC5 Incomplete Configuration.	Incomplete configuration
SMTPNOT SMTPERR5 [str].	SMTP 5XX errors
SMTPNOT PROTO5Protocol Error: [str].	SMTP protocol errors
SYSTEMPROC_STOP6 Stopping process [qstr]	Stopping process
SYSTEMCLOCK_RESET6 System clock reset, Time: [str]	System clock reset
SYSTEMLOGIN5 Successfully logged in user [qstr] with privilege [qstr] from [qstr]	Successful login
SYSTEMLOGIN_FAIL3 Log-in failed for user [qstr] from [qstr]	Failed login attempt - user authentication failed
SYSTEMLOGIN_FAIL_ACCESS3 Log-in failed - user [qstr] is not allowed access from [qstr]	Failed login attempt - access violation
VRRP VRRP_STATE_CHANGE 5 [str]: VRRP Group [uint] transitioned to [str] state	VRRP state transition
VRRP VRRP_VIP_SUBNET_MISMATCH 2 VRRP Group [uint] VIP [ip] does not overlap with any of the interface addresses	VRRP IP not overlapping with interface addresses
VRRP VRRP_MONITOR_CHANGE 5 [str]: VRRP Group [uint] monitored [str] state change to [str]; priority change from [uint] to [uint]	VRRP monitor link state change
WIPSUNSANCTIONED_AP_ACTIVE 6 Unsanctioned AP [mac] vendor [str] on channel [int] with rssi [int] active from [str]	Unsanctioned AP active
WIPSUNSANCTIONED_AP_INACTIVE 6 Unsanctioned AP [mac] vendor [str] inactive from [str]	Unsanctioned AP inactive

WIPSUNSANCTIONED_AP_STATUS_CHANGE 6 Unsanctioned AP [mac] vendor [str] status has been administratively changed	Unsanctioned AP changed state
WIPSROGUE_AP_ACTIVE 4 Rogue AP [mac] vendor [str] on channel [int] with vlan [int] and rssi [int] active from [str] //	Rogue AP active
WIPSROGUE_AP_INACTIVE 4 Rogue AP [mac] vendor [str] inactive from [str]	Rogue AP inactive
WIPSAIR_TERMINATION_INITIATED 4 Air termination of [mac] vendor [str] on channel [int] initiated	Air termination initiated
WIPSAIR_TERMINATION_ENDED 4 Air termination of [mac] vendor [str] ended	Air termination ended

A PUBLICLY AVAILABLE SOFTWARE

A.1 General Information

This document contains information regarding licenses, acknowledgments and required copyright notices for open source packages used in the following products:

Access Points

- AP6521, AP6522, AP6522M, AP6532, AP6562, AP7161, AP7502, AP7522, AP7532, AP7562, AP7602, AP7612, AP7622, AP7632, AP7662, AP8122, AP8132, AP8163, AP8232, AP8432 and AP8533.

Wireless Controllers and Service Platforms

- Wireless Controllers – RFS4000, RFS6000
- Service Platforms – NX5500, NX5500E, NX7500, NX75XX, NX7510E, NX9500, NX9510, NX9600, NX9610, VX9000, VX9000E

A.2 Open Source Software Used

The Support site, located at www.extremenetworks.com/support provides information and online assistance including developer tools, software downloads, product manuals, support contact information and online repair requests.

Name	Version	URL	License
Apache Web Server	1.3.41	*http://www.apache.org/*	*Apache License, Version 2.0*
Asterisk	1.2.24	*http://www.asterisk.org/*	*GNU General Public License 2.0*
accepts	1.2.10	*http://registry.npmjs.org/accepts/-/accepts-1.2.10.tgz*	*MIT License*
advas	0.2.3	*http://advas.sourceforge.net/*	*GNU General Public License, version 2*
alivepdf	0.1.4.9	*https://code.google.com/p/alivepdf/*	*MIT License*
apscheduler	3.0.1	*https://pypi.python.org/pypi/APScheduler/*	*MIT License*
async	1.3.0	*http://registry.npmjs.org/async/-/async-1.3.0.tgz*	*MIT License*
autoconf	2.69	*http://www.gnu.org/software/autoconf/*	*GNU General Public License, version 2*
automake	1.11.6	*http://www.gnu.org/software/automake/*	*GNU General Public License, version 2*
bash	4.2	*http://www.gnu.org/software/bash/*	*GNU General Public License, version 2*
binutils	2.23	*http://www.gnu.org/software/binutils/*	*GNU General Public License, version 2*
bison	2.3	*http://www.gnu.org/software/bison/*	*GNU General Public License, version 2*
bluez	5.7	*http://www.bluez.org/*	*GNU General Public License, version 2*
body-parser	1.13.2	*http://registry.npmjs.org/body-parser/-/body-parser-1.13.2.tgz*	*MIT License*
bridge	1.0.4	*http://www.linuxfoundation.org/collaborate/workgroups/networking/bridge/*	*GNU General Public License, version 2*
bridge-utils	1.0.4	*http://sourceforge.net/projects/bridge/*	*GNU General Public License, version 2*
buffer-crc32	0.2.5	*http://registry.npmjs.org/buffer-crc32/-/buffer-crc32-0.2.5.tgz*	*MIT License*
busybox	1.14.4	*http://www.busybox.net/*	*GNU General Public License, version 2*

Name	Version	URL	License
bytes	2.1.0	http://registry.npmjs.org/bytes/-/bytes-2.1.0.tgz	MIT License
colors	1.1.2	http://registry.npmjs.org/colors/-/colors-1.1.2.tgz	MIT License
compression	1.5.1	http://registry.npmjs.org/compression/-/compression-1.5.1.tgz	MIT License
conect-mongo	0.8.2	http://registry.npmjs.org/connect-mongo/-/connect-mongo-0.8.2.tgz	MIT License
cookie	0.1.3	http://registry.npmjs.org/cookie/-/cookie-0.1.3.tgz	MIT License
cookie-parser	1.3.5	http://registry.npmjs.org/cookie-parser/-/cookie-parser-1.3.5.tgz	MIT License
cookie-signature	1.0.6	http://registry.npmjs.org/cookie-signature/-/cookie-signature-1.0.6.tgz	MIT License
cuint	0.2.0	http://registry.npmjs.org/cuint/-/cuint-0.2.0.tgz	MIT License
cycle	1.0.3	https://registry.npmjs.org/cycle/-/cycle-1.0.3.tgz	MIT License
czjson	1.0.8	https://pypi.python.org/pypi/czjson/1.0.8	GNU Lesser General Public License 2.1
dash	0.5.7	http://gondor.apana.org.au/~herbert/dash/	The BSD License
debug	2.2.0	https://registry.npmjs.org/debug/-/debug-2.2.0.tgz	MIT License
depd	1.0.1	http://registry.npmjs.org/depd/-/depd-1.0.1.tgz	MIT License
dfu-util	0.8	http://dfu-util.gnumonks.org/	GNU General Public License, version 2
dhcp	3.0.3	http://www.isc.org/software/dhcp	ISC License
diffutils	2.8.1	http://www.gnu.org/software/diffutils/	GNU General Public License, version 2
dmalloc	5.5.2	http://dmalloc.com/	None
dmidecode	2.11	http://savannah.nongnu.org/projects/dmidecode/	GNU General Public License, version 2
dnsmasq	2.47	http://www.thekelleys.org.uk/dnsmasq/doc.html	GNU General Public License, version 2
dosfstools	2.11	http://www.daniel-baumann.ch/software/dosfstools/	GNU General Public License, version 2
dropbear	0.55	http://matt.ucc.asn.au/dropbear/dropbear.html	DropBear License
e2fsprogs	1.41.13	http://e2fsprogs.sourceforge.net/	GNU General Public License, version 2

Name	Version	URL	License
ejs	2.3.3	http://registry.npmjs.org/ejs/-/ejs-2.3.3.tgz	Apache License, Version 2.0
engine.io	1.5.2	http://registry.npmjs.org/engine.io/-/engine.io-1.5.2.tgz	MIT License
escape-html	1.0.2	http://registry.npmjs.org/escape-html/-/escape-html-1.0.2.tgz	MIT License
ethtool	2.6.35	http://www.kernel.org/pub/software/network/ethtool/	GNU General Public License, version 2
event-loop-lag	1.1.0	http://registry.npmjs.org/event-loop-lag/-/event-loop-lag-1.1.0.tgz	MIT License
express	4.13.1	http://registry.npmjs.org/express/-/express-4.13.1.tgz	MIT License
express-session	1.11.3	http://registry.npmjs.org/express-session/-/express-session-1.11.3.tgz	MIT License
eyes	0.1.8	http://github.com/cloudhead/eyes.js	MIT License
finalhandler	0.4.0	http://registry.npmjs.org/finalhandler/-/finalhandler-0.4.0.tgz	MIT License
flashrom	0.9.4	http://flashrom.org/Flashrom	GNU General Public License, version 2
flex	4.5.1.21328	http://flex.sourceforge.net/	The BSD License
fluks	0.2	https://github.com/markuspeloquin/fluks	MIT License
freedos	4.5.1.21328	http://www.freedos.org/download/	GNU General Public License, version 2
freeipmi	1.1	http://www.gnu.org/software/freeipmi/	GNU General Public License, version 3
fresh	0.3.0	http://registry.npmjs.org/fresh/-/fresh-0.3.0.tgz	MIT License
futures	2.2.0	https://github.com/agronholm/pythonfutures	The BSD License
gcc	4.1.2	http://gcc.gnu.org/	GNU General Public License, version 2
gdb	7.2	http://www.gnu.org/software/gdb/	GNU General Public License, version 3
gdbm	1.8.3	http://www.gnu.org/s/gdbm/	GNU General Public License, version 2
genext2fs	1.4.1	http://genext2fs.sourceforge.net/	GNU General Public License, version 2
glib2	2.30.2	http://www.gtk.org/	GNU Lesser General Public License 2.1
glibc	2.7	http://www.gnu.org/software/libc/	GNU General Public License, version 2

Name	Version	URL	License
has-binary-data	0.1.5	http://registry.npmjs.org/has-binary-data/-/has-binary-data-0.1.5.tgz	MIT License
hdparm	9.38	http://sourceforge.net/projects/hdparm/	GNU General Public License, version 2
hooks	0.3.2	http://registry.npmjs.org/hooks/-/hooks-0.3.2.tgz	MIT License
hostapd	0.6.9	http://hostap.epitest.fi/hostapd/	GNU General Public License, version 2
hotplug	1.3	http://sourceforge.net/projects/linux-hotplug/	GNU General Public License, version 2
hotplug2	0.9	http://isteve.bofh.cz/~isteve/hotplug2/	GNU General Public License, version 2
i2ctools	3.0.3	http://www.lm-sensors.org/wiki/I2CTools	GNU General Public License, version 2
iconv-lite	0.4.11	http://registry.npmjs.org/iconv-lite/-/iconv-lite-0.4.11.tgz	MIT License
igb	5.2.9.4	http://sourceforge.net/projects/e1000/	GNU General Public License, version 2
ipaddr	2.1.0	http://code.google.com/p/ipaddr-py/	Apache License, Version 2.0
ipkg-utils	1.7	http://www.handhelds.org/sources.html	GNU General Public License, version 2
ipmitool	1.8.11	http://ipmitool.sourceforge.net/	The BSD License
iproute2	050816	http://www.linuxfoundation.org/collaborate/workgroups/networking/iproute2	GNU General Public License, version 2
iptables	1.4.3	http://www.netfilter.org/projects/iptables/index.html	GNU General Public License, version 2
ipxe	1.0.0	http://ipxe.org/	GNU General Public License, version 2
isstream	0.1.2	https://registry.npmjs.org/isstream/-/isstream-0.1.2.tgz	MIT License
js-yaml	3.3.1	http://registry.npmjs.org/js-yaml/-/js-yaml-3.3.1.tgz	MIT License
kerberos	None	http://web.mit.edu/Kerberos/	GNU General Public License, version 2
kexec-tools	2.0.3	http://kernel.org/pub/linux/utils/kernel/kexec/	GNU General Public License, version 2
libbson	1.1.0	http://github.com/mongodb/libbson	Apache License, Version 2.0
libcares	1.7.1	http://c-ares.haxx.se/	The BSD License

Name	Version	URL	License
libcurl	7.30.0	*http://curl.haxx.se/libcurl/*	*The BSD License*
libdevmapper	2.02.66	*ftp://sources.redhat.com/pub/lvm2/old*	*GNU Lesser General Public License 2.1*
libexpat	2.0.0	*http://expat.sourceforge.net/*	*MIT License*
libffi	3.0.7	*http://sourceware.org/libffi/*	*MIT License*
libgcrypt	1.4.5	*ftp://ftp.gnupg.org/GnuPG/libgcrypt/*	*GNU Lesser General Public License 2.1*
libgmp	4.2.2	*http://gmplib.org/*	*GNU Lesser General Public License, version 3.0*
libgnutls	3.2.12	*ftp://ftp.gnupg.org/GnuPG/gnutls/v3.0/*	*GNU Lesser General Public License, version 3.0*
libgpg-error	1.6	*ftp://ftp.gnupg.org/GnuPG/libgpg-error/*	*GNU Lesser General Public License 2.1*
libharu	2.1.0	*http://libharu.org/*	*MIT License*
libhttp-parser	None	*None*	*MIT License*
libiconv	1.14	*http://savannah.gnu.org/projects/libiconv/*	*GNU General Public License 2.0*
libjson	0.10	*http://sourceforge.net/projects/libjson/*	*The BSD License*
libkerberos	0.1	*http://web.mit.edu/kerberos/dist/*	*The BSD License*
libncurses	5.4	*http://www.gnu.org/software/ncurses/*	*MIT License*
libnettle	2.7	*http://www.lysator.liu.se/~nisse/nettle/*	*GNU Lesser General Public License 2.1*
libnuma	2.0.10	*https://github.com/numactl/numactl/*	*GNU Lesser General Public License, version 2.0*
libpam	1.1.1	*http://www.kernel.org/pub/linux/libs/pam/*	*The BSD License*
libpcap	1.0.0	*http://www.tcpdump.org/*	*The BSD License*
libpcre	8.21	*ftp://ftp.csx.cam.ac.uk/pub/software/programming/pcre/*	*The BSD License*
libpopt	1.14	*http://freecode.com/projects/popt*	*MIT License*
libraryopt	1.01	*http://sourceforge.net/projects/libraryopt/*	*GNU General Public License, version 2*
libreadline	4.3	*http://cnswww.cns.cwru.edu/php/chet/readline/rltop.html*	*GNU General Public License, version 2*
libtool	2.4.2	*http://www.gnu.org/software/libtool/*	*GNU General Public License, version 2*

Name	Version	URL	License
libusb	0.1.12	*http://www.libusb.org/*	*GNU Lesser General Public License, version 2.0*
libusb	1.0.18	*http://www.libusb.org/*	*GNU Lesser General Public License, version 2.0*
libvirt	0.9.11	*http://libvirt.org/sources/*	*GNU Lesser General Public License 2.1*
libxml2	2.8.0	*http://xmlsoft.org/*	*MIT License*
libxslt	1.1.26	*http://xmlsoft.org/xslt/*	*MIT License*
lighttpd	1.4.37	*http://www.lighttpd.net/*	*MIT License*
lilo	22.6	*http://lilo.alioth.debian.org/*	*The BSD License*
linux	2.6.28.9	*http://www.kernel.org/*	*GNU General Public License, version 2*
linux	2.6.35.9	*http://www.kernel.org/*	*GNU General Public License, version 2*
lodash	3.10.0	*http://registry.npmjs.org/lodash/-/lodash-3.10.0.tgz*	*MIT License*
log-timestamp	0.1.2	*http://registry.npmjs.org/log-timestamp/-/log-timestamp-0.1.2.tgz*	*MIT License*
ltp	20130904	*https://github.com/linux-test-project/ltp*	*GNU General Public License, version 2*
lxml	2.3beta1	*http://lxml.de/*	*The BSD License*
lzma	4.32	*http://www.7-zip.org/sdk.html*	*GNU Lesser General Public License, version 2.0*
lzma	4.57	*http://www.7-zip.org/sdk.html*	*GNU Lesser General Public License, version 2.0*
lzo	2.03	*http://www.oberhumer.com/opensource/lzo/*	*GNU General Public License, version 2*
M2Crypto	0.21.1	*http://chandlerproject.org/bin/view/Projects/MeTooCrypto*	*The BSD License*
m4	1.4.16	*http://www.gnu.org/software/m4/*	*GNU General Public License, version 2*
madwifi	trunk-r3314	*http://madwifi-project.org/*	*The BSD License*
mdadm	3.2.2	*http://neil.brown.name/blog/mdadm*	*GNU General Public License, version 2*
media-typer	0.3.0	*http://registry.npmjs.org/media-typer/-/media-typer-0.3.0.tgz*	*MIT License*
memtester	4.0.8	*http://pyropus.ca/software/memtester/*	*GNU General Public License, version 2*

Name	Version	URL	License
merge-descriptors	1.0.0	http://registry.npmjs.org/merge-descriptors/-/merge-descriptors-1.0.0.tgz	MIT License
method-override	2.3.4	http://registry.npmjs.org/method-override/-/method-override-2.3.4.tgz	MIT License
methods	1.1.1	http://registry.npmjs.org/methods/-/methods-1.1.1.tgz	MIT License
mii-diag	2.09	http://freecode.com/projects/mii-diag	GNU General Public License, version 2
mkyaffs	None	http://www.yaffs.net/	GNU General Public License, version 2
mod_ssl	2.8.3.1-1.3.41	http://www.modssl.org/	The BSD License
mongo-c-driver	1.1.0	http://github.com/mongodb/mongo-c-driver	Apache License, Version 2.0
mongo-python-driver	2.7.1	http://github.com/mongodb/mongo-python-driver	Apache License, Version 2.0
mongodb	3.0.5	http://www.mongodb.org/	GNU Lesser General Public License, version 3.0
mongoose	4.0.7	http://registry.npmjs.org/mongoose/-/mongoose-4.0.7.tgz	MIT License
mpath	0.2.1	http://registry.npmjs.org/mpath/-/mpath-0.2.1.tgz	MIT License
mpromise	0.5.5	http://registry.npmjs.org/mpromise/-/mpromise-0.5.5.tgz	MIT License
mquery	1.6.2	http://registry.npmjs.org/mquery/-/mquery-1.6.2.tgz	MIT License
ms	0.7.1	http://registry.npmjs.org/ms/-/ms-0.7.1.tgz	MIT License
mtd	2009-05-05	http://www.linux-mtd.infradead.org/	GNU General Public License, version 2
mtd-utils	1.4.4	http://www.linux-mtd.infradead.org/	GNU General Public License, version 2
mtd-utils	2009-05-05	http://www.linux-mtd.infradead.org/	GNU General Public License, version 2
muri	1.1.0	http://registry.npmjs.org/muri/-/muri-1.1.0.tgz	MIT License
nano	1.2.4	http://www.nano-editor.org/	GNU General Public License, version 2
net-snmp	5.3.0.1	http://net-snmp.sourceforge.net/	The BSD License
no-vnc	None	http://kanaka.github.io/noVNC/	Mozilla Public License, version 2

Name	Version	URL	License
node-mongodb-native	1.4.35	http://github.com/mongodb/node-mongodb-native	Apache License, Version 2.0
node.js	0.12.7	http://nodejs.org/	MIT License
ntp	4.2.6p4	http://www.ntp.org/index.html	The BSD License
numactl	2.0.10	https://github.com/numactl/numactl/	GNU General Public License, version 2
Open Scales	2.2	http://openscales.org/	GNU Lesser General Public License, version 3.0
OpenStreetMap		http://www.openstreetmap.org/	Creative Commons Attribution-ShareAlike License, version 3.0
on-headers	1.0.0	http://registry.npmjs.org/on-headers/-/on-headers-1.0.0.tgz	MIT License
openldap	2.4.40	http://www.openldap.org/foundation/	The Open LDAP Public License
openllpd	0.0.3alpha	http://openlldp.sourceforge.net/	GNU General Public License, version 2
openssh	6.6p1	http://www.openssh.com/	The BSD License
openssl	0.9.8zg	http://www.openssl.org/	OpenSSL License
openssl	1.0.0i	http://www.openssl.org/	OpenSSL License
openssl	1.0.1g	http://www.openssl.org/	OpenSSL License
openssl-fips	1.2.3	http://www.openssl.org/	OpenSSL License
openwrt	trunk-r15025	http://www.openwrt.org/	GNU General Public License, version 2
opkg	trunk-r4564	http://code.google.com/p/opkg/	GNU General Public License, version 2
oprofile	0.9.2	http://oprofile.sourceforge.net/news/	GNU Lesser General Public License 2.1
ProGuard	4.8	http://proguard.sourceforge.net/	GNU General Public License, version 2
PyPDF2	1.23	http://mstamy2.github.com/PyPDF2	The BSD License
parseurl	1.3.0	http://registry.npmjs.org/parseurl/-/parseurl-1.3.0.tgz	MIT License
path-to-regexp	1.2.0	http://registry.npmjs.org/path-to-regexp/-/path-to-regexp-1.2.0.tgz	MIT License
pciutils	3.1.8	http://mj.ucw.cz/sw/pciutils/	GNU General Public License, version 2

Name	Version	URL	License
pdnsd	1.2.5	http://members.home.nl/p.a.rombouts/pdnsd/	GNU General Public License, version 2
picocom	1.6	http://code.google.com/p/picocom/	GNU General Public License, version 2
pillow	2.8.1	http://python-pillow.github.io/	MIT License
ping	1.0	None	The BSD License
pkg-config	0.22	http://pkg-config.freedesktop.org/wiki/	GNU General Public License, version 2
portmap	6.0	http://neil.brown.name/portmap/	The BSD License
posix	2.0.1	http://registry.npmjs.org/posix/-/posix-2.0.1.tgz	MIT License
ppp	2.4.5	http://ppp.samba.org/ppp/	The BSD License
ppp	2.4.3	http://ppp.samba.org/ppp/	The BSD License
preppy	2.3.1	https://bitbucket.org/rptlab/preppy	The BSD License
procname	0.2	http://code.google.com/p/procname/	GNU Lesser General Public License, version 2.0
procps	3.2.8	http://procps.sourceforge.net/	GNU General Public License, version 2
proxy-addr	1.0.8	http://registry.npmjs.org/proxy-addr/-/proxy-addr-1.0.8.tgz	MIT License
psmisc	22.8	http://sourceforge.net/projects/psmisc/	GNU General Public License, version 2
pure-ftpd	1.0.22	http://www.pureftpd.org/project/pure-ftpd	The BSD License
pychecker	0.8.18	http://pychecker.sourceforge.net/	The BSD License
pyparsing	1.5.1	http://sourceforge.net/projects/pyparsing/	The BSD License
pytz	2014.10	http://pythonhosted.org/pytz	MIT License
pyxapi	0.1	http://www.pps.jussieu.fr/%7Eylg/PyXAPI/	GNU General Public License, version 2
pyyaml	3.11	http://pyyaml.org/	MIT License
qdbm	1.8.77	http://qdbm.sourceforge.net/	GNU General Public License, version 2
qs	4.0.0	http://registry.npmjs.org/qs/-/qs-4.0.0.tgz	The BSD License
quagga	0.99.16	http://www.quagga.net	GNU General Public License, version 2
quilt	0.47	http://savannah.nongnu.org/projects/quilt/	GNU General Public License, version 2

Name	Version	URL	License
radius	2.2.3	*http://freeradius.org/*	*GNU General Public License, version 2*
range-parser	1.0.2	*http://registry.npmjs.org/range-parser/-/range-parser-1.0.2.tgz*	*MIT License*
raw-body	2.1.2	*http://registry.npmjs.org/raw-body/-/raw-body-2.1.2.tgz*	*MIT License*
redis	3.0.3	*http://redis.io/*	*The BSD License*
redis	0.12.1	*http://registry.npmjs.org/redis/-/redis-0.12.1.tgz*	*MIT License*
regexp-clone	0.0.1	*http://registry.npmjs.org/regexp-clone/-/regexp-clone-0.0.1.tgz*	*MIT License*
report-lab	3.1.44	*http://www.reportlab.com*	*The BSD License*
rp-pppoe	3.1.0	*http://www.roaringpenguin.com/products/pppoe*	*GNU General Public License, version 2*
rsync	3.0.6	*http://rsync.samba.org/*	*GNU General Public License, version 3*
safestr	1.0.3	*http://www.zork.org/*	*The BSD License*
samba	3.5.1	*http://www.samba.org*	*GNU General Public License, version 3*
sed	4.1.2	*http://www.gnu.org/software/sed/*	*GNU General Public License, version 2*
semaphore	1.0.3	*http://registry.npmjs.org/semaphore/-/semaphore-1.0.3.tgz*	*MIT License*
send	0.13.0	*http://registry.npmjs.org/send/-/send-0.13.0.tgz*	*MIT License*
serve-static	1.10.0	*http://registry.npmjs.org/serve-static/-/serve-static-1.10.0.tgz*	*MIT License*
setproctitle	1.1.8	*http://code.google.com/p/py-setproctitle*	*The BSD License*
setuptools	11.3.1	*https://bitbucket.org/pypa/setuptools*	*Python License, Version 2 (Python-2.0)*
sliced	1.0.1	*http://registry.npmjs.org/sliced/-/sliced-1.0.1.tgz*	*MIT License*
smarttools	6.2	*http://smartmontools.sourceforge.net*	*GNU General Public License, version 2*
snmpagent	5.0.9	*http://sourceforge.net/*	*The BSD License*
socket.io	1.3.6	*http://registry.npmjs.org/socket.io/-/socket.io-1.3.6.tgz*	*MIT License*
socket.io-adapter	0.3.1	*http://registry.npmjs.org/socket.io-adapter/-/socket.io-adapter-0.3.1.tgz*	*MIT License*

Name	Version	URL	License
socket.io-adapter-mongo	0.1.4	http://registry.npmjs.org/socket.io-adapter-mongo/-/socket.io-adapter-mongo-0.1.4.tgz	MIT License
socket.io-client	1.3.6	http://registry.npmjs.org/socket.io-client/-/socket.io-client-1.3.6.tgz	MIT License
socket.io-parser	2.2.4	http://registry.npmjs.org/socket.io-parser/-/socket.io-parser-2.2.4.tgz	MIT License
sqlite3	3070900	http://www.sqlite.org/	None
squashfs	3.0	http://squashfs.sourceforge.net/	GNU General Public License, version 2
squid	2.7.STABLE9	http://www.squid-cache.org/	GNU General Public License, version 2
stack-trace	0.0.9	https://registry.npmjs.org/stack-trace/-/stack-trace-0.0.9.tgz	MIT License
stackless python	2.7.5	http://www.stackless.com/	GNU General Public License, version 2
sticky-session	0.1.0	http://registry.npmjs.org/sticky-session/-/sticky-session-0.1.0.tgz	MIT License
strace	4.5.20	http://sourceforge.net/projects/strace/	The BSD License
stress	1.0.4	http://people.seas.harvard.edu/~apw/stress/	GNU General Public License, version 2
strongswan	4.4.0	http://www.strongswan.org	GNU General Public License, version 2
stunnel	4.31	http://www.stunnel.org/	GNU General Public License, version 2
svg2rlg	0.3	http://code.google.com/p/svg2rlg/	The BSD License
sysstat	9.0.5	http://sebastien.godard.pagesperso-orange.fr/	GNU General Public License, version 2
tar	1.17	http://www.gnu.org/software/tar/	GNU General Public License, version 2
tcpdump	4.0.0	http://www.tcpdump.org/	The BSD License
tinyproxy	1.8.3	https://banu.com/tinyproxy/	GNU General Public License, version 2
type-is	1.6.4	http://registry.npmjs.org/type-is/-/type-is-1.6.4.tgz	MIT License
tz	2014b	http://www.iana.org/time-zones/repository/releases/	GNU General Public License, version 2
u-boot	trunk-2010-03-30	http://www.denx.de/wiki/U-Boot/	GNU General Public License, version 2

Name	Version	URL	License
u-boot	trunk-2010-05-10	http://www.denx.de/wiki/U-Boot/	GNU General Public License, version 2
uClibc	0.9.29	http://www.uclibc.org/	GNU General Public License, version 2
uClibc	0.9.30.2	http://www.uclibc.org/	GNU General Public License, version 2
uci	0.7.5	http://www.openwrt.org/	GNU General Public License, version 2
udev	147	https://launchpad.net/udev	GNU General Public License, version 2
udev	r147	http://www.kernel.org/pub/linux/utils/kernel/hotplug/	GNU General Public License, version 2
usbutils	0.73	http://www.linux-usb.org/	GNU General Public License, version 2
util-linux	2.20	http://www.kernel.org/pub/linux/utils/util-linux/	GNU General Public License, version 2
utils-merge	1.0.0	http://registry.npmjs.org/utils-merge/-/utils-merge-1.0.0.tgz	MIT License
valgrind	3.5.0	http://valgrind.org/	GNU General Public License, version 2
validator	3.41.2	http://registry.npmjs.org/validator/-/validator-3.41.2.tgz	MIT License
vary	1.0.1	http://registry.npmjs.org/vary/-/vary-1.0.1.tgz	MIT License
wanpipe	3.5.18	http://wiki.sangoma.com/wanpipe-linux-drivers	GNU General Public License, version 2
websocket	2.4	https://github.com/nori0428/mod_websocket	MIT License
wget	1.14	http://www.gnu.org/software/wget/	GNU General Public License, version 3
winston	1.0.1	http://registry.npmjs.org/winston/-/winston-1.0.1.tgz	MIT License
wireless_tools	r29	http://www.hpl.hp.com/personal/Jean_Tourrilhes/Linux/Tools.html	GNU General Public License, version 2
wpa_supplicant	2.0	http://hostap.epitest.fi/wpa_supplicant/	The BSD License
ws	0.7.2	http://registry.npmjs.org/ws/-/ws-0.7.2.tgz	MIT License
wuftpd	1.0.21	http://wu-ftpd.therockgarden.ca/	WU-FTPD Software License
XenAPI	None	http://docs.vmd.citrix.com/XenServer/4.0.1/api/client-examples/python/index.html	GNU General Public License, version 2

Name	Version	URL	License
xen	4.1.5	*http://www.xen.org/*	*GNU General Public License, version 2*
xen-crashdump-analyser	20130505	*http://xenbits.xen.org/people/ andrewcoop/*	*GNU General Public License, version 2*
xen-tools	4.2.1	*http://xen-tools.org/software/xen-tools/*	*GNU General Public License, version 2*
xxhashjs	0.1.1	*http://registry.npmjs.org/xxhashjs/-/ xxhashjs-0.1.1.tgz*	*MIT License*
z3c-rml	2.7.2	*http://pypi.python.org/pypi/z3c.rml*	*Zope Public License (ZPL) Version 2.0*
zlib	1.2.8	*http://www.zlib.net/*	*zlib License*
zope-event	4.0.3	*http://pypi.python.org/pypi/zope.event*	*Zope Public License (ZPL) Version 2.0*
zope-interface	4.1.1	*http://pypi.python.org/pypi/zope.interface*	*Zope Public License (ZPL) Version 2.1*
zope-schema	4.4.2	*http://pypi.python.org/pypi/zope.schema*	*Zope Public License (ZPL) Version 2.0*
zwave	0.1	*http://code.google.com/p/open-zwave/*	*GNU Lesser General Public License, version 2.1*

A.3 OSS Licenses

A.3.1 Apache License, Version 2.0

Apache License

Version 2.0, January 2004

http://www.apache.org/licenses

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

You must give any other recipients of the Work or Derivative Works a copy of this License; and

You must cause any modified files to carry prominent notices stating that You changed the files; and

You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

A.3.2 The BSD License

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, and the entire permission notice in its entirety, including the disclaimer of warranties.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,

STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF NOT ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

A.3.3 Creative Commons Attribution-ShareAlike License, version 3.0

Creative Commons

Attribution-ShareAlike 3.0 Unported

CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS LICENSE DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS-IS" BASIS. REATIVE COMMONS MAKES NO WARRANTIES REGARDING THE INFORMATION PROVIDED, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM ITS USE

License

THE WORK (AS DEFINED BELOW) IS PROVIDED UNDER THE TERMS OF THIS CREATIVE COMMONS PUBLIC LICENSE ("CCPL" OR "LICENSE"). THE WORK IS PROTECTED BY COPYRIGHT AND/OR OTHER APPLICABLE LAW. ANY USE OF THE WORK OTHER THAN AS AUTHORIZED UNDER THIS LICENSE OR COPYRIGHT LAW IS PROHIBITED

BY EXERCISING ANY RIGHTS TO THE WORK PROVIDED HERE, YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. TO THE EXTENT THIS LICENSE MAY BE CONSIDERED TO BE A CONTRACT, THE LICENSOR GRANTS YOU THE RIGHTS CONTAINED HERE IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS.

Definitions

1. "Adaptation" means a work based upon the Work, or upon the Work and other pre-existing works, such as a translation, adaptation, derivative work, arrangement of music or other alterations of a literary or artistic work, or phonogram or performance and includes cinematographic adaptations or any other form in which the Work may be recast, transformed, or adapted including in any form recognizably derived from the original, except that a work that constitutes a Collection will not be considered an Adaptation for the purpose of this License. For the avoidance of doubt, where the Work is a musical work, performance or phonogram, the synchronization of the Work in timed-relation with a moving image ("synching") will be considered an Adaptation for the purpose of this License.

2. "Collection" means a collection of literary or artistic works, such as encyclopedias and anthologies, or performances, phonograms or broadcasts, or other works or subject matter other than works listed in Section 1(f) below, which, by reason of the selection and arrangement of their contents, constitute intellectual creations, in which the Work is included in its entirety in unmodified form along with one or more other contributions, each constituting separate and independent works in themselves, which together are assembled into a collective whole. A work that constitutes a Collection will not be considered an Adaptation (as defined below) for the purposes of this License.

3. "Creative Commons Compatible License" means a license that is listed at http://creativecommons.org/ compatiblelicenses that has been approved by Creative Commons as being essentially equivalent to this License, including, at a minimum, because that license: (i) contains terms that have the same purpose, meaning and effect as the License Elements of this License; and, (ii) explicitly permits the relicensing of adaptations of works made available under that license under this License or a Creative Commons jurisdiction license with the same License Elements as this License.

4. "Distribute" means to make available to the public the original and copies of the Work or Adaptation, as appropriate, through sale or other transfer of ownership.

5. "License Elements" means the following high-level license attributes as selected by Licensor and indicated in the title of this License: Attribution, ShareAlike.

6. "Licensor" means the individual, individuals, entity or entities that offer(s) the Work under the terms of this License.

7. "Original Author" means, in the case of a literary or artistic work, the individual, individuals, entity or entities who created the Work or if no individual or entity can be identified, the publisher; and in addition (i) in the case of a performance the actors, singers, musicians, dancers, and other persons who act, sing, deliver, declaim, play in, interpret or otherwise perform literary or artistic works or expressions of folklore; (ii) in the case of a phonogram the producer being the person or legal entity who first fixes the sounds of a performance or other sounds; and, (iii) in the case of broadcasts, the organization that transmits the broadcast.

8. "Work" means the literary and/or artistic work offered under the terms of this License including without limitation any production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression including digital form, such as a book, pamphlet and other writing; a lecture, address, sermon or other work of the same nature; a dramatic or dramatico-musical work; a choreographic work or entertainment in dumb show; a musical composition with or without words; a cinematographic work to which are assimilated works expressed by a process analogous to cinematography; a work of drawing, painting, architecture, sculpture, engraving or lithography; a photographic work to which are assimilated works expressed by a process analogous to photography; a work of applied art; an illustration, map, plan, sketch or three-dimensional work relative to geography, topography, architecture or science; a performance; a broadcast; a phonogram; a compilation of data to the extent it is protected as a copyrightable work; or a work performed by a variety or circus performer to the extent it is not otherwise considered a literary or artistic work.

9. "You" means an individual or entity exercising rights under this License who has not previously violated the terms of this License with respect to the Work, or who has received express permission from the Licensor to exercise rights under this License despite a previous violation.

10. "Publicly Perform" means to perform public recitations of the Work and to communicate to the public those public recitations, by any means or process, including by wire or wireless means or public digital performances; to make available to the public Works in such a way that members of the public may access these Works from a place and at a place individually chosen by them; to perform the Work to the public by any means or process and the communication to the public of the performances of the Work, including by public digital performance; to broadcast and rebroadcast the Work by any means including signs, sounds or images.

11. "Reproduce" means to make copies of the Work by any means including without limitation by sound or visual recordings and the right of fixation and reproducing fixations of the Work, including storage of a protected performance or phonogram in digital form or other electronic medium.

12. Fair Dealing Rights. Nothing in this License is intended to reduce, limit, or restrict any uses free from copyright or rights arising from limitations or exceptions that are provided for in connection with the copyright protection under copyright law or other applicable laws.

13. License Grant. Subject to the terms and conditions of this License, Licensor hereby grants You a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) license to exercise the rights in the Work as stated below:

a. to Reproduce the Work, to incorporate the Work into one or more Collections, and to Reproduce the Work as incorporated in the Collections;

b. to create and Reproduce Adaptations provided that any such Adaptation, including any translation in any medium, takes reasonable steps to clearly label, demarcate or otherwise identify that changes were made to the original Work. For example, a translation could be marked "The original work was translated from English to Spanish," or a modification could indicate "The original work has been modified.";

c. to Distribute and Publicly Perform the Work including as incorporated in Collections; and,

d. to Distribute and Publicly Perform Adaptations

For the avoidance of doubt:

1. Non-waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme cannot be waived, the Licensor reserves the exclusive right to collect such royalties for any exercise by You of the rights granted under this License;

2. Waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme can be waived, the Licensor waives the exclusive right to collect such royalties for any exercise by You of the rights granted under this License; and,

3. Voluntary License Schemes. The Licensor waives the right to collect royalties, whether individually or, in the event that the Licensor is a member of a collecting society that administers voluntary licensing schemes, via that society, from any exercise by You of the rights granted under this License.

The above rights may be exercised in all media and formats whether now known or hereafter devised. The above rights include the right to make such modifications as are technically necessary to exercise the rights in other media and formats. Subject to Section 8(f), all rights not expressly granted by Licensor are hereby reserved.

4. Restrictions. The license granted in Section 3 above is expressly made subject to and limited by the following restrictions:

a. You may Distribute or Publicly Perform the Work only under the terms of this License. You must include a copy of, or the *Uniform Resource Identifier* (URI) for, this License with every copy of the Work You Distribute or Publicly Perform. You may not offer or impose any terms on the Work that restrict the terms of this License or the ability of the recipient of the Work to exercise the rights granted to that recipient under the terms of the License. You may not sublicense the Work. You must keep intact all notices that refer to this License and to the disclaimer of warranties with every copy of the Work You Distribute or Publicly Perform. When You Distribute or Publicly Perform the Work, You may not impose any effective technological measures on the Work that restrict the ability of a recipient of the Work from You to exercise the rights granted to that recipient under the terms of the License. This Section 4(a) applies to the Work as incorporated in a Collection, but this does not require the Collection apart from the Work itself to be made subject to the terms of this License. If You create a Collection, upon notice from any Licensor You must, to the extent practicable, remove from the Collection any credit as required by Section 4(c), as requested. If You create an Adaptation, upon notice from any Licensor You must, to the extent practicable, remove from the Adaptation any credit as required by Section 4(c), as requested.

b. You may Distribute or Publicly Perform an Adaptation only under the terms of: (i) this License; (ii) a later version of this License with the same License Elements as this License; (iii) a Creative Commons jurisdiction

license (either this or a later license version) that contains the same License Elements as this License (e.g., Attribution-ShareAlike 3.0 US)); (iv) a Creative Commons Compatible License. If you license the Adaptation under one of the licenses mentioned in (iv), you must comply with the terms of that license. If you license the Adaptation under the terms of any of the licenses mentioned in (i), (ii) or (iii) (the "Applicable License"), you must comply with the terms of the Applicable License generally and the following provisions: (I) You must include a copy of, or the URI for, the Applicable License with every copy of each Adaptation You Distribute or Publicly Perform; (II) You may not offer or impose any terms on the Adaptation that restrict the terms of the Applicable License or the ability of the recipient of the Adaptation to exercise the rights granted to that recipient under the terms of the Applicable License; (III) You must keep intact all notices that refer to the Applicable License and to the disclaimer of warranties with every copy of the ork as included in the Adaptation You Distribute or Publicly Perform; (IV) when You Distribute or Publicly Perform the Adaptation, You may not impose any effective technological measures on the Adaptation that restrict the ability of a recipient of the Adaptation from You to exercise the rights granted to that recipient under the terms of the Applicable License. This Section 4(b) applies to the Adaptation as incorporated in a Collection, but this does not require the Collection apart from the Adaptation itself to be made subject to the terms of the Applicable License.

c. If You Distribute, or Publicly Perform the Work or any Adaptations or Collections, You must, unless a request has been made pursuant to Section 4(a), keep intact all copyright notices for the Work and provide, reasonable to the medium or means You are utilizing: (i) the name of the Original Author (or pseudonym, if applicable) if supplied, and/or if the Original Author and/or Licensor designate another party or parties (e.g., a sponsor institute, publishing entity, journal) for attribution ("Attribution Parties") in Licensor's copyright notice, terms of service or by other reasonable means, the name of such party or parties; (ii) the title of the Work if supplied; (iii) to the extent reasonably practicable, the URI, if any, that Licensor specifies to be associated with the Work, unless such URI does not refer to the copyright notice or licensing information for the Work; and (iv) , consistent with Section 3(b), in the case of an Adaptation, a credit identifying the use of the Work in the Adaptation (e.g., "French translation of the Work by Original Author," or "Screenplay based on original Work by Original Author"). The credit required by this Section 4(c) may be implemented in any reasonable manner; provided, however, that in the case of a Adaptation or Collection, at a minimum such credit will appear, if a credit for all contributing authors of the Adaptation or Collection appears, then as part of these credits and in a manner at least as prominent as the credits for the other contributing authors. For the avoidance of doubt, You may only use the credit required by this Section for the purpose of attribution in the manner set out above and, by exercising Your rights under this License, You may not implicitly or explicitly assert or imply any connection with, sponsorship or endorsement by the Original Author, Licensor and/or Attribution Parties, as appropriate, of You or Your use of the Work, without the separate, express prior written permission of the Original Author, Licensor and/or Attribution Parties.

d. Except as otherwise agreed in writing by the Licensor or as may be otherwise permitted by applicable law, if You Reproduce, Distribute or Publicly Perform the Work either by itself or as part of any Adaptations or Collections, You must not distort, mutilate, modify or take other derogatory action in relation to the Work which would be prejudicial to the Original Author's honor or reputation. Licensor agrees that in those jurisdictions (e.g. Japan), in which any exercise of the right granted in Section 3(b) of this License (the right to make Adaptations) would be deemed to be a distortion, mutilation, modification or other derogatory action prejudicial to the Original Author's honor and reputation, the Licensor will waive or not assert, as appropriate, this Section, to the fullest extent permitted by the applicable national law, to enable You to reasonably exercise Your right under Section 3(b) of this License (right to make Adaptations) but not otherwise.

5. Representations, Warranties and Disclaimer.

UNLESS OTHERWISE MUTUALLY AGREED TO BY THE PARTIES IN WRITING, LICENSOR OFFERS THE WORK AS-IS AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE WORK, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTIBILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, OR THE ABSENCE OF LATENT OR OTHER DEFECTS, ACCURACY, OR THE PRESENCE OF ABSENCE OF ERRORS, WHETHER OR NOT DISCOVERABLE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO SUCH EXCLUSION MAY NOT APPLY TO YOU.

6. Limitation on Liability. EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW, IN NO EVENT WILL LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF THIS LICENSE OR THE USE OF THE WORK, EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. Termination.

This License and the rights granted hereunder will terminate automatically upon any breach by You of the terms of this License. Individuals or entities who have received Adaptations or Collections from You under this License, however, will not have their licenses terminated provided such individuals or entities remain in full compliance with those licenses. Sections 1, 2, 5, 6, 7, and 8 will survive any termination of this License.

Subject to the above terms and conditions, the license granted here is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, Licensor reserves the right to release the Work under different license terms or to stop distributing the Work at any time; provided, however that any such election will not serve to withdraw this License (or any other license that has been, or is required to be, granted under the terms of this License), and this License will continue in full force and effect unless terminated as stated above.

8. Miscellaneous.

Each time You Distribute or Publicly Perform the Work or a Collection, the Licensor offers to the recipient a license to the Work on the same terms and conditions as the license granted to You under this License.

Each time You Distribute or Publicly Perform an Adaptation, Licensor offers to the recipient a license to the original Work on the same terms and conditions as the license granted to You under this License.

If any provision of this License is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the emainder of the terms of this License, and without further action by the parties to this agreement, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

No term or provision of this License shall be deemed waived and no breach consented to unless such waiver or consent shall be in writing and signed by the party to be charged with such waiver or consent.

This License constitutes the entire agreement between the parties with respect to the Work licensed here. There are no understandings, agreements or representations with respect to the Work not specified here. Licensor shall not be bound by any additional provisions that may appear in any communication from You. This License may not be modified without the mutual written agreement of he Licensor and You.

The rights granted under, and the subject matter referenced, in this License were drafted utilizing the terminology of the Berne Convention for the Protection of Literary and Artistic Works (as amended on September 28, 1979), the Rome Convention of 1961, the WIPO Copyright Treaty of 1996, the WIPO

Performances and Phonograms Treaty of 1996 and the Universal Copyright Convention (as revised on July 24, 1971). These rights and subject matter take effect in the relevant jurisdiction in which the License terms are sought to be enforced according to the corresponding provisions of the implementation of those treaty provisions in the applicable national law. If the standard suite of rights granted under applicable copyright law includes additional rights not granted under this License, such additional rights are deemed to be included in the License; this License is not intended to restrict the license of any rights under applicable law.

Creative Commons Notice

Creative Commons is not a party to this License, and makes no warranty whatsoever in connection with the Work. Creative Commons will not be liable to You or any party on any legal theory for any damages whatsoever, including without limitation any general, special, incidental or consequential damages arising in connection to this license. Notwithstanding the foregoing two (2) sentences, if Creative Commons has expressly identified itself as the Licensor hereunder, it shall have all rights and obligations of Licensor.

Except for the limited purpose of indicating to the public that the Work is licensed under the CCPL, Creative Commons does not authorize the use by either party of the trademark "Creative Commons" or any related trademark or logo of Creative Commons without the prior written consent of Creative Commons. Any permitted use will be in compliance with Creative Commons' then-current trademark usage guidelines, as may be published on its website or otherwise made available upon request from time to time. For the avoidance of doubt, this trademark restriction does not form part of the License.

Creative Commons may be contacted at http://creativecommons.org/.

A.3.4 DropBear License

Dropbear contains a number of components from different sources, hence there are a few licenses and authors involved. All licenses are fairly non-restrictive.

The majority of code is written by Matt Johnston, under the license below.

Portions of the client-mode work are (c) 2004 Mihnea Stoenescu, under the same license:

Copyright (c) 2002-2004 Matt Johnston

Portions copyright (c) 2004 Mihnea Stoenescu

All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT

HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

LibTomCrypt and LibTomMath are written by Tom St Denis, and are .

=====

sshpty.c is taken from OpenSSH 3.5p1,

  Copyright (c) 1995 Tatu Ylonen , Espoo, Finland

             All rights reserved

"As far as I am concerned, the code I have written for this software can be used freely for any purpose. Any derived versions of this   software must be clearly marked as such, and if the derived work is incompatible with the protocol description in the RFC file, it must be called by a name other than "ssh" or "Secure Shell". "

=====

loginrec.c

loginrec.h

atomicio.h

atomicio.c

and strlcat() (included in util.c) are from OpenSSH 3.6.1p2, and are licensed under the 2 point license.

loginrec is written primarily by Andre Lucas, atomicio.c by Theo de Raadt.

strlcat() is (c) Todd C. Miller

=====

Import code in keyimport.c is modified from PuTTY's import.c, licensed as follows:

PuTTY is copyright 1997-2003 Simon Tatham.

Portions copyright Robert de Bath, Joris van Rantwijk, Delian Delchev, Andreas Schultz, Jeroen Massar, Wez Furlong, Nicolas Barry, Justin Bradford, and CORE SDI S.A.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

A.3.5 GNU General Public License, version 2

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program

proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

A.3.6 GNU GENERAL PUBLIC LICENSE

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

The modified work must itself be a software library.

You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

IIf a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted,

regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under   Sections 1 and 2 above); and, if the work is an executable linked   with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the   user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

Use a suitable shared library mechanism for linking with the   Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

 Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided

that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

Each time you redistribute the Library (or any work based on the library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only

in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

A.3.7 GNU Lesser General Public License 2.1

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

 Copyright (C) 1991, 1999 Free Software Foundation, Inc.

 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

 Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away yourfreedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages-- typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

Creative Commons Legal Code CC0 1.0 Universal CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS DOCUMENT DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS-IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER.

This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

The modified work must itself be a software library.

You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under   Sections 1 and 2 above); and, if the work is an executable linked   with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the   user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

Use a suitable shared library mechanism for linking with the   Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

 Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

 Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if

you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

Each time you redistribute the Library (or any work based on the library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

A.3.8 CCO 1.0 Universal

Creative Commons Legal Code

CC0 1.0 Universal

CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDELEGAL SERVICES. DISTRIBUTION OF THIS DOCUMENT DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS-IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER.

Statement of Purpose

The laws of most jurisdictions throughout the world automatically confer exclusive Copyright and Related Rights (defined below) upon the creator and subsequent owner(s) (each and all, an "owner") of an original work of authorship and/or a database (each, a "Work").

Certain owners wish to permanently relinquish those rights to a Work for the purpose of contributing to a commons of creative, cultural and scientific works ("Commons") that the public can reliably and without fear of later claims of infringement build upon, modify, incorporate in other works, reuse and redistribute as freely as possible in any form whatsoever and for any purposes, including without limitation commercial purposes. These owners may contribute to the Commons to promote the ideal of a free culture and the further production of creative, cultural and scientific works, or to gain reputation or greater distribution for their Work in part through the use and efforts of others.

For these and/or other purposes and motivations, and without any expectation of additional consideration or compensation, the person associating CC0 with a Work (the "Affirmer"), to the extent that he or she is an owner of Copyright and Related Rights in the Work, voluntarily elects to apply CC0 to the Work and publicly distribute the Work under its terms, with knowledge of his or her Copyright and Related Rights in the Work and the meaning and intended legal effect of CC0 on those rights.

Copyright and Related Rights. A Work made available under CC0 may be protected by copyright and related or neighboring rights ("Copyright and Related Rights"). Copyright and Related Rights include, but are not limited to, the following:

the right to reproduce, adapt, distribute, perform, display, communicate, and translate a Work;

moral rights retained by the original author(s) and/or performer(s);

publicity and privacy rights pertaining to a person's image or likeness depicted in a Work;

rights protecting against unfair competition in regards to a Work, subject to the limitations in paragraph 4(a), below;

rights protecting the extraction, dissemination, use and reuse of data in a Work;

database rights (such as those arising under Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, and under any national implementation thereof, including any amended or successor version of such directive); and

other similar, equivalent or corresponding rights throughout the world based on applicable law or treaty, and any national implementations thereof.

Waiver. To the greatest extent permitted by, but not in contravention of, applicable law, Affirmer hereby overtly, fully, permanently, irrevocably and unconditionally waives, abandons, and surrenders all of Affirmer's Copyright and Related Rights and associated claims and causes of action, whether now known or unknown (including existing as well as future claims and causes of action), in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "Waiver"). Affirmer makes the Waiver for the benefit of each member of the public at large and to the detriment of Affirmer's heirs and successors, fully intending that such Waiver shall not be subject to revocation, rescission, cancellation, termination, or any other legal or equitable action to disrupt the quiet enjoyment of the Work by the public as contemplated by Affirmer's express Statement of Purpose.

Public License Fallback. Should any part of the Waiver for any reason be judged legally invalid or ineffective under applicable law, then the Waiver shall be preserved to the maximum extent permitted taking into account Affirmer's express Statement of Purpose. In addition, to the extent the Waiver is so judged Affirmer hereby grants to each affected person a royalty-free, non transferable, non sublicensable, non exclusive, irrevocable and unconditional license to exercise Affirmer's Copyright and Related Rights in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "License"). The License shall be deemed effective as of the date CC0 was applied by Affirmer to the Work. Should any part of the License for any reason be judged legally invalid or ineffective under applicable law, such partial invalidity or ineffectiveness shall not invalidate the remainder of the License, and in such case Affirmer hereby affirms that he or she will not (i) exercise any of his or her remaining Copyright and Related Rights in the Work or (ii) assert any associated claims and causes of action with respect to the Work, in either case contrary to Affirmer's express Statement of Purpose.

Limitations and Disclaimers.

No trademark or patent rights held by Affirmer are waived, abandoned, surrendered, licensed or otherwise affected by this document.

Affirmer offers the Work as-is and makes no representations or warranties of any kind concerning the Work, express, implied, statutory or otherwise, including without limitation warranties of title, merchantability, fitness for a particular purpose, non infringement, or the absence of latent or other defects, accuracy, or the present or absence of errors, whether or not discoverable, all to the greatest extent permissible under applicable law.

Affirmer disclaims responsibility for clearing rights of other persons that may apply to the Work or any use thereof, including without limitation any person's Copyright and Related Rights in the Work. Further, Affirmer disclaims responsibility for obtaining any necessary consents, permissions or other rights required for any use of the Work.

Affirmer understands and acknowledges that Creative Commons is not a party to this document and has no duty or obligation with respect to this CC0 or use of the Work.

A.3.9 GNU General Public License, version 3

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

 When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution andmodification follow.

TERMS AND CONDITIONS

Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case o interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files forthe work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing i not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of echnological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

a) The work must carry prominent notices stating that you modified it, and giving a relevant date.

b) The work must carry prominent notices stating that it is released under this License and any conditions added under section

7. This requirement modifies the requirement in section 4 to "keep intact all notices".

c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.

d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules andprotocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or

b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or

c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or

d) Limiting the use for publicity purposes of names of licensors or authors of the material; or

e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or

f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives

whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise ofights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any

of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE

PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OFSUCH DAMAGES.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

> END OF TERMS AND CONDITIONS

A.3.10 ISC License

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OFTHIS SOFTWARE.

A.3.11 GNU Lesser General Public License, version 3.0

GNU LESSER GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc.

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This version of the GNU Lesser General Public License incorporates the terms and conditions of version 3 of the GNU General PublicLicense, supplemented by the additional permissions listed below.

Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library. Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

2. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or

b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.

b) Accompany the object code with a copy of the GNU GPL and this license document.

4. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each ofthe following:

a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.

b) Accompany the Combined Work with a copy of the GNU GPL and this license document.

c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.

d) Do one of the following:

0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.

1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.

e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.

b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you

have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

A.3.12 GNU General Public License 2.0

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Library General Public License, applies to some specially designated Free Software Foundation software, and to any other libraries whose authors decide to use it. You can use it for your libraries, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, thus in effect making the program proprietary software. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License, which was designed for utility programs. This license, the GNU Library General Public License, applies to certain designated libraries. This license is quite different from the ordinary one; be sure to read it in full, and don't assume that anything in it is the same as in the ordinary license.

The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library,and the ordinary General Public License treats it as such.

Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library which contains notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Library General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1   You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the

    You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2   You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

    The modified work must itself be a software library.

    You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

    You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

    IIf, a facility in the modified Library, refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

    (For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

    These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

    Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

    In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3   You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer

version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4 You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5 A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6 As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under   Sections 1 and 2 above); and, if the work is an executable linked   with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the   user can modify the Library and then relink to produce a modified executable containing the modified Library.

(It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7   You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8   You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9   You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10 Each time you redistribute the Library (or any work based on the library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11 If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who

receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12 If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13 The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14 If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

 NO WARRANTY

15 BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY

TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

A.3.13 GNU Lesser General Public License, version 2.0

GNU LIBRARY GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1991 Free Software Foundation, Inc. 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the library GPL. It is numbered 2 because it goes with version 2 of the ordinary GPL.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Library General Public License, applies to some specially designated Free Software Foundation software, and to any other libraries whose authors decide to use it. You can use it for your libraries, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library, or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link a program with the library, you must provide complete object files to the recipients so that they can relink them with the library, after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

Our method of protecting your rights has two steps: (1) copyright the library, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the library.

Also, for each distributor's protection, we want to make certain that everyone understands that there is no warranty for this free library. If the library is modified by someone else and passed on, we want its recipients to know that what they have is not the original version, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that companies distributing free software will individually obtain patent licenses, thus in effect transforming the program into proprietary software. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License, which wa designed for utility programs. This license, the GNU Library General Public License, applies to certain designated libraries. This license is quite different from the ordinary one; be sure to read it in full, and don't assume that anything in it is the same as in the ordinary license.

The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the

library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Library General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

* a) The modified work must itself be a software library.

* b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

* c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

* d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other han as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest you rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, s the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

* a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

* b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

* c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

* d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

* a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

* b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by

law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose thatchoice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Library General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

A.3.14 GNU Lesser General Public License, version 2.1

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.

Preamble

The licenses for most software are designed to take away yourfreedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages-- typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

A.3.15 GNU LESSER GENERAL PUBLIC LICENSE

ERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1   You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

    You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2   You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

    a. The modified work must itself be a software library.

    b. You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

    c. You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d. If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3   You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4   You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5   A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6   As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a. Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under   Sections 1 and 2 above); and, if the work is an executable linked   with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the   user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b. Use a suitable shared library mechanism for linking with the   Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c. Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d. If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e. Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7 You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a. Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b. Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8 You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9 You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10 Each time you redistribute the Library (or any work based on the library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11 If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12 If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13 The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14 If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15 BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

A.3.16 MIT License

Permission is hereby granted, without written agreement and without icense or royalty fees, to use, copy, modify, and distribute this software and its documentation for any purpose, provided that the above copyright notice and the following two paragraphs appear in all copies of this software.

IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS SOFTWARE AND ITS DOCUMENTATION, EVEN IF THE COPYRIGHT HOLDER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE COPYRIGHT HOLDER SPECIFICALLY DISCLAIMS ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE SOFTWARE PROVIDED HEREUNDER IS ON AN "AS IS" BASIS, AND THE COPYRIGHT HOLDER HAS NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

A.3.17 Mozilla Public License, version 2

Version 2.0

1. Definitions

1.1. Contributor means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.

1.2. Contributor Versionâ means the combination of the Contributions of others (if any) used by a Contributor and that particular Contribution.

1.3. Contribution means Covered Software of a particular Contributor.

1.4. Covered Software means Source Code Form to which the initial Contributor has attached the notice in Exhibit A, the Executable Form of such Source Code Form, and Modifications of such Source Code Form, in each case including portions thereof.

1.5. Incompatible With Secondary Licenses means

1. that the initial Contributor has attached the notice described in Exhibit B to the Covered Software; or

2. that the Covered Software was made available under the terms of version 1.1 or earlier of the License, but not also under the terms of a Secondary License.

1.6. Executable Form means any form of the work other than Source Code Form.

1.7. Larger Work means a work that combines Covered Software with other material, in a separate file or files, that is not Covered Software.

1.8. License means this document.

1.9. Licensable means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently, any and all of the rights conveyed by this License.

1.10. Modifications means any of the following:

1. any file in Source Code Form that results from an addition to, deletion from, or modification of the contents of Covered Software; or

2. any new file in Source Code Form that contains any Covered Software.

1.11. Patent Claims of a Contributor means any patent claim(s), including without limitation, method, process, and apparatus claims, in any patent Licensable by such Contributor that would be infringed, but for the grant of the License, by the making, using, selling, offering for sale, having made, import, or transfer of either its Contributions or its Contributor Version.

1.12. Secondary License means either the GNU General Public License, Version 2.0, the GNU Lesser General Public License, Version 2.1, the GNU Affero General Public License, Version 3.0, or any later versions of those licenses.

1.13. Source Code Form means the form of the work preferred for making modifications.

1.14. You (orYour) means an individual or a legal entity exercising rights under this License. For legal entities, You includes any entity that controls, is controlled by, or is under common control with You. For purposes of this definition, control means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

2. License Grants and Conditions

2.1. Grants

Each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

1. under intellectual property rights (other than patent or trademark) Licensable by such Contributor to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit its Contributions, either on an unmodified basis, with Modifications, or as part of a Larger Work; and

2. under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor Version.

2.2. Effective Date

The licenses granted in Section 2.1 with respect to any Contribution become effective for each Contribution on the date the Contributor first distributes such Contribution.

2.3. Limitations on Grant Scope

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

1. for any code that a Contributor has removed from Covered Software; or

2. for infringements caused by: (i) Your and any other third partyâ€™s modifications of Covered Software, or (ii) the combination of its Contributions with other software (except as part of its Contributor Version); or

3. under Patent Claims infringed by Covered Software in the absence of its Contributions.

This License does not grant any rights in the trademarks, service marks, or logos of any Contributor (except as may be necessary to comply with the notice requirements in Section 3.4).

2.4. Subsequent Licenses

No Contributor makes additional grants as a result of Your choice to distribute the Covered Software under a subsequent version of this License (see Section 10.2) or under the terms of a Secondary License (if permitted under the terms of Section 3.3).

2.5. Representation

Each Contributor represents that the Contributor believes its Contributions are its original creation(s) or it has sufficient rights to grant the rights to its Contributions conveyed by this License.

2.6. Fair Use

This License is not intended to limit any rights You have under applicable copyright doctrines of fair use, fair dealing, or other equivalents.

2.7. Conditions

Sections 3.1, 3.2, 3.3, and 3.4 are conditions of the licenses granted in Section 2.1.

3. Responsibilities

3.1. Distribution of Source Form

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipientsâ€™ rights in the Source Code Form.

3.2. Distribution of Executable Form

If You distribute Covered Software in Executable Form then:

1. such Covered Software must also be made available in Source Code Form, as described in Section 3.1, and You must inform recipients of the Executable Form how they can obtain a copy of such Source Code Form by reasonable means in a timely manner, at a charge no more than the cost of distribution to the recipient; and

2. You may distribute such Executable Form under the terms of this License, or sublicense it under different terms, provided that the license for the Executable Form does not attempt to limit or alter the recipientsâ€™ rights in the Source Code Form under this License.

3.3. Distribution of a Larger Work

You may create and distribute a Larger Work under terms of Your choice, provided that You also comply with the requirements of this License for the Covered Software. If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

3.4. Notices

You may not remove or alter the substance of any license notices (including copyright notices, patent notices, disclaimers of warranty, or limitations of liability) contained within the Source Code Form of the Covered Software, except that You may alter any license notices to the extent required to remedy known factual inaccuracies.

3.5. Application of Additional Terms

You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, You may do so only on Your own behalf, and not on behalf of any Contributor. You must make it absolutely clear that any such warranty, support, indemnity, or liability obligation is offered by You alone, and You hereby agree to indemnify every Contributor for any liability incurred by such Contributor as a result of warranty, support, indemnity or liability terms You offer. You may include additional disclaimers of warranty and limitations of liability specific to any jurisdiction.

4. Inability to Comply Due to Statute or Regulation

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Software due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be placed in a text file included with all distributions of the Covered Software under this License. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

5. Termination

5.1. The rights granted under this License will terminate automatically if You fail to comply with any of its terms. However, if You become compliant, then the rights granted under this License from a particular Contributor are reinstated (a) provisionally, unless and until such Contributor explicitly and finally terminates Your grants, and (b) on an ongoing basis, if such Contributor fails to notify You of the non-compliance by some reasonable means prior to 60 days after You have come back into compliance. Moreover, Your grants from a particular Contributor are reinstated on an ongoing basis if such Contributor notifies You of the non-compliance by some reasonable means, this is the first time You have received notice of non-compliance with this License from such Contributor, and You become compliant prior to 30 days after Your receipt of the notice.

5.2. If You initiate litigation against any entity by asserting a patent infringement claim (excluding declaratory judgment actions, counter-claims, and cross-claims) alleging that a Contributor Version directly or indirectly infringes any patent, then the rights granted to You by any and all Contributors for the Covered Software under Section 2.1 of this License shall terminate.

5.3. In the event of termination under Sections 5.1 or 5.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or Your distributors under this License prior to termination shall survive termination.

6. Disclaimer of Warranty

Covered Software is provided under this License on an â€œas isâ€‌basis, without warranty of any kind, either expressed, implied, or statutory, including, without limitation, warranties that the Covered Software is free of defects, merchantable, fit for a particular purpose or non-infringing. The entire risk as to the quality and performance of the Covered Software is with You. Should any Covered Software prove defective in any respect, You (not any Contributor) assume the cost of any necessary servicing, repair, or correction. This disclaimer of warranty constitutes an essential part of this License. No use of any Covered Software is authorized under this License except under this disclaimer.

7. Limitation of Liability

Under no circumstances and under no legal theory, whether tort (including negligence), contract, or otherwise, shall any Contributor, or anyone who distributes Covered Software as permitted above, be liable to You for any direct, indirect, special, incidental, or consequential damages of any character including, without limitation, damages for lost profits, loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses, even if such party shall have been informed of the possibility of such damages. This limitation of liability shall not apply to liability for death or personal injury resulting from such partyâ€™s negligence to the extent applicable law prohibits such limitation. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion and limitation may not apply to You.

8. Litigation

Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party's ability to bring cross-claims or counter-claims.

9. Miscellaneous

This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not be used to construe this License against a Contributor.

10. Versions of the License

10.1. New Versions

Mozilla Foundation is the license steward. Except as provided in Section 10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

10.2. Effect of New Versions

You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

10.3. Modified Versions

If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

10.4. Distributing Source Code Form that is Incompatible With Secondary Licenses

If You choose to distribute Source Code Form that is Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

Exhibit A - Source Code Form License Notice

This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at http://mozilla.org/MPL/2.0/. You may add additional accurate notices of copyright ownership.

Exhibit B - Incompatible With Secondary Licenses Notice

This Source Code Form is Incompatible With Secondary Licenses, as defined by the Mozilla Public License, v. 2.0.

A.3.18 The Open LDAP Public License

The OpenLDAP Public License

Version 2.8, 17 August 2003

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

1. Redistributions in source form must retain copyright statements and notices,

2. Redistributions in binary form must reproduce applicable copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and

3. Redistributions must contain a verbatim copy of this document.

The OpenLDAP Foundation may revise this license from time to time. Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license.

THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders.

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

Copyright 1999-2003 The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved. Permission to copy and distribute verbatim copies of this document is granted.

A.3.19 OpenSSL License

OpenSSL License

Copyright (c) 1998-2000 The OpenSSL Project. All rights reserved. Redistribution and use in source and binary forms with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

 3. All advertising materials mentioning features or use of this software must display the following acknowledgment: This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org)

4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contac openssl-core@openssl.org

5. Products derived from this software may not be called "OpenSSL" nor may OpenSSL" appear in their names without prior written permission of the OpenSSL Project.

6. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes oftware written by Tim Hudson (tjh@cryptsoft.com).

A.3.20 WU-FTPD Software License

WU-FTPD SOFTWARE LICENSE

Use, modification, or redistribution (including distribution of any modified or derived work) in any form, or on any medium, is permitted only if all the following conditions are met:

1. Redistributions qualify as "freeware" or "Open Source Software" under the following terms:

a. Redistributions are made at no charge beyond the reasonable cost of materials and delivery. Where redistribution of this software is as part of a larger package or combined work, this restriction applies only to the costs of materials and delivery of this software, not to any other costs associated with the larger package or combined work.

b. Redistributions are accompanied by a copy of the Source Code or by an irrevocable offer to provide a copy of the Source Code for up to three years at the cost of materials and delivery. Such redistributions must allow further use, modification, and redistribution of the Source Code under substantially the same terms as this license. For the purposes of redistribution "Source Code" means all files included in the original distribution, including all modifications or additions, on a medium and in a form allowing fully working executable programs to be produced.

 2. Redistributions of Source Code must retain the copyright notices as they appear in each Source Code file and the COPYRIGHT file, these license terms, and the disclaimer/limitation of liability set forth as paragraph 6 below.

3. Redistributions in binary form must reproduce the Copyright Notice, these license terms, and the disclaimer/limitation of liability set forth as paragraph 6 below, in the documentation and/or other materials provided with the distribution. For the purposes of binary distribution the"Copyright Notice" refers to the following language:

Copyright (c) 1999,2000,2001 WU-FTPD Development Group.

All rights reserved.

Portions Copyright (c) 1980, 1985, 1988, 1989, 1990, 1991, 1993, 1994

The Regents of the University of California.

Portions Copyright (c) 1993, 1994 Washington University in Saint Louis.

Portions Copyright (c) 1996, 1998 Berkeley Software Design, Inc.

Portions Copyright (c) 1998 Sendmail, Inc.

Portions Copyright (c) 1983, 1995, 1996, 1997 Eric P. Allman.

Portions Copyright (c) 1989 Massachusetts Institute of Technology.

Portions Copyright (c) 1997 Stan Barber.

Portions Copyright (c) 1991, 1992, 1993, 1994, 1995, 1996, 1997 Free Software Foundation, Inc.

Portions Copyright (c) 1997 Kent Landfield.

Use and distribution of this software and its source code are governed by the terms and conditions of the WU-FTPD Software License ("LICENSE").

If you did not receive a copy of the license, it may be obtained online at http://www.wu-ftpd.org/license.html

4.   All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product includes software developed by the WU-FTPD Development Group, the Washington University at Saint Louis, Berkeley Software Design, Inc., and their contributors."

5.   Neither the name of the WU-FTPD Development Group, nor the names of any copyright holders, nor the names of any contributors may be used to endorse or promote products derived from this software without specific prior written permission. The names "wuftpd" and "wu-ftpd" are trademarks of the WU-FTPD Development Group and the Washington University at Saint Louis.

6.   Disclaimer/Limitation of Liability:

THIS SOFTWARE IS PROVIDED BY THE WU-FTPD DEVELOPMENT GROUP, THE COPYRIGHT HOLDERS, AND CONTRIBUTORS, "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE WU-FTPD DEVELOPMENT GROUP, THE COPYRIGHT HOLDERS, OR CONTRIBUTORS, BE LIABLE FOR ANY DIRECT, NDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7.   USE, MODIFICATION, OR REDISTRIBUTION, OF THIS SOFTWARE IMPLIES   ACCEPTANCE OF ALL TERMS AND CONDITIONS OF THIS LICENSE.

A.3.21 zlib License

Copyright (C) 1995-2005 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.

2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.

3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly Mark Adler

jloup@gzip.org, madler@alumni.caltech.edu

A.3.22 Python License, Version 2 (Python-2.0)

PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2

------ --

This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation.

Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee.

In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python.

PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON,OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

This License Agreement will automatically terminate upon a material breach of its terms and conditions.

Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSFtrademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement.

A.3.23 BEOPEN.COM LICENSE AGREEMENT FOR PYTHON 2.0

BEOPEN PYTHON OPEN SOURCE LICENSE AGREEMENT VERSION 1

This LICENSE AGREEMENT is between BeOpen.com ("BeOpen"), having an office at 160 Saratoga Avenue, Santa Clara, CA 95051, and the Individual or Organization ("Licensee") accessing and otherwise using this software in source or binary form and its associated documentation ("the Software").

Subject to the terms and conditions of this BeOpen Python License Agreement, BeOpen hereby grants Licensee a non-exclusive,royalty-free, world-wide license to reproduce, analyze, test, perform   and/or display publicly, prepare derivative works, distribute, and otherwise use the Software alone or in any derivative version, provided, however, that the BeOpen Python License is retained in the Software, alone or in any derivative version prepared by Licensee.

BeOpen is making the Software available to Licensee on an "AS IS" basis. BEOPEN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, BEOPEN MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

BEOPEN SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THE SOFTWARE, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

This License Agreement will automatically terminate upon a material breach of its terms and conditions.

This License Agreement shall be governed by and interpreted in all respects by the law of the State of California, excluding conflict of law provisions. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between BeOpen and Licensee. This License Agreement does not grant permission to use BeOpen trademarks or trade names in a trademark sense to endorse or promote products or services of Licensee, or any third party. As an exception, the "BeOpen Python" logos available at http://www.pythonlabs.com/logos.html may be used according to the permissions granted on that web page.

By copying, installing or otherwise using the software, Licensee agrees to be bound by the terms and conditions of this License Agreement.

A.3.24 CNRI OPEN SOURCE LICENSE AGREEMENT (for Python 1.6b1)

IMPORTANT: PLEASE READ THE FOLLOWING AGREEMENT CAREFULLY.

BY CLICKING ON "ACCEPT" WHERE INDICATED BELOW, OR BY COPYING, INSTALLING OR OTHERWISE USING PYTHON 1.6, beta 1 SOFTWARE, YOU ARE DEEMED TO HAVE AGREED TO THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT.

This LICENSE AGREEMENT is between the Corporation for National Research Initiatives, having an office at 1895 Preston White Drive, Reston, VA 20191 ("CNRI"), and the Individual or Organization   ("Licensee") accessing and otherwise using Python 1.6, beta 1 software in source or binary form and its associated documentation,as released at the www.python.org Internet site on August 4, 2000 ("Python 1.6b1").

Subject to the terms and conditions of this License Agreement, CNRI hereby grants Licensee a non-exclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 1.6b1 alone or in any derivative version, provided, however, that CNRIs License Agreement is retained in Python 1.6b1, alone or in any derivative version prepared by Licensee.

Alternately, in lieu of CNRIs License Agreement, Licensee may substitute the following text (omitting the quotes): "Python 1.6, beta 1, is made available subject to the terms and conditions in CNR Is License Agreement. This Agreement may be located on the Internet using the following unique, persistent identifier (known as a handle): 1895.22/1011. This Agreement may also be obtained from a proxy server on the Internet using the URL:http://hdl.handle.net/1895.22/1011".

In the event Licensee prepares a derivative work that is based on or incorporates Python 1.6b1 or any part thereof, and wants to make the derivative work available to the public as provided herein, then Licensee hereby agrees to indicate in any such work the nature of the modifications made to Python 1.6b1.

CNRI is making Python 1.6b1 available to Licensee on an "AS IS" basis. CNRI MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, CNRI MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 1.6b1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

CNRI SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING PYTHON 1.6b1,   OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

This License Agreement will automatically terminate upon a material breach of its terms and conditions.

This License Agreement shall be governed by and interpreted in all respects by the law of the State of Virginia, excluding conflict of law provisions. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between CNRI and Licensee. This License Agreement does not grant permission to use CNRI trademarks or trade name in a trademark   sense to endorse or promote products or services of Licensee, or any third party.

By clicking on the "ACCEPT" button where indicated, or by copying, installing or otherwise using Python 1.6b1, Licensee agrees to be bound by the terms and conditions of this License Agreement.

ACCEPT

A.3.25 CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2

Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Stichting Mathematisch Centrum or CWI not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA

OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

A.3.26 Zope Public License (ZPL) Version 2.0

Zope Public License (ZPL) Version 2.0

This software is Copyright (c) Zope Corporation (tm) and Contributors. All rights reserved.

This license has been certified as open source. It has also been designated as GPL compatible by the Free Software Foundation (FSF).

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the, following conditions are met:

Redistributions in source code must retain the above copyright notice, this list of conditions, and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.

The name Zope Corporation (tm) must not be used to endorse or promote products derived from this software without prior written permission from Zope Corporation.

The right to distribute this software or to use it for any purpose does not give you the right to use Servicemarks (sm) orTrademarks (tm) of Zope Corporation. Use of them is covered in a separate agreement (see http://www.zope.com/Marks).

If any files are modified, you must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

Disclaimer

THIS SOFTWARE IS PROVIDED BY ZOPE CORPORATION ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL ZOPE CORPORATION OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO,PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This software consists of contributions made by Zope Corporation and many individuals on behalf of Zope Corporation. Specific attributions are listed in the accompanying credits file.

A.3.27 Zope Public License (ZPL) Version 2.1

Zope Public License (ZPL) Version 2.1

A copyright notice accompanies this license document that identifies the copyright holders.

This license has been certified as open source. It has also been designated as GPL compatible by the Free Software Foundation (FSF).

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the, following conditions are met:

Redistributions in source code must retain the above copyright notice, this list of conditions, and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.

The name Zope Corporation (tm) must not be used to endorse or promote products derived from this software without prior written permission from Zope Corporation.

The right to distribute this software or to use it for any purpose does not give you the right to use Servicemarks (sm) orTrademarks (tm) of Zope Corporation. Use of them is covered in a separate agreement (see http://www.zope.com/Marks).

If any files are modified, you must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

Disclaimer

THIS SOFTWARE IS PROVIDED BY ZOPE CORPORATION ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL ZOPE CORPORATION OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO,PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.