

MANUALE DELL'UTENTE

DUAL DRIVE NETWORK CENTER

EXTERNAL REMOVABLE DUAL NETWORK HARD DRIVE / 3.5" / GIGABIT LAN / USB 2.0 HOST



Gentile acquirente,

La ringraziamo di aver acquistato l'hard disk di rete **Freecom Dual Drive Network Center**. Il Centro di rete di Freecom Le consentirà di gestire facilmente la memoria di rete ed inoltre potrà utilizzare il Suo nuovo dispositivo come media server DLNA/UPnP e come client download torrent.

Si prega di notare che questo manuale contiene indicazioni generali e viene utilizzato per più prodotti Freecom. Le immagini di prodotto rappresentate in questo manuale possono essere diverse dal prodotto che avete acquistato.

Freecom Technologies GmbH • Germany www.freecom.com

Contenuto della confezione

Si prega di controllare il contenuto della confezione. Tutti gli articoli facenti parte del corredo di consegna sono elencati sul retro della confezione.



Avete bisogno di aiuto? Avete domande?

Avete domande inerenti l'uso di questo prodotto, cercate informazioni su altri prodotti Freecom o avete bisogno di supporto? Rivogetevi al punto di servizio per clienti Freecom del vostro paese. Potete trovare ulteriori informazioni in proposito sotto www.freecom.com.

Freecom vi offre un illimitato supporto Helpdesk gratuito.



Attenzione!

Tutti i diritti riservati. I prodotti citati in questo manuale sono utilizzati meramente a scopo identificativo e possono essere marchi commerciali o marchi commerciali registrati dei rispettivi proprietari. Il drive è stato concepito per uso domestico o per l'ufficio.

L'unità è conforme a EN55022 classe B.

Freecom non è responsabile per eventuali danni, perdite di dati o danni derivanti di qualsiasi tipo (inclusi, senza limitazione, danni per perdita di profitto economico, interruzione dell'attività, perdita di informazioni azien dall'eperdite economiche) derivanti dall'impiego o dall'impossibilità di impiego del prodotto Freecom in questione, anche qualora Freecom sia stata informata della possibilità di tali danni.

Ci riserviamo il diritto di aggiornare i nostri prodotti in conformità ai nuovi sviluppi tecnologici.



Sommario

Informazioni generali

Requisiti dei sistemapagina	4
Misure precauzionalipagina	5
Freecom Dual Drive Network Center - Schema del setuppagina	6
Capitolo	
Installazione dell'hardwarepagina	7
Capitolo	
Uso della modalità LANpagina	9
Capitolo	
Installazione del softwarepagina	15
Capitolo	
Accesso al Dual Drive Network Centerpagina	18
Capitolo	
Configurazione di Freecom Dual Drive Network Centerpagina	22
Capitolo	
Funzioni del Dual Drive Network Centerpagina	24
Capitolo	
L'assistente Freecom Network Storagepagina	51

© 2010 Freecom Technologies



Informazioni generali

I seguenti requisiti dell'hardware e del software devono essere soddisfatti per garantire un funzionamento corretto.

Requisiti del sistema

Per l'impiego di Freecom Dual Drive Network Center sono necessari i seguenti componenti:

PC:

- Intel Pentium III / AMD Duron 900 MHz o superiore
- 256 MB RAM (Vista / 7: 512 MB RAM) o superiore
- LAN (collegamento consigliato: 1000Base -T Full Duplex)
- Unità CD-ROM
- Connessione Internet per registrare online la garanzia e per scaricare il software aggiornato
- Sistema operativo: Windows XP, Windows Vista, Windows 7

Mac:

- PowerPC G4/G5 o Intel Mac
- 256 MB RAM o superiore
- LAN (collegamento consigliato: 1000Base -T Full Duplex)
- Unità CD-ROM
- Connessione Internet per registrare online la garanzia e per scaricare il software aggiornato
- Sistema operativo: Mac OS X v10.4 o superiore

Il Freecom Dual Drive Network Center si può usare da subito perché è già formattato e configurato come RAID 0. In tal modo si ha a disposizione quasi tutta la memoria fisica. Se si imposta il valore su Massima Protezione Dati, allora è preferibile impostare la configurazione su RAID 1. Nella modalità "RAID 1" si ha a disposizione solamente la metà della memoria fisica perché i due dischi rigidi si fanno da specchio. Nel caso in cui un disco rigido dovesse danneggiarsi, i dati si possono recuperare dal secondo. Ulteriori informazioni su come configurare i dischi rigidi si trovano al capitolo "Configurazione dei dischi rigidi" del manuale.



Misure precauzionali

Per garantire il corretto funzionamento di Freecom Dual Drive Network Center, prestare attenzione alle seguenti avvertenze. In caso di mancata osservanza, la garanzia potrebbe decadere e l'Freecom Dual Drive Network Center potrebbe subire danneggiamenti.

- Impedire che il Freecom Dual Drive Network Center cada o venga esposto ad altri tipi di urti meccanici, in quanto ciò potrebbe causare una perdita di dati e un danneggiamento dell'Freecom Dual Drive Network Center.
- Non impiegare il Freecom Dual Drive Network Center se la temperatura ambiente è inferiore a 10 °C o superiore a 35 °C.
- Se il Freecom Dual Drive Network Center viene trasportato da un ambiente freddo a un ambiente a temperatura maggiore, permettere al drive di raggiungere la temperatura ambiente prima di metterlo in funzione. In caso contrario si produce una condensa all'interno dell'alloggiamento del drive che a sua volta potrebbe causare un funzionamento scorretto del drive.
- Non appoggiare liquidi o bevande sull'Freecom Dual Drive Network Center. Se vengono versati dei liquidi e questi entrano in contatto con le parti elettroniche all'interno dell'alloggiamento del drive, il drive subisce un danneggiamento e non funziona correttamente.
- Non impiegare l'Freecom Dual Drive Network Center in un ambiente con molta polvere.
 Troppa polvere all'interno dell'alloggiamento potrebbe danneggiare le parti elettroniche interne e causare un funzionamento scorretto del drive.
- Utilizzare esclusivamente l'alimentatore in dotazione con l'Freecom Dual Drive Network Center.
- L'apertura dell'Freecom Dual Drive Network Center fa decadere la garanzia.



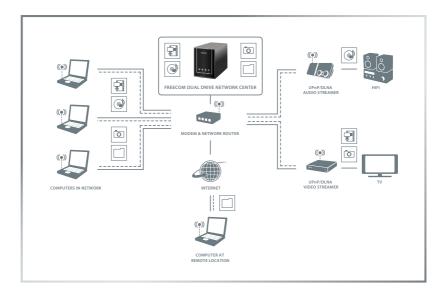
Se durante l'installazione o la configurazione dell'Dual Drive Network Center avete bisogno di aiuto o avete domande, vi preghiamo di rivolgervi al servizio clienti Freecom del vostro paese. Altre informazioni in proposito si trovano sotto www.freecom.com.

Freecom vi offre un illimitato supporto Helpdesk gratuito.





Schema per l'installazione di Freecom Dual Drive Network Center



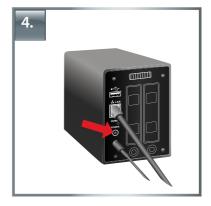


Capitolo: Installazione hardware









- 1. Collegare il connettore del cavo* all'Freecom Dual Drive Network Center.
- 2. **Eventualmente:** Collegare il cavo dell'alimentatore all'Freecom Dual Drive Network Center e l'unità dell'alimentatore stesso alla presa di corrente.
- Collegare l'altra estremità del connettore del cavo* con un router di rete.
 Accertarsi che: il router sia configurato come Server DHCP.Per impostare la modalità Server DHCP sul router seguire le istruzioni contenute nel manuale del router.
- 4. **Eventualmente**, se il vostro apparecchio dispone di un interruttore di rete, allora è necessario attivarlo prima di poterlo utilizzare.
 - * Si prega di utilizzare il cavo interfaccia del vostro apparecchio (per esempio USB, eSATA, Firewire, LAN) per collegarelo al PC / Mac.



Freecom Dual Drive Network Center - Schema del LED

	Acceso	Lampeggiante	Rosso	Spento
1. LED: Disco rigido 1	Disco rigido formattato	x	Disco rigido non formattato	х
2. LED: Disco rigido 2	Disco rigido formattato	х	Disco rigido non formattato	х
3. LED: Rete	Collegamento di rete	х	х	Nessun collegamento di rete
4. LED: Power	Modalità normale	Accesso ai dati	Errore di sistema	Dispositivo spento



Interruttore di alimentazione

Per questo motivo, spegnere Freecom Dual Drive Network Center quando non viene utilizzato. In questo modo si risparmia energia e si preserva il disco rigido. L'interruttore di alimentazione è posto sulla parte posteriore di Freecom Dual Drive Network Center.

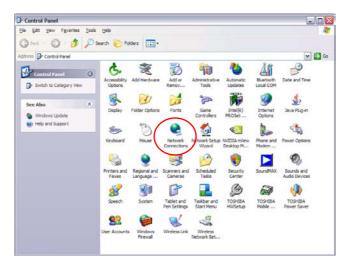




Capitolo: Uso della modalità LAN

Controllo delle impostazioni TCP/IP in Windows XP

1. Aprire "Start" -> "Impostazioni" -> "Pannello di controllo".



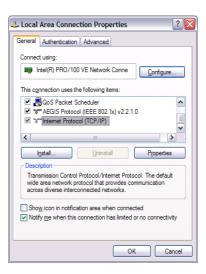
2. Fare doppio clic su "Connessioni di rete".



 Fare clic con il tasto destro del mouse su "Connessione alla rete locale" e selezionare "Proprietà".



4. Comprare la finestra seguente. Selezionare "Protocollo Internet (TCP/IP)" e fare clic sul pulsante "Proprietà".



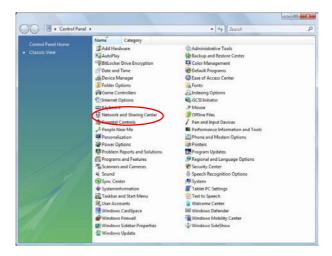
5. Nella scheda "Generale", selezionare "Ottieni automaticamente un indirizzo IP" e "Ottieni indirizzo server DNS automaticamente".





Controllo delle impostazioni TCP/IP in Windows Vista / 7

 Aprire il "Pannello di controllo" -> "Network and Sharing Center" (Centro di rete e di condivisione).

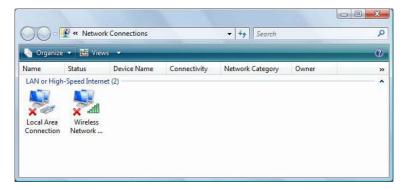


2. Fare clic su "Manage Network Connections" (Gestione connessione di rete).

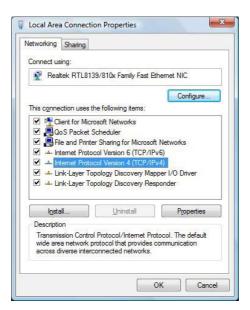




3. Fare clic con il tasto destro del mouse su "Local Area Connection" (Connessione alla rete locale) e selezionare "Properties" (Proprietà).



4. Nella scheda "Networking" (rete), selezionare "Internet Protocol Version 4 (TCP/IPv4)" (Versione Protocollo Internet 4 (TCP/IPv4)) e fare clic su "Properties" (Proprietà).





5. Nella scheda "Generale", selezionare "Ottieni automaticamente un indirizzo IP" e "Ottieni indirizzo server DNS automaticamente".



Controllo delle impostazioni TCP/IP in Mac OS X

1. Aprire "Preferenze di sistema" -> "Network".





2. Nella scheda "TCP/IP", selezionare "Usa DHCP" nelle impostazioni "Configura IPv4".





Capitolo: Installazione del software

Installazione di software l'assistente Freecom Network Storage (PC)

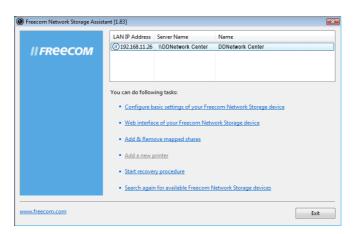
L'assistente Freecom Network Storage consente il riconoscimento e la configurazione base dell'Dual Drive Network Center. Quando viene eseguito visualizza tutti gli Dual Drive Network Center disponibili in rete e semplifica di creazione delle cartelle di rete.

- 1. Introducete il CD Manual & Application nel drive CD/DVD. Il CD contiene il manuale utente e il software utente, incluso il "Freecom Network Storage Assistant". Non appena il CD viene inserito, si apre automaticamente una finestra sullo schermo. Se non dovesse essere così, comportatevi come segue:
- 2. Aprite "Risorse del computer".
- 3. Cliccare deu volte sul simbolo CD. Adesso dovrebbe aprirsi il pannello di avvio.



- 4. Cliccare su "Installazione del software" -> " Assistente FNS ". Adesso parte l'installazione. Seguite le indicazioni che appaiono sullo schermo e confermate premendo "Avanti", per proseguire l'installazione. Dopochè l'installazione è stata completata, cliccare su "Quit" per uscire dalla schermata di menù.
- 5. Fate partire "Freecom Network Storage Assistant" cliccando due volte sul simbolo "FNSA" del desktop o tramite "Avvio" -> " Programmi".
- 6. Controllare nell'Freecom Network Storage se l'Dual Drive Network Center è stato rilevato dal sistema. Il rilevamento può richiedere alcuni minuti. Se l'Dual Drive Network Center non viene rilevato immediatamente, fare clic su "Search again for available Freecom Network Storage devices" per ripetere la ricerca dell'Dual Drive Network Center.





7. Per una descrizione funzionale precisa dell'assistente Freecom Network Storage consultare il capitolo "L'assistente Freecom Network Storage".



Installazione di software l'assistente Freecom Network Storage (Mac)

L'assistente Freecom Network Storage consente il riconoscimento e la configurazione base dell'Dual Drive Network Center. Quando viene eseguito visualizza tutti gli Dual Drive Network Center disponibili in rete e semplifica di creazione delle cartelle di rete.

- 1. Introducete il CD Manual & Application nel drive CD/DVD. Il CD contiene il manuale utente e il software utente, incluso il "Freecom Network Storage Assistant".
- 2. Adesso l'simbolo CD è visibile sul desktop del Mac.
- 3. Cliccare deu volte sul simbolo CD. Si apre il menu di avvio di Freecom.



- 4. Cliccare su "Installazione del software" -> " Assistente FNS ". Adesso parte l'installazione. Seguite le indicazioni che appaiono sullo schermo e confermate premendo "Avanti", per proseguire l'installazione. Dopochè l'installazione è stata completata, cliccare su "Quit" per uscire dalla schermata di menù.
- 5. Fate partire il "Freecom Network Storage Assistant". L'applicazione si trova in "Applications" (Programmi) —> "Utilities" (Applicazioni).
- 6. Controllare nell'Freecom Network Storage se l'Dual Drive Network Center è stato rilevato dal sistema. Il rilevamento può richiedere alcuni minuti. Se l'Dual Drive Network Center non viene rilevato immediatamente, fare clic su "Search again for available Freecom Network Storage devices" per ripetere la ricerca dell'Dual Drive Network Center.
- 7. Per una descrizione funzionale precisa dell'assistente Freecom Network Storage consultare il capitolo "L'assistente Freecom Network Storage".



Capitolo: Accesso al Dual Drive Network Center

Accesso ai dati via SMB

Il Server Message Block (SMB) funziona come protocollo di rete, utilizzato prevalentemente per regolare l'accesso ai dati tra diversi nodi appartenenti alla stessa rete.

Windows

Aprite Windows Explorer e digitate \\ddnetworkcenter* oppure \\IP_ADRESS nella barra degli indirizzi (IP_ADRESS è l'indirizzo IP del vostro Dual Drive Network Center).



Se avete cambiato il nome host o l'indirizzo IP, servitevi delle nuove impostazioni. Inserite il nome utente e la passwort, per poter accedere al Dual Drive Network Center. Quando vi collegate come amministratore, avete adesso accesso a tutte le cartelle contenute nel Dual Drive Network Center.

Linux

Aprite il vostro browser (es. Konqueror) e digitate smb://ddnetworkcenter* oppure smb://IP_ADRESSE nella barra per l'indirizzo (IP_ADRESSE è l'indirizzo IP del vostro Dual Drive Network Center).

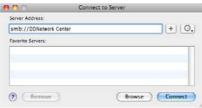
Se avete cambiato il nome host o l'indirizzo IP, servitevi delle nuove impostazioni. Inserite il nome utente e la passwort, per poter accedere al Dual Drive Network Center. Quando vi collegate come amministratore, avete adesso accesso a tutte le cartelle contenute nel Dual Drive Network Center.

Mac OS

Mac OS X 10.4 e successivi. Selezionate "Vai a" -> "Collegare il server ..." nella barra del menu. L'indirizzo del Dual Drive Network Center è:

smb://ddnetworkcenter* oppure

smb://IP_ADRESS nella riga dell'indirizzo (IP_ADRESS è l'indirizzo IP del vostro Dual Drive Network Center).



^{*} impostazione iniziale (di fabbrica). Se avete modificato il nome host o l'inirizzo IP, utilizzate i nuovi valori impostati.



Cliccare su "Collegare". Inserite adesso il nome del gruppo di lavoro, il nome utente e la passwort, per accedere al Dual Drive Network Center. Se vi collegate come amministratore, vi viene consentito l'accesso a tutte le cartelle del Dual Drive Network Center.



Nota: Per definire il nome del gruppo di lavoro del Freecom Dual Drive Network Center andare in Setup - Sistema nel Menu di configurazione Freecom Dual Drive Network Center.





Mac OS X 10.4

Mac OS X 10.5

Selezionate con il prossimo passo una cartella alla quale avete accesso e cliccate su OK, per proseguire. Dopo aver premuto OK, la configurazione è completata ed appare un simbolo sul desktop.



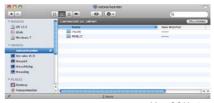
Mac OS X 10.4

Mac OS X 10.5

Per poter accedere a tutte le cartelle del Dual Drive Network Center per cui l'utente da voi prescelto è autorizzato, cliccate due volte su questo simbolo.



Mac OS X 10.4



Mac OS X 10.5



Accesso ai dati tramite FTP



Osservazione: non tutti i browser possono essere utilizzati per scaricare dati via FTP. I browser che sono in grado di farlo sono, per esempio, Explorer e Konqueror. Noi consigliamo di servirci di un software FTP-CI cliente come WS FTP, SmartFTP or CuteFTP.

Il protocollo di trasferimento dati File Transfer Protocol (FTP) è un protocollo di rete standard, utilizzato per scambiare dati all'interno di una rete TCP/IP. Tale protocollo si basa su un'architettura Client-Server.

Accesso locale

Attivate l'opzione "FTP Server". Usate un software FTP-Client oppure aprite il vostro browser e digitate

ftp://USERNAME:USERPASSWORD@IP_ADDRESS * oppure ftp://USERNAME:USERPASSWORD@ddnetworkcenter *

(IP_ADRESS è l'indirizzo IP del vostro Dual Drive Network Center).

Accesso FTP via Internet

Attivate l'opzione "FTP-Server" della configurazione del Dual Drive Network Center. Il vostro router deve essere configurato nella maniera sequente:

1. Cambiamento di porta

Dirottate la porta 21 sull'indirizzo IP del Dual Drive Network Center.

* Se il nome host o l'indirizzo IP del Dual Drive Network Center è cambiato, utilizzate qui le nuove impostazioni.



2. Dynamic DNS

Il "Dynamic Domain Name System" vi offre la possibilità di dirottare un nome DSN ufficiale come www.yourname.com su di un indirizzo IP dinamico, ricevuto dal vostro fornitore di servizi internet.

Perfar questo, dovete registrarvi presso un fornitore DynDNS. Questo attualizza gli indirizzi IP modificati e li dirotta verso i nomi di dominio corrispondenti. Ciò vi consente di essere sempre raggiungibili sotto un solo nome di dominio, anche quando l'indirizzo IP cambia.

Se il vostro router supporta tale caratteristica, vi consigliamo di utilizzare l'opzione. In caso contrario, dovete essere sempre a conoscenza dell'indirizzo WAN IP den router, per poter raggiungere, via internet e FTP il Dual Drive Network Center.

Utilizzate un software "FTP-Client" oppure aprite il vostro browser e digitate ftp://USERNAME:USERPASSWORD@YOUR_INTERNET_IP oppure

ftp://USERNAME:USERPASSWORD@YOUR_DYNDNS_HOST.

USERNAME = il vostro nome utente

USERPASSWORD = la vostra passwort

YOUR_INTERNET_IP = il vostro indirizzo WAN IP

YOUR_DYNDNS_HOST = il vostro indirizzo DynDNS



Capitolo: Configurazione di Freecom Dual Drive Network Center

Freecom Network Storage Assistant

Potete usare utilizzare "Freecom Network Storage Assistant" (procedura guidata per il salvataggio di rete Freecom) per configurare Freecom Dual Drive Network Center. Questa applicazione offre le seguenti funzioni:

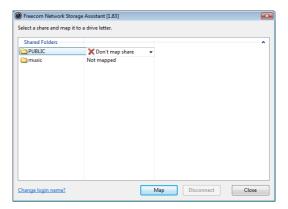


Accesso all'interfaccia Web dell'Freecom Dual Drive Network Center

Facendo doppio clic su questa voce di menu si apre l'interfaccia Web dell'Freecom Dual Drive Network Center nel browser predefinito.

Aggiunta ed eliminazione di unità di rete

In questo menu è possibile assegnare alle cartelle sull'Freecom Dual Drive Network Center una lettera di unità. Ciò consente un accesso più rapido a tali cartelle.





Ripetizione della ricerca dei Freecom Dual Drive Network Center disponibili

Fare clic qui per ripetere la ricerca dell'Freecom Dual Drive Network Center se non è stato identificato. Assicurarsi che la rete sia stata configurata come descritto precedentemente nel manuale e che tutti i cavi siano collegati correttamente.

Mettetevi in contatto con il centro di supporto Freecom Support Center se, dopo aver collegato tutti i cavi, il vostro apparecchio non dovesse essere riconosciuto neanche dopo diversi tentativi.



Capitolo: Funzioni del Freecom Dual Drive Network Center

In questo capitolo sono descritte le funzioni del Suo Freecom Dual Drive Network Center.

Login

Per aprire l'interfaccia web del Dual Drive Network Center si deve utilizzare l'assistente "Freecom Network Storage Assistant" oppure avviare il browser e digitare

http://ddnetworkcenter

Si apre una finestra d'accesso:

Per accedere la prima volta utilizzare per favore il nome utente e la password seguenti:

Nome utente: admin Password: admin

Stato

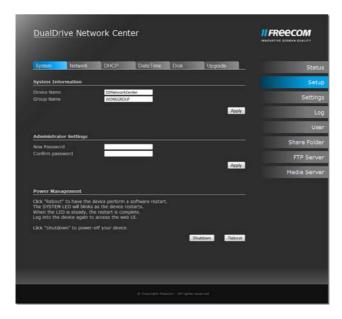
Scegliendo questa voce appare una finestra, che contiene non solo tutte le impostazioni del dispositivo e della rete ma anche informazioni sullo stato dei dischi rigidi:





Setup

Alla voce "Setup" è possibile configurare le impostazioni base del Freecom Dual Drive Network Center.



Dal sottomenu "Sistema" è possibile configurare le seguenti impostazioni:

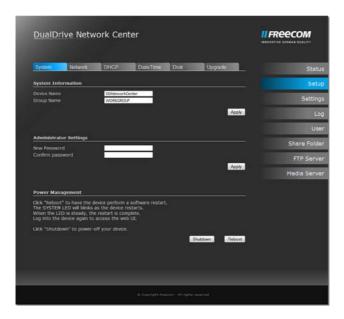
- modificare il nome del gruppo di lavoro e del dispositivo dal sottomenu "Sistema"
- modificare la password amministratore dal sottomenu "Sistema"
- spegnere o riavviare il dispositivo dal sottomenu "Sistema"
- configurare le impostazioni di rete dal sottomenu "Rete"
- configurare un server DHCP dal sottomenu "DHCP"
- impostare data e ora dal sottomenu "Datat/Ora"
- configurare RAID e JBOD dal sottomenu "Disco"
- aggiornare il firmware di sistema dal sottomenu "Aggiornamenti"



Sistema

Dal sottomenu "Sistema" è possibile configurare le seguenti impostazioni:

- nome dispositivo
- nome del gruppo di lavoro
- password amministratore



Aggiornare il nome del gruppo di lavoro / del dispositivo

Andare su Setup -> Sistema

In questo menu, sotto la voce "Informazioni sistema", si può modificare il nome del dispositivo e quello del gruppo di lavoro, in cui si trova il Suo Freecom Dual Drive Network Center.

Nuovo nome

Una volta modificato il nome del Freecom Dual Drive Network Center, si può accedere al dispositivo andando su http://NEW_NAME (NEW_NAME sta per il nuovo nome che è stato assegnato al dispositivo).

Il nome del dispositivo deve avere una lunghezza massima di 15 caratteri. Si possono utilizzare soltanto i caratteri A-Z, a-z, 0-9.



Nuovo gruppo di lavoro

Qui si può modificare il nome del gruppo di lavoro in cui si trova il dispositivo.

Il nome del gruppo di lavoro deve avere una lunghezza massima di 15 caratteri. Si possono utilizzare soltanto i caratteri A-Z, a-z, 0-9.

Dopo aver modificato l'impostazione fare click su "Apply" (Applica) per confermare le modifiche. Il Freecom Dual Drive Network Center si riavvierà.



Modificare la password amministratore

Qui è possibile modificare la password amministratore. Digitare una nuova password e confermarla nel secondo campo.

Nel caso in cui è stata dimenticata la password amministratore ripristinare il dispositivo alle impostazioni di fabbrica come indicato nel capitolo "Avvio della procedura di recovery".

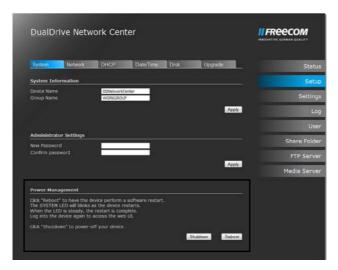




Power Management

Da qui si può spegnere o riavviare il dispositivo tramite l'interfaccia web.

Facendo click con il cursore del mouse sul pulsante Shutdown (spegnere) oppure su Reboot (riavviare).

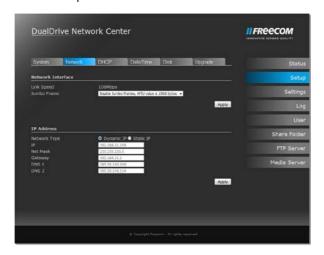


Configurazione delle impostazioni di rete

Andare su Setup -> Rete

Dal sottomenu "Rete" è possibile configurare le seguenti impostazioni:

- dimensioni del pacchetto di dati Jumbo
- configurazione delle impostazioni di rete



o Q

FREECOM DUAL DRIVE NETWORK CENTER

Interfaccia di rete

Dalla voce Interfaccia di rete si possono determinare le dimensioni del pacchetto di dati Jumbo. Le impostazioni di rete possono essere esequite manualmente o automaticamente.





Attenzione: soltanto utenti esperti devono effettuare modifiche alle dimensioni dei frame Jumbo.

Configurazione automatica

Scegliendo "Dynamic IP" un server DHCP (normalmente il Suo router) assegnerà in automatico un indirizzo IP al Freecom Dual Drive Network Center.

Per confermare le modifiche scegliere inizialmente "Dynamic IP" e poi "Apply" (Applica). Al termine dell'operazione il Freecom Dual Drive Network Center sarà riavviato.







Configurazione manuale



Attenzione: non utilizzare la voce Configurazione manuale se non si sa come procedere con questo tipo di configurazione.

La configurazione manuale consente di configurare il Freecom Dual Drive Network Center assegnandogli un indirizzo IP statico.

Per confermare le modifiche scegliere inizialmente "Static IP" e poi "Applica". Al termine dell'operazione il Freecom Dual Drive Network Center sarà riavviato.



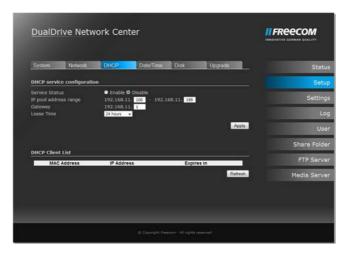


Configurazione del server DHCP

Andare su Setup -> DHCP

Dal sottomenu " DHCP "è possibile configurare le seguenti impostazioni:

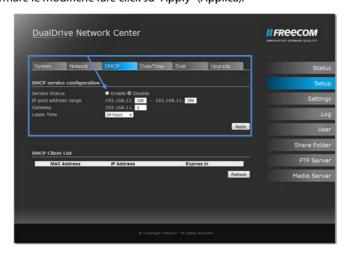
- configurazione del server DHCP
- gestione dei diversi client



Server DHCP

Per attivare il server DHCP scegliere "Enable" (Attiva). Adesso determinare la range degli indirizzi del server DHCP ed inserire il Gateway di default. Il Lease Time (Tempo d'assegnazione) determina per quanto tempo si riserva un indirizzo IP ad un client.

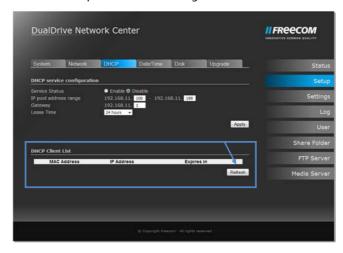
Per confermare le modifiche fare click su "Apply" (Applica).





Lista dei client DHCP

Facendo click su "Refresh" (Attualizza) viene visualizzata la lista dei client DHCP, che mostra tutti i client connessi al server DHCP. Inoltre per ogni client viene visualizzato l'indirizzo MAC, l'indirizzo IP ed il tempo rimanente di assegnazione "Lease Time".

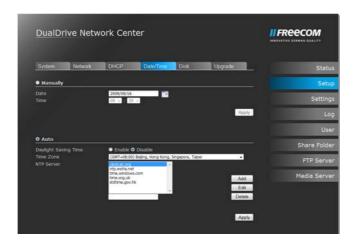


Configurazione di data e ora

Andare su Setup -> Date/Time (Data/Ora)

Dal sottomenu "Date/Time "è possibile configurare le seguenti impostazioni:

- impostazione manuale della data e dell'ora
- impostazione automatica della data e dell'ora





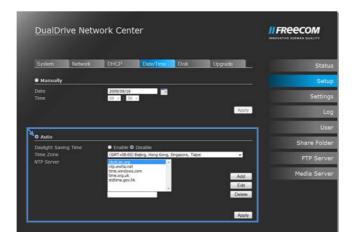
Impostazione manuale

Selezionare "Manually" (Manuale) e immettere manualmente la data e l'ora. Per confermare le modifiche fare click su "Apply" (Applica).



Impostazione automatica

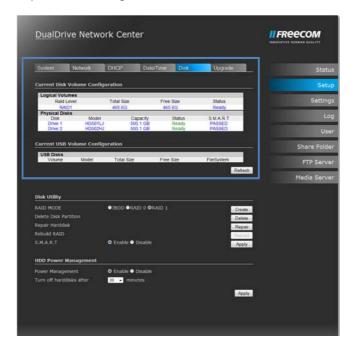
Selezionare "Auto" (Automatico), "Enable" (Attiva) e il fuso orario, il dispositivo configurerà automaticamente l'orario. Per confermare le modifiche fare click su "Apply" (Applica).





Configurazione dei dischi rigidi

Andare su Setup -> Disk (Disco rigido)



Current Disk Volume Configuration/Current USB Volume Configuration

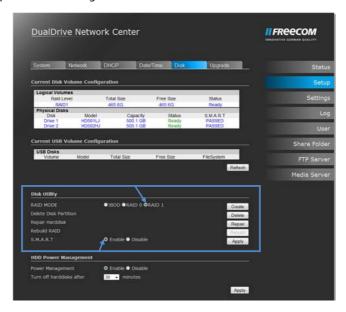
In questa schermata è visualizzata la lista di tutti i dispositivi logici e fisici e dell'attuale organizzazione dei dispositivi logici. Facendo click su "Refresh" (Attualizza) si aggiorna la lista.



Disk Utility

Qui si può scegliere l'organizzazione dei dispositivi logici selezionando "RAID 1".

Selezionare uno schema d'organizzazione e poi alla voce S.M.A.R.T selezionare o "Enable" (Attiva) o "Disable" (Disattiva). S.M.A.R.T è acronimo di Self-Monitoring, Analysis and Reporting Technology (Tecnologia di autotest, analisi e report) ed è una tecnologia di controllo del funzionamento dei dischi rigidi. Adesso facendo click su "Create" (Crea) si creerà il tipo di schema d'organizzazione desiderato.



Modalità RAID

I dischi rigidi del Dual Drive Network Center si possono configurare in diverse modalità RAID:

JBOD: In questa modalitá i dischi rigidi del Dual Drive Network Center sono impostati come singoli dispositivi.

RAID 0: Nella modalità "RAID 0" i dischi rigidi del Dual Drive Network Center sono assommati ed i dati suddivisi su entrambi in modo sempre alternato.

In questo modo si accelera la velocità di lettura e scrittura rispetto a dischi rigidi singoli. Lo svantaggio di questa modalità è dato però dalla possibilità che uno dei due dischi possa danneggiarsi e di conseguenza vanno persi tutti i dati memorizzati sul Dual Drive Network Center.

RAID 1: Utilizzando la modalità "RAID 1" il secondo disco rigido fa da specchio per tutti i dati memorizzati sul primo disco rigido. Di conseguenza si può usufruire solamente della metà della memoria fisica del Dual Drive Network Center. Il vantaggio è però che si ha una maggiore protezione dei dati in quanto tutti i dati sono salvati due volte. Se dovesse danneggiarsi uno dei due dischi rigidi i dati salvati sono sempre a disposizione grazie al secondo disco rigido.



HDD Power Management (Gestione attività dei dischi rigidi)

I dischi rigidi si possono configurare di modo che, se non in uso, dopo un certo tempo cessano l'attività. In tal modo non si risparmia solo energia, ma si allunga anche la vita dei dischi rigidi. Questa opzione però non è attivata di default.

Si può attivare o disattivare il Power Management (la Gestione attività) selezionando prima una delle opzioni Enable/Disable (Attiva/Disattiva), e poi dal menu a tendina il tempo dopo il quale il disco rigido va in pausa. Si possono selezionare le seguenti impostazioni:

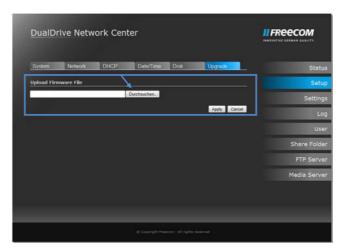
- 10 min
- 20 min
- 30 min
- 60 min
- 120 min

Aggiornamento del firmware

Andare su Setup -> Aggiornamenti

Upgrade (Aggiornamenti)

Fare click su "Sfoglia" e selezionare il file scaricato da http://www.freecom.com. Facendo click su "Apply" (Applica) il nuovo firmware viene installato. Il dispositivo si riavvia dopo l'aggiornamento.



Di norma i nuovi firmware servono ad eliminare errori ed ampliare le funzionalità del Dual Drive Network Center. Verificare la presenza di aggiornamenti del firmware su http://www.freecom.com.





Settings (Impostazioni)



Alla voce "Settings" è possibile caricare, memorizzare e ripristinare le impostazioni di configurazione.

Salvare la configurazione

Da questo menu è possibile salvare sul computer il file dell'attuale configurazione.

Facendo click sul pulsante "Save"(Salva) viene generato il nome del file di configurazione. Per salvarlo fare click sul nome del file.



Ripristino della configurazione

Fare click su "Sfoglia", selezionare il file Bin precedentemente salvato e fare click su "Load" (Carica) per ripristinare le impostazioni salvate.



Ripristinare le impostazioni di fabbrica

Facendo click su "Reset" (Ripristino) si riporta alle impostazioni di fabbrica il dispositivo.



Attenzione: andranno perse tutte le impostazioni modificate in precedenza.





Log



Alla voce "Log" si può visualizzare una lista dei processi di sistema.

System Log - Lista del Log del Kernel

Andare su Log -> Sistema

Nel Log del Kernel sono mostrati tutti i processi relativi al Kernel.





Connection Log - Log di connessione

Andare su Log -> Connessione

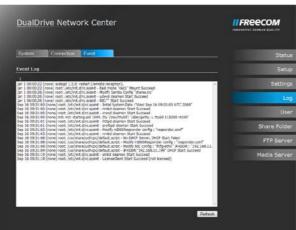
Nel sottomenu Connection Log (Log di connessione) sono visualizzate tutte le FTP Connection (Connessioni FTP).



Event Log - Lista del Log di Event

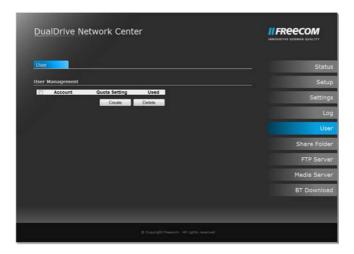
Andare su Log -> Event

Nel sottomenu Event Log (Log di Event) sono visualizzati tutti gli eventi di servizio (p. es. samba).





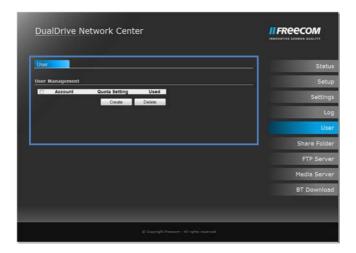
User (Gestione utente)



Alla voce "User" (Gestione utente) si può visualizzare una lista di tutti i conti utente, dello spazio della memoria fisica impegnato ed è inoltre possibile aggiungere nuovi account.

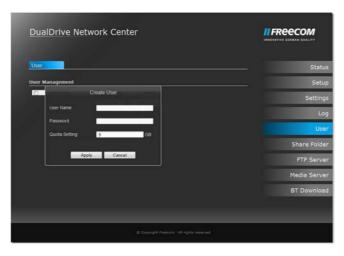
Creare un nome utente

Per creare un nuovo nome utente fare click su "Create" (Crea).





Appare un pop up in cui si possono assegnare il nome utente, la password e lo spazio disponibile.



Cartella di condivisione

Alla voce "Cartella di condivisione"si ha la possibilità di attivare ("Enable") o disattivare ("Disable") diversi servizi, ma anche di definire la dimensione della cartella pubblica (Public). Viene inoltre visualizzato lo stato di utilizzo della cartella pubblica e si possono gestire cartelle.





Sono disponibili i sequenti servizi:

Service Status

Attiva o disattiva la funzione SMB.

Master Browser

Il browser principale gestisce tutti i nomi computer presenti nella rete. Nelle reti di Windows è lo stesso Windows a mettere a disposizione il browser principale. Di norma non è necessario attivare il browser principale.

Oplocks Option

Oplocks ("Opportunistic locking" – it. "Blocco opportunistico") è un meccanismo di blocco di file presente nel protocollo SMB, sviluppato per migliorare le prestazioni grazie al caching controllato dei file.

Recycle.bin folders

Si possono creare o non creare le cartelle del Cestino nei centri condivisioni SMB.



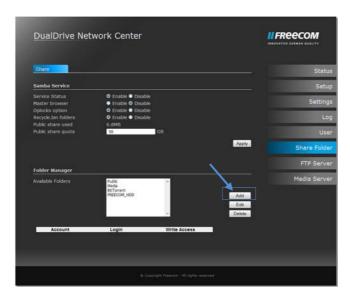


Nella Gestione cartelle si possono aggiungere, modificare o cancellare cartelle.

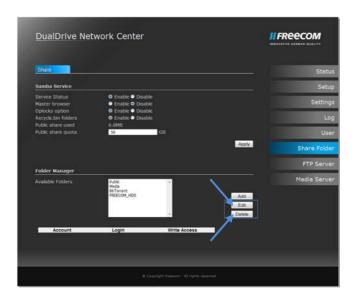




Facendo click su "Add" (Aggiungi) si può creare una nuova cartella, selezionarne i diritti d'accesso e poi facendo click su "Apply" (Applica) confermarne le modifiche.



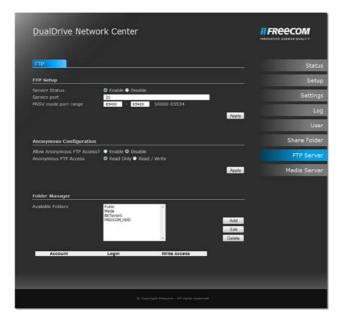
Facendo click su "Edit" (Modifica) o "Delete" (Elimina) si possono modificare o eliminare le cartelle create.





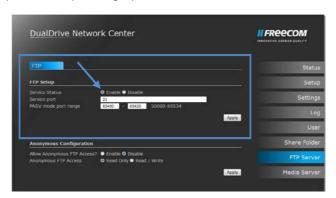
Server FTP

Alla voce "FTP" si ha la possibilità di impostare e gestire un server FTP.



FTP Setup (Setup FTP)

Da FTP Setup (Setup FTP) si può attivare ("Enable") o disattivare ("Disable") il server FTP, assegnare la porta di servizio ("Service Port") e impostare la modalità passiva per la range delle porte (passiv mode port range) per il server FTP.



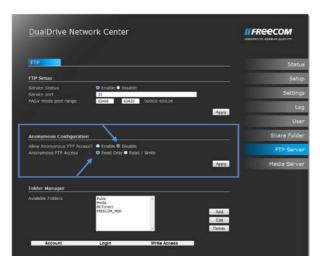


Anonymous Configuration (Configurazione utenti anonimi)

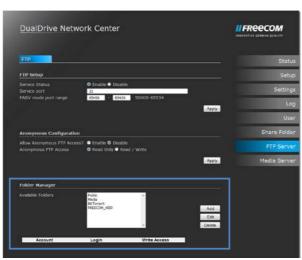
Da "Anonymous Configuration" (Configurazione utenti anonimi) si può consentire (enable) o negare (disable) l'accesso all'FTP ad utenti anonimi. Inoltre si può determinare se gli utenti anonimi, che accedono all'FTP, hanno diritti di lettura e scrittura oppure solo diritti di lettura.

Fare click su "Apply" (Applica) per confermare le modifiche.

Gli utenti anonimi si registrano con il nome utente "anonimo" ed utilizzano un indirizzo e-mail come password.

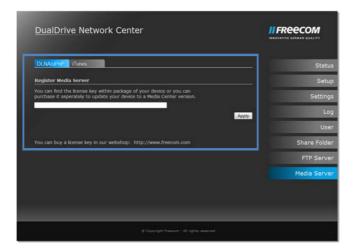


Nella Gestione cartelle si possono condividere, aggiungere, modificare ed eliminare cartelle del proprio server FTP.





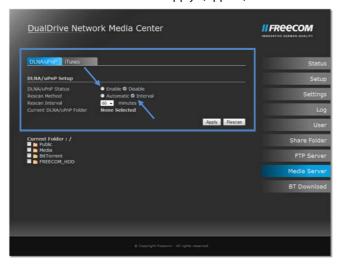
Media Server



Inserendo la License Key (Licenza) alla voce "Media Server" è possibile utilizzare il dispositivo come server multimediale ed anche utilizzarne il client BitTorrent installato.

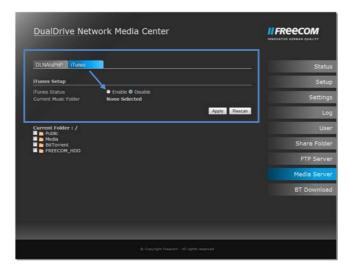
DLNA/uPnP

Inserendo il codice si può utilizzare e configurare il servizio DLNA/uPnP, per attivarlo fare click su "Enable" (Attiva) e poi selezionare il metodo di scansione. Selezionando "Interval" (Intervallo) si deve selezionare anche il tempo d'intervallo alla voce "Rescan Interval" (Intervallo di scansione). Selezionare una o più cartelle dal contenuto multimediale e poi confermare le modifiche facendo click su "Apply" (Applica).



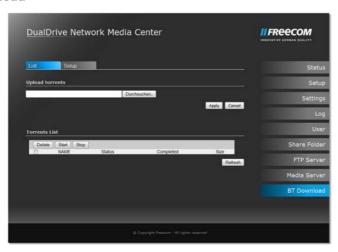


iTunes



Attivare il servizio facendo click su "Enable" (Attiva). Selezionare una o più cartelle dal contenuto multimediale e poi confermare le modifiche facendo click su "Apply" (Applica). I contenuti multimediali condivisi devono trovarsi in sottocartelle delle cartelle condivise.

BT Download

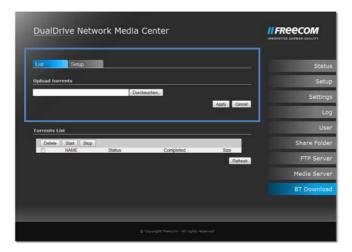


Alla voce Download BT si trova il client BitTorrent del dispositivo. Da qui si possono aggiungere o scaricare file Torrent.

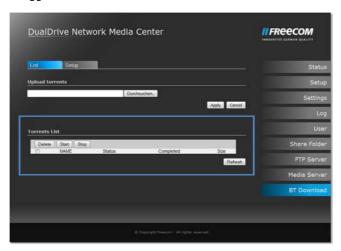


List (Lista)

Dal sottomenu "List" (Lista) si possono aggiungere file Torrent facendo click su "Sfoglia" nella casella "Upload torrents" (Carica torrents). Fare click su "Apply" (Applica) per confermare le modifiche.



Nella "Torrent List" (Lista Torrent) si visualizza una lista di file Torrent presenti nel client BitTorrent, che vengono scaricati in quello stesso momento. Facendo click su "Refresh" (Attualizza) si aggiorna la lista.





Capitolo: L'assistente Freecom Network Storage

Funzioni dell'assistente Freecom Network Storage (PC)

L'assistente Freecom Network Storage consente di trovare ciascun Dual Drive Network Center in rete. Quando viene eseguito, visualizza tutti gli Dual Drive Network Center disponibili in rete e semplifica le operazioni di creazione delle cartelle di rete. Tutte le funzioni dell'assistente Freecom Network Storage possono essere eseguite anche manualmente.



La password e il login predefiniti per l'Dual Drive Network Center sono:

Login Name: admin
Password: admin

Configurazione delle impostazioni di base del Dual Drive Network Center

In questo menu potete associare al Dual Drive Network Center un indirizzo IP, una maschera Subnet, un nome d'apparecchio o quello di un gruppo di lavoro. Con l'aiuto di quest'informazione è più facile localizzare il vostro Dual Drive Network Center anche senza l'assistente, nella rete. Per far ciò dovete digitare la password da amministratore e apportare modifiche.

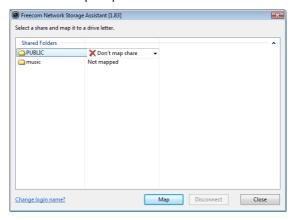
Accesso all'interfaccia Web dell'Dual Drive Network Center

Facendo doppio clic su questa voce di menu si apre l'interfaccia Web dell'Dual Drive Network Center nel browser predefinito.



Aggiunta ed eliminazione di unità di rete

In questo menu è possibile assegnare alle cartelle sull'Dual Drive Network Center una lettera di unità. Ciò consente un accesso più rapido a tali cartelle in Windows.



Avvio della procedura di recovery

Questa procedura permette di eseguire il ripristino delle impostazioni predefinite di fabbrica dell'Dual Drive Network Center se non è più possibile accedere all'Dual Drive Network Center. I dati utente non verranno cancellati!

Eseguire la procedura seguente per il ripristino:

- a) Attivare la modalità di ripristino facendo clic nell'assistente Freecom Network Storage sul pulsante per l'avvio della procedura di ripristino.
- b) Spegnete il Dual Drive Network Center.
- c) Con un oggetto appuntito, premere con cautela il pulsante "reset". Il pulsante "reset" si trova accanto alla connessione per l'alimentatore AC sul retro dell'Dual Drive Network Center.
- d) Tenete premuto il pulsante di "Reset" e riaccendete l'apparecchio.
- e) Aspettate fino a che il LED bianco si spegne (dopo circa 1 secondo) e lasciate andare il tasto di "Reset".

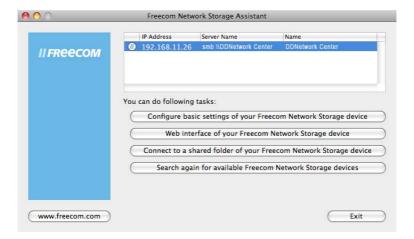


Ripetizione della ricerca dei Freecom Dual Drive Network Center disponibili

Fare clic qui per ripetere la ricerca dell'Dual Drive Network Center se non è stato identificato. Assicurarsi che la rete sia stata configurata come descritto precedentemente nel manuale e che tutti i cavi siano collegati correttamente.

Funzioni dell'assistente Freecom Network Storage (Mac)

L'assistente Freecom Network Storage consente di trovare ciascun Dual Drive Network Center in rete. Quando viene eseguito, visualizza tutti gli Dual Drive Network Center disponibili in rete e semplifica le operazioni di configurazione dell'Dual Drive Network Center e di creazione delle cartelle di rete. Tutte le funzioni dell'assistente Freecom Network Storage possono essere eseguite anche manualmente.



La password e il login predefiniti per l'Dual Drive Network Center sono:

Login Name: admin Password: admin



Configurazione delle impostazioni di base del Dual Drive Network Center

In questo menu potete associare al Dual Drive Network Center un indirizzo IP, una maschera Subnet, un nome d'apparecchio o quello di un gruppo di lavoro. Con l'aiuto di quest'informazione è più facile localizzare il vostro Dual Drive Network Center anche senza l'assistente, nella rete. Per far ciò dovete digitare la password da amministratore e apportare modifiche.

Pagina Web il vostro dispositivo Freecom Network Storage

Facendo doppio clic su questa voce di menu si apre l'interfaccia Web dell'Dual Drive Network Center nel browser predefinito.

Collegare ad un dispositivo di piegatura comune del vostro dispositivo Freecom Network Storage

In questo menu è possibile per "mount" (montare) qualsiasi dispositivo di piegatura del vostro Dual Drive Network Center sul vostro Mac. Ciò consente un accesso più rapido a tali cartelle.





Mac OS X 10.4

Mac OS X 10.5

Ripetizione della ricerca dei Freecom Dual Drive Network Center disponibili

Fare clic qui per ripetere la ricerca dell'Dual Drive Network Center se non è stato identificato. Assicurarsi che la rete sia stata configurata come descritto precedentemente nel manuale e che tutti i cavi siano collegati correttamente.



La ringraziamo di aver acquistato questo prodotto Freecom e ci auguriamo che Lei abbia piacere nell'utilizzarlo. Per un ottimale utilizzo del prodotto, le suggeriamo di leggere attentamente la guida di installazione , il manuale di istruzioni ed ogni altro manuale supplementare. Per eventuali problemi Freecom mette a disposizione un utile database con le più frequenti domande (FAQ- Frequently Asked Questions) sul suo sito Internet (www.freecom.com). Per favore consultare questo sito prima di contattare il supporto tecnico.

La sua Garanzia

Tutti i prodotti Freecom offrono supporto tecnico illimitato, sia telefonico che online. Con questa Garanzia, Freecom attesta che i suoi prodotti non abbiano difetti di materiale o produzione per un periodo elencato di seguito valido dalla data di acquisto. Se durante questo periodo di garanzia i prodotti presentano difetti dovuti a materiale improprio od errori di produzione, Freecom, a sua discrezione, e a sue spese, riparerà o sostituirà il prodotto o le sue parti diffettose secondo i termini e le condizioni specificati qui di seguito.

Condizioni

La garanzia viene concessa solamente se la fattura originale o la ricevuta (indicante la data di acquisto, il prodotto e il suo numero seriale) viene presentata insieme al prodotto diffettoso e ad un numero RMA assegnato dal sito internet Freecom o da un Centro Servizi Freecom. Freecom si riserva il diritto di rifiutare la fornitura dei servizi garantiti a proprie spese, in caso la data dell'acquisto del prodotto non possa essere comprovata. La garanzia non viene concessa se manca il numero RMA, se il numero seriale sul prodotto è stato modificato, rimosso o sia illegibile.

Questa garanzia copre solo i componenti hardware imballati con il prodotto. Questa garanzia copre nessuno dei seguenti: (a) nessun bene di consumo fornito con il prodotto, quali supporti o batterie; (b) danni a, o perdita, di programmi software, di supporti storage rimovibili; (c) nessun danno che risulti da adattamenti, modifiche o aggiustamenti fatti al prodotto prima di un consenso scritto di Freecom; (d) la tentata riparazione da terzi non autorizzati da Freecom e (e) incidenti, fulmine, acqua, fuoco e ogni altra causa che vada oltre il controllo ragionevole di Freecom.

In riferimento a tutti i servizi forniti, Freecom non si ritiene responsabile per alcun danno a, o perdita di, programmi, dati o altre informazioni memorizzati sui supporti o in altre parti del prodotto; o per una perdita di affari conseguente al fallimento del sistema. Si assicuri di escludere tutte le parti non coperte da questa garanzia prima di rispedire il prodotto a Freecom. Se durante la riparazione del prodotto i contenuti del hard drive venissero alterati, cancellati o in qualsiasi modo modificati, Freecom non ne è responsabile.

Le parti e i prodotti diffettosi da essere riparati saranno modificati o sostuiti con dei nuovi. Tutti le parti e i prodotti riparati diventano proprietà di Freecom . Il periodo di garanzia di qualsiasi prodotto o parte dopo essere stati riparati o sostituiti in garanzia è il bilancio del periodo di garanzia originale. Le parti o i prodotti diffettosi riparati o sostituiti da Freecom dopo il periodo di garanzia hanno **6 (sei)** mesi di garanzia.

Licensing Information

This **Freecom product DDNC** includes copyrighted third-party software licensed under the terms of the GNU General Public License. Please see The GNU General Public License for the exact terms and conditions of this license.

Specially, the following parts of this product are subject to the GNU GPL:

U-Boot: version 1.1.2 GPLv2
Linux Kernel version: 2.6.24.4 GPLv2
BusyBox version: 1.10.3 GPLv2
Samba version: 3.0.25 GPLv2
Xfsprogs version: 2.7.11 LGPLv2.1

howl version: 1.0.0 Porchdog Software License

mt-daapd version: 0.2.4.2 GPLv2 dimount version: 0.71 GPLv2 Dropbear version: 0.51 MIT mtd version: 1.1.0 GPLv2 mdadm version: 2.6.4 GPLv2 ntfs-3g version 2009.4.4 GPLv2 ProFTPD version: 1.3.1 GPLv2 Smartmontools version: 5.33 GPLv2 Udevd version: 115 GPLv2 uShare version: 1.1a GPLv2

openssl version: 0.9.7e OpenSSL License/Original SSLeay License

efsprogs version: 1.41.3 GPLv2 / LibGPLv2

libid3tag version: 0.15.1bGPLv2coreutils version: 6.9GPLv2findutils version: 4.2.31GPLv2logrotate version: 3.7.8GPLv2LPRng version: 3.8.33GPLv2sysklogd version: 1.5GPLv2

ffmpeg-checkout version: 2009-02-17 GPLv2/LGPLv2.1

fuse version: 2.6.1 GPLv2
gettext version: 0.16.1 GPLv2
libdlna version: 0.2.3 LGPLv2.1
libupnp version: 1.6.6 Intel Copyright

All listed software packages are copyright by their respective authors. Please see the source code for detailed information. Source code and tool chain can be found at http://gpl.freecom.com

Availability of source code

Freecom has exposed the full source code of the GPL licensed software, including any scripts to control compilation and installation of the object code. All future firmware updates will also be accompanied with their respective source code. For more information on how you can obtain our open source code, please visit our web site.

License texts

GPLv2 License text
The LGPLv2.1 License text
GNU Library GPLv2
The MIT license text
OpenSSL License
Original SSLeay License
Porchdog Software License
Intel Copyright

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc. Temple Place, Suite 330, Boston, MA 02111-1307 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 Library 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.

GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

- 0. 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.
- 1. 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.
- 2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, 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) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, 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 Program, 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 Program.

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

- 3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:
 - a) 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; or,
 - b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
 - c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, 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 executable. 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.

If distribution of executable or 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 counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

- 4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program 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.
- 5. 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 Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.
- 6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program 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.

7. 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 Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program 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 Program.

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.

- 8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program 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.
- 9. The Free Software Foundation may publish revised and/or new versions of the 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 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 Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.
- 10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, 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

- 11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, 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.
- 12. 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 PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITYTO 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 OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

1. April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

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 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 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.

GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. 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.
- 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.

END OF TERMS AND CONDITIONS

GNU LIBRARY GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1991 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 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 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.

GNU LIBRARY GENERAL PUBLIC LICENSE 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 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 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 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 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.

END OF TERMS AND CONDITIONS

The MIT License

Copyright (c)

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.

Original SSLeay License

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com).

The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed.

If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used.

This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

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 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 acknowledgement: "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)" The word ,cryptographic can be left out if the rouines from the library being used are not cryptographic related:-).
- 4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "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 AUTHOR OR 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.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

Copyright (c) 2003, 2004 Porchdog Software

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.

THIS SOFTWARE IS PROVIDED BY 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 COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, 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.

Portions of Howl are covered under the Apple Public Source License (APSL).

Please read this License carefully before downloading this software. By downloading or using this software, you are agreeing to be bound by the terms of this License. If you do not or cannot agree to the terms of this License, please do not download or use the software.

- 1. General; Definitions. This License applies to any program or other work which Apple Computer, Inc. ("Apple") makes publicly available and which contains a notice placed by Apple identifying such program or work as "Original Code" and stating that it is subject to the terms of this Apple Public Source License version 2.0 ("License"). As used in this License:
- 1.1 "Applicable Patent Rights" mean: (a) in the case where Apple is the grantor of rights, (i) claims of patents that are now or hereafter acquired, owned by or assigned to Apple and (ii) that cover subject matter contained in the Original Code, but only to the extent necessary to use, reproduce and/or distribute the Original Code without infringement; and (b) in the case where You are the grantor of rights, (i) claims of patents that are now or hereafter acquired, owned by or assigned to You and (ii) that cover subject matter in Your Modifications, taken alone or in combination with Original Code.
- 1.2 "Contributor" means any person or entity that creates or contributes to the creation of Modifications.
- 1.3 "Covered Code" means the Original Code, Modifications, the combination of Original Code and any Modifications, and/or any respective portions thereof.
- 1.4 "Externally Deploy" means: (a) to sublicense, distribute or otherwise make Covered Code available, directly or indirectly, to anyone other than You; and/or (b) to use Covered Code, alone or as part of a Larger Work, in any way to provide a service, including but not limited to delivery of content, through electronic communication with a client other than You.
- 1.5 "Larger Work" means a work which combines Covered Code or portions thereof with code not governed by the terms of this License.
- 1.6 "Modifications" mean any addition to, deletion from, and/or change to, the substance and/or structure of the Original Code, any previous Modifications, the combination of Original Code and any previous Modifications, and/or any respective portions thereof. When code is released as a series of files, a Modification is: (a) any addition to or deletion from the contents of a file containing Covered Code; and/or (b) any new file or other representation of computer program statements that contains any part of Covered Code.
- 1.7 "Original Code" means (a) the Source Code of a program or other work as originally made available by Apple under this License, including the Source Code of any updates or upgrades to such programs or works made available by Apple under this License, and that has been expressly identified by Apple as such in the header file(s) of such work; and (b) the object code compiled from such Source Code and originally made available by Apple under this License.
- 1.8 "Source Code" means the human readable form of a program or other work that is suitable for making modifications to it, including all modules it contains, plus any associated interface definition files, scripts used to control compilation and installation of an executable (object code).

- 1.9 "You" or "Your" means an individual or a legal entity exercising rights under this License. For legal entities, "You" or "Your" includes any entity which controls, is controlled by, or is under common control with, You, where "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 fifty percent (50%) or more of the outstanding shares or beneficial ownership of such entity.
- 2. Permitted Uses; Conditions & Restrictions. Subject to the terms and conditions of this License, Apple hereby grants You, effective on the date You accept this License and download the Original Code, a world-wide, royalty-free, non-exclusive license, to the extent of Apple's Applicable Patent Rights and copyrights covering the Original Code, to do the following:
- 2.1 Unmodified Code. You may use, reproduce, display, perform, internally distribute within Your organization, and Externally Deploy verbatim, unmodified copies of the Original Code, for commercial or non-commercial purposes, provided that in each instance:
 - (a) You must retain and reproduce in all copies of Original Code the copyright and other proprietary notices and disclaimers of Apple as they appear in the Original Code, and keep intact all notices in the Original Code that refer to this License; and
 - (b) You must include a copy of this License with every copy of Source Code of Covered Code and documentation You distribute or Externally Deploy, and You may not offer or impose any terms on such Source Code that alter or restrict this License or the recipients' rights hereunder, except as permitted under Section 6.
- 2.2 Modified Code. You may modify Covered Code and use, reproduce, display, perform, internally distribute within Your organization, and Externally Deploy Your Modifications and Covered Code, for commercial or non-commercial purposes, provided that in each instance You also meet all of these conditions:
 - (a) You must satisfy all the conditions of Section 2.1 with respect to the Source Code of the Covered Code;
 - (b) You must duplicate, to the extent it does not already exist, the notice in Exhibit A in each file of the Source Code of all Your Modifications, and cause the modified files to carry prominent notices stating that You changed the files and the date of any change; and
 - (c) If You Externally Deploy Your Modifications, You must make Source Code of all Your Externally Deployed Modifications either available to those to whom You have Externally Deployed Your Modifications, or publicly available. Source Code of Your Externally Deployed Modifications must be released under the terms set forth in this License, including the license grants set forth in Section 3 below, for as long as you Externally Deploy the Covered Code or twelve (12) months from the date of initial External Deployment, whichever is longer. You should preferably distribute the Source Code of Your Externally Deployed Modifications electronically (e.g. download from a web site).
- 2.3 Distribution of Executable Versions. In addition, if You Externally Deploy Covered Code (Original Code and/or Modifications) in object code, executable form only, You must include a prominent notice, in the code itself as well as in related documentation, stating that Source Code of the Covered Code is available under the terms of this License with information on how and where to obtain such Source Code.
- 2.4 Third Party Rights. You expressly acknowledge and agree that although Apple and each Contributor grants the licenses to their respective portions of the Covered Code set forth herein, no assurances are provided by Apple or any Contributor that the Covered Code does not infringe the patent or other intellectual property rights of any other entity. Apple and each Contributor disclaim any liability to You for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, You hereby assume sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow You to distribute the Covered Code, it is Your responsibility to acquire that license before distributing the Covered Code.
- 3. Your Grants. In consideration of, and as a condition to, the licenses granted to You under this License, You hereby grant to any person or entity receiving or distributing Covered Code under this License a non-exclusive, royalty-free, perpetual, irrevocable license, under Your Applicable Patent Rights and other intellectual property rights (other than patent) owned or controlled by You, to use, reproduce, display, perform, modify, sublicense, distribute and Externally Deploy Your Modifications of the same scope and extent as Apple's licenses under Sections 2.1 and 2.2 above.
- 4. Larger Works. You may create a Larger Work by combining Covered Code with other code not governed by the terms of this License and distribute the Larger Work as a single product. In each such instance, You must make sure the requirements of this License are fulfilled for the Covered Code or any portion thereof.
- 5. Limitations on Patent License. Except as expressly stated in Section 2, no other patent rights, express or implied, are granted by Apple herein. Modifications and/or Larger Works may require additional patent licenses from Apple which Apple may grant in its sole discretion.

- 6. Additional Terms. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations and/or other rights consistent with the scope of the license granted herein ("Additional Terms") to one or more recipients of Covered Code. However, You may do so only on Your own behalf and as Your sole responsibility, and not on behalf of Apple or any Contributor. You must obtain the recipient's agreement that any such Additional Terms are offered by You alone, and You hereby agree to indemnify, defend and hold Apple and every Contributor harmless for any liability incurred by or claims asserted against Apple or such Contributor by reason of any such Additional Terms.
- 7. Versions of the License. Apple may publish revised and/or new versions of this License from time to time. Each version will be given a distinguishing version number. Once Original Code has been published under a particular version of this License, You may continue to use it under the terms of that version. You may also choose to use such Original Code under the terms of any subsequent version of this License published by Apple. No one other than Apple has the right to modify the terms applicable to Covered Code created under this License.
- 8. NO WARRANTY OR SUPPORT. The Covered Code may contain in whole or in part pre-release, untested, or not fully tested works. The Covered Code may contain errors that could cause failures or loss of data, and may be incomplete or contain inaccuracies. You expressly acknowledge and agree that use of the Covered Code, or any portion thereof, is at Your sole and entire risk. THE COVERED CODE IS PROVIDED "AS IS" AND WITHOUT WARRANTY, UPGRADES OR SUPPORT OF ANY KIND AND APPLE AND APPLE'S LICENSOR(S) (COLLECTIVELY REFERRED TO AS "APPLE" FOR THE PURPOSES OF SECTIONS 8 AND 9) AND ALL CONTRIBUTORS EXPRESSLY DISCLAIM ALL WARRANTIES AND/OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES AND/OR CONDITIONS OF MERCHANTABILITY, OF SATISFACTORY QUALITY, OF FITNESS FOR A PARTICULAR PURPOSE, OF ACCURACY, OF QUIET ENJOYMENT, AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. APPLE AND EACH CONTRIBUTOR DOES NOT WARRANT AGAINST INTERFERENCE WITH YOUR ENJOYMENT OF THE COVERED CODE, THAT THE FUNCTIONS CONTAINED IN THE COVERED CODE WILL MEET YOUR REQUIREMENTS, THAT THE OPERATION OF THE COVERED CODE WILL BE UNINTERRUPTED OR ERROR-FREE, ORTHAT DEFECTS INTHE COVERED CODE WILL BE CORRECTED. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY APPLE, AN APPLE AUTHORIZED REPRESENTATIVE OR ANY CONTRIBUTOR SHALL CREATE A WARRANTY. You acknowledge that the Covered Code is not intended for use in the operation of nuclear facilities, aircraft navigation, communication systems, or air traffic control machines in which case the failure of the Covered Code could lead to death, personal injury, or severe physical or environmental damage.
- 9. LIMITATION OF LIABILITY. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT SHALL APPLE OR ANY CONTRIBUTOR BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR RELATING TO THIS LICENSE OR YOUR USE OR INABILITY TO USE THE COVERED CODE, OR ANY PORTION THEREOF, WHETHER UNDER A THEORY OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), PRODUCTS LIABILITY OR OTHERWISE, EVEN IF APPLE OR SUCH CONTRIBUTOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDY. SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OF LIABILITY OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS LIMITATION MAY NOT APPLY TO YOU. In no event shall Apple's total liability to You for all damages (other than as may be required by applicable law) under this License exceed the amount of fifty dollars (\$50.00).
- 10. Trademarks. This License does not grant any rights to use the trademarks or trade names "Apple", "Apple Computer", "Mac", "Mac OS", "QuickTime", "QuickTime Streaming Server" or any other trademarks, service marks, logos or trade names belonging to Apple (collectively "Apple Marks") or to any trademark, service mark, logo or trade name belonging to any Contributor. You agree not to use any Apple Marks in or as part of the name of products derived from the Original Code or to endorse or promote products derived from the Original Code other than as expressly permitted by and in strict compliance at all times with Apple's third party trademark usage guidelines which are posted at http://www.apple.com/legal/guidelinesfor3rdparties.html.
- 11. Ownership. Subject to the licenses granted under this License, each Contributor retains all rights, title and interest in and to any Modifications made by such Contributor. Apple retains all rights, title and interest in and to the Original Code and any Modifications made by or on behalf of Apple ("Apple Modifications"), and such Apple Modifications will not be automatically subject to this License. Apple may, at its sole discretion, choose to license such Apple Modifications under this License, or on different terms from those contained in this License or may choose not to license them at all.

12. Termination.

- 12.1 Termination. This License and the rights granted hereunder will terminate:
 - (a) automatically without notice from Apple if You fail to comply with any term(s) of this License and fail to cure such breach within 30 days of becoming aware of such breach;
 - (b) immediately in the event of the circumstances described in Section 13.5(b); or
 - (c) automatically without notice from Apple if You, at any time during the term of this License, commence an action for patent infringement against Apple; provided that Apple did not first commence an action for patent infringement against You in that instance.

- 12.2 Effect of Termination. Upon termination, You agree to immediately stop any further use, reproduction, modification, sublicensing and distribution of the Covered Code. All sublicenses to the Covered Code which have been properly granted prior to termination shall survive any termination of this License. Provisions which, by their nature, should remain in effect beyond the termination of this License shall survive, including but not limited to Sections 3, 5, 8, 9, 10, 11, 12.2 and 13. No party will be liable to any other for compensation, indemnity or damages of any sort solely as a result of terminating this License in accordance with its terms, and termination of this License will be without prejudice to any other right or remedy of any party.
- 13. Miscellaneous.
- 13.1 Government End Users. The Covered Code is a "commercial item" as defined in FAR 2.101. Government software and technical data rights in the Covered Code include only those rights customarily provided to the public as defined in this License. This customary commercial license in technical data and software is provided in accordance with FAR 12.211 (Technical Data) and 12.212 (Computer Software) and, for Department of Defense purchases, DFAR 252.227-7015 (Technical Data Commercial Items) and 227.7202-3 (Rights in Commercial Computer Software or Computer Software Documentation). Accordingly, all U.S. Government End Users acquire Covered Code with only those rights set forth herein.
- 13.2 Relationship of Parties. This License will not be construed as creating an agency, partnership, joint venture or any other form of legal association between or among You, Apple or any Contributor, and You will not represent to the contrary, whether expressly, by implication, appearance or otherwise.
- 13.3 Independent Development. Nothing in this License will impair Apple's right to acquire, license, develop, have others develop for it, market and/or distribute technology or products that perform the same or similar functions as, or otherwise compete with, Modifications, Larger Works, technology or products that You may develop, produce, market or distribute.
- 13.4 Waiver; Construction. Failure by Apple or any Contributor to enforce any provision of this License will not be deemed a waiver of future enforcement of that or any other provision. Any law or regulation which provides that the language of a contract shall be construed against the drafter will not apply to this License.
- 13.5 Severability. (a) If for any reason a court of competent jurisdiction finds any provision of this License, or portion thereof, to be unenforceable, that provision of the License will be enforced to the maximum extent permissible so as to effect the economic benefits and intent of the parties, and the remainder of this License will continue in full force and effect. (b) Notwithstanding the foregoing, if applicable law prohibits or restricts You from fully and/or specifically complying with Sections 2 and/or 3 or prevents the enforceability of either of those Sections, this License will immediately terminate and You must immediately discontinue any use of the Covered Code and destroy all copies of it that are in your possession or control.
- 13.6 Dispute Resolution. Any litigation or other dispute resolution between You and Apple relating to this License shall take place in the Northern District of California, and You and Apple hereby consent to the personal jurisdiction of, and venue in, the state and federal courts within that District with respect to this License. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded.
- 13.7 Entire Agreement; Governing Law. This License constitutes the entire agreement between the parties with respect to the subject matter hereof. This License shall be governed by the laws of the United States and the State of California, except that body of California law concerning conflicts of law.

Where You are located in the province of Quebec, Canada, the following clause applies: The parties hereby confirm that they have requested that this License and all related documents be drafted in English. Les parties ont exige que le present contrat et tous les documents connexes soient rediges en anglais.

EXHIBIT A.

"Portions Copyright (c) 1999-2003 Apple Computer, Inc. All Rights Reserved.

This file contains Original Code and/or Modifications of Original Code as defined in and that are subject to the Apple Public Source License Version 2.0 (the 'License'). You may not use this file except in compliance with the License. Please obtain a copy of the License at http://www.opensource.apple.com/apsl/ and read it before using this file.

The Original Code and all software distributed under the License are distributed on an, AS IS' basis, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, AND APPLE HEREBY DISCLAIMS ALL SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT OR NON-INFRINGEMENT. Please see the License for the specific language governing rights and limitations under the License."

Copyright (c) 2000-2003 Intel Corporation

All rights reserved.

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, 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.

Neither name of Intel Corporation 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 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 INTEL OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, 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.