Debian GNU/Linux 6.0 (squeeze), 32-bit PC 的發行公告

The Debian Documentation Project [http://www.debian.org/doc/]

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內容目錄

章 1. 引言

This document informs users of the Debian GNU/Linux distribution about major changes in version 6.0 (codenamed squeeze).

The release notes provide information on how to upgrade safely from release 5.0 (codenamed lenny) to the current release and inform users of known potential issues they could encounter in that process.

You can get the most recent version of this document from http://www.debian.org/releases/squeeze/releasenotes. If in doubt, check the date on the first page to make sure you are reading a current version.

注意

請注意到，要列出所有的已知問題是不可能的任務。因此，這些都是在經過篩選之後，被認為是普遍存在且重大的問題。

請注意到，在此只會提供及記述從上一個 Debian 發行版本進行升級的資訊。（也就是說，由 lenny 進行升級）。如果您必須從更為早期的發行版進行升級的話，我們建議您能參閱舊有的發行情報，並先升級至 lenny。

回報這份文件的錯誤

We have attempted to test all the different upgrade steps described in this document and to anticipate all the possible issues our users might encounter.

Nevertheless, if you think you have found a bug (incorrect information or information that is missing) in this documentation, please file a bug in the bug tracking system [http://bugs.debian.org/] against the `release-notes` 套件 package. You might want to review first the existing bug reports [http://bugs.debian.org/release-notes] in case the issue you've found has already been reported. Feel free to add additional information to existing bug reports if you can contribute content for this document.

We appreciate, and encourage, reports providing patches to the document's sources. You will find more information describing how to obtain the sources of this document in "這份文件的來源資訊".

提交升級報告

我們十分歡迎使用者回報有關由 lenny 升級至 squeeze 的任何資訊。如果您願意分享這些資訊，請到 錯誤回報系統 [http://bugs.debian.org/] 將您的成果向 `upgrade-reports`▢▢ 套件發送錯誤回報。我們希望您能先將所有附加檔案（使用 **gzip**）壓縮後再進行傳送。

在遞交您的升級報告時，請包含以下資訊：

 The status of your package database before and after the upgrade: **dpkg**'s status database available at /var/lib/dpkg/status and apt▢▢'s package state information, available at /var/lib/apt/extended_states. You should have made a backup before the upgrade as described at "備份資料及設定資訊", but you can also find backups of /var/lib/dpkg/status in /var/backups

 Session logs created using **script**, as described in "記錄歷程".
 可由 /var/log/apt/term.log 取得您的 apt▢▢ 日誌，或是由 /var/log/aptitude 取得您的 **aptitude** 日誌。

 在錯誤回報裡引用這些資訊之前，您應該花點時間去重新檢視這些資訊，並移除任何 敏感 及/或 私密 資料。因為這些資訊將會發佈在公共的資料庫上。

這份文件的來源資訊

 The source of this document is in DocBook XML▢▢ format. The HTML version is generated using docbook-xsl▢▢ and xsltproc▢▢. The PDF version is generated using dblatex▢▢ or xmlroff▢▢. Sources for the Release Notes are available in the SVN repository of the *Debian Documentation Project*. You can use the web interface [http://svn.debian.org/viewsvn/ddp/manuals/trunk/release-notes/] to access its files individually through the web and see their changes. For more information on how to access the SVN please consult the Debian Documentation Project SVN information pages [http://www.debian.org/doc/cvs].

章 2. 在 **Debian GNU/Linux** 6.0 中有什麼新增功能

The Wiki [http://wiki.debian.org/NewInSqueeze] has more information about this topic.

This release drops official support for the HP PA-RISC ('hppa') [http://lists.debian.org/debian-devel-announce/2010/09/msg00008.html], Alpha ('alpha') and ARM ('arm') architectures.

以下是 Debian GNU/Linux squeeze 官方所支援的硬體平台：

    32-bit PC ('i386')
    SPARC ('sparc')
    PowerPC ('powerpc')
    MIPS ('mips' (big endian) 及 'mipsel' (little endian))
    Intel Itanium ('ia64')
    S/390 ('s390')
    64-bit PC ('amd64')
    ARM EABI ('armel')

In addition to the officially supported architectures, Debian GNU/Linux squeeze introduces the GNU/kFreeBSD ports ('kfreebsd-amd64' and 'kfreebsd-i386') as a technology preview. These ports are the first ones included in a Debian release which aren't based on the Linux kernel, but instead use the FreeBSD kernel with a GNU userland. Users of these versions however should be warned that the quality of these ports is still catching up with the outstanding high quality of our Linux ports, and that some advanced desktop features are not supported yet. However, the support of common server software is strong and extends the features of Linux-based Debian versions by the unique features known from the BSD world. This is the first time a Linux distribution has been extended to also allow use of a non-Linux kernel.

您可以在 Debian 硬體架構網頁 [http://www.debian.org/ports/] 中取得更多關於各個平台移植的情況，以及針對移植至您的硬體平台的相關資訊。

在這次的發行版本中有什麼新變化?

比起之前的 lenny，新的 Debian 發行版再度收集了更多的軟體；在這次的發行版本裡包含了超過 10352 個新套件，總數則超過了 29050 個套件。大部份的軟體都被更新了：超過 15436 個套件（大約佔了 lenny 的套件數量的 67%）。當然囉，因為種種的原因，也有不少的軟體（超過 4238 個，大約佔了 lenny 的套件數量的 18%）在這次的發行版本裡被移除掉了。您會發覺到這些套件的版本已不再更新，並且在套件的管理介面裡它們會被標記為 '廢棄(obsolete)' 套件。

With this release, Debian GNU/Linux updates from X.Org 7.3 to X.Org 7.5.

Debian GNU/Linux again ships with several desktop applications and environments. Among others it now includes the desktop environments GNOME⚉ 2.30, KDE⚉ 4.4.5, Xfce⚉ 4.6.2, and LXDE⚉ 0.5.0. Productivity applications have also been upgraded, including the office suites OpenOffice.org⚉ 3.2.1 and KOffice⚉ 2.2.1 as well as GNUcash⚉ 2.2.9, GNUmeric⚉ 1.10.8 and Abiword⚉ 2.8.2.

Updates of other desktop applications include the upgrade to Evolution⚉ 2.30.3 and Pidgin⚉ 2.7.3. The Mozilla⚉ suite has also been updated: `iceweasel`⚉ (version 3.5.13) is the unbranded Firefox⚉ web browser and `icedove`⚉ (version 3.0.7) is the unbranded Thunderbird⚉ mail client.

除此之外，在此發行版中也包含了以下的軟體更新:

套件	在 5.0 (**lenny**) 裡的版本	在 6.0 (**squeeze**) 裡的版本
Apache⚉	2.2.9	2.2.16
BIND⚉ DNS 伺服器	9.6.0	9.7.1
Cherokee⚉ web server	0.7.2	1.0.8
Courier⚉ MTA	0.60.0	0.63.0
Dia⚉	0.96.1	0.97.1
Ekiga⚉ VoIP Client	2.0.12	3.2.7
Exim⚉ 預設的郵件伺服器	4.69	4.72
GNU 編譯器套裝程式以做為預設的編譯程式⚉	4.3.2	4.4.5
GIMP⚉	2.4.7	2.6.10
GNU C 函式庫	2.7	2.11.2
lighttpd	1.4.19	1.4.28
maradns	1.3.07.09	1.4.03
MySQL⚉	5.0.51a	5.1.49
OpenLDAP	2.4.11	2.4.23
OpenSSH⚉	5.1p1	5.5p1
PHP⚉	5.2.6	5.3.2
Postfix⚉ MTA	2.5.2	2.7.1
PostgreSQL⚉	8.3.5	8.4.5
Python	2.5.2	2.6.6
Samba	3.2.5	3.5.5
Tomcat⚉	5.5.26	6.0.28

The official Debian GNU/Linux distribution now ships on 4 to 5 binary DVDs ⚉ or 28 to 32 binary CDs ⚉ (depending on the architecture) and 4 source DVDs or 28 source CDs. Additionally, there is a *multi-arch* DVD, with a subset of the release for the `amd64` and `i386` architectures, along with the source code. Debian GNU/Linux is also released as Blu-ray ⚉ images, also for the `amd64` and `i386` architectures, along with the source code.

Debian still supports Linux Standard Base (LSB) version 3.2. ⚉

Firmware moved to the non-free section

Some drivers included in the Linux kernel used to contain non-free firmware blobs. Starting from squeeze this firmware has been moved to separate packages in the non-free section of the archive, such as `firmware-linux`⌨⌨. If such packages are installed, the firmware will be loaded automatically when ~~required.~~

套件管理

The preferred program for interactive package management from a terminal is **aptitude**. For a non-interactive command line interface for package management, it is recommended to use **apt-get**. **apt-get** is also the preferred tool for upgrades between major releases. If you are still using **dselect**, you should switch to `aptitude`⌨⌨ as the official front-end for package ~~management.~~

For squeeze APT automatically installs recommended packages by default. This can be changed by adding the following line in `/etc/apt/apt.conf`:

```
APT::Install-Recommends "false";
```

Dependency booting

An important improvement in the Debian GNU/Linux boot system is the introduction of dependency-based boot sequencing and parallel boot. This feature is enabled by default in new installs and it will be enabled for upgrades from lenny, if possible.

This feature is enabled through the use of `insserv`⌨⌨ by sysv-rc to order init.d scripts based on their declared dependencies. It has been possible after a sustained effort to adapt all the boot scripts of packages provided in the distribution as well as the boot system itself.

With dependency-based boot sequencing it is also now possible to run the boot system scripts in parallel which can, under most circumstances, improve the speed of the boot process. This feature is enabled by default, in new systems and upgrades, whenever possible. To disable it specify

```
CONCURRENCY=none
```

in `/etc/default/rcS`. For more information on this feature refer to the information available in `/usr/share/doc/insserv/README.Debian`.

Unified keyboard settings

In this new release, the settings for the keyboard have been unified so that both the console and the Xorg server use the same settings. The keyboard settings are now defined in the `/etc/default/keyboard` configuration file which overrides the keyboard defined in Xorg's configuration file.

The `console-setup`⌨⌨ package now handles the keyboard for both environments as well as the font configuration for the console. You can reconfigure the keyboard layout and related settings by executing **dpkg-reconfigure keyboard-configuration** or by manually editing the `/etc/default/keyboard` configuration file.

Kernel mode setting

Graphics mode setting code for the most common desktop chipsets (from Intel, ATI/AMD and NVIDIA) has moved from the respective Xorg drivers to the Linux kernel. This provides a number of advantages, such as:

More reliable suspend and resume
Ability to use graphics devices without X
Faster VT switch
Native mode text console

More details are in "Graphics stack changes" and in the Debian wiki [http:// wiki.debian.org/KernelModesetting].

LDAP support

This Debian release comes with several options for implementing client-side authentication using LDAP. Users of the `libnss-ldap`⬚⬚ and `libpam-ldap` ⬚⬚ packages should consider upgrading to `libnss-ldapd`⬚⬚ and `libpam-ldapd`⬚⬚

These newer packages delegate the LDAP queries to a central unprivileged daemon (**nslcd**) that provides separation between the process using the LDAP information and the daemon performing LDAP queries. This simplifies handling of secured LDAP connections, LDAP authentication credentials, provides a simpler mechanism to perform connection fail-over and debugging and avoids loading LDAP and related libraries into most applications.

Upgrading to `libnss-ldapd`⬚⬚ and `libpam-ldapd`⬚⬚ should be easy as existing configuration information will be mostly reused. Only for advanced configuration should any manual reconfiguration be necessary.

These packages however currently lack support for nested groups and only support password change using the LDAP password modify EXOP operation.

升級計劃

All changes to the released stable distribution (and to oldstable) go through an extended testing period before they are accepted into the archives. Each such update of the stable (or oldstable) release is called a point release. Preparation of point releases is done through the `proposed-updates` mechanism.

Packages can enter `proposed-updates` in two ways. Firstly, security-patched packages added to security.debian.org are automatically added to `proposed-updates` as well. Secondly, Debian GNU/Linux developers may upload new packages to `proposed-updates`, where they get added after review by the Stable Release Managers. The current list of packages can be seen at http://ftp-master.debian.org/proposed-updates.html.

如果在這些套件正式加入小改版之前您想要幫忙測試這些更新的話，您可以將 `proposed-updates` 區段加入您的 `sources.list`裡:

```
deb      http://mirrors.kernel.org/debian squeeze-proposed-updates
main contrib
deb-src http://mirrors.kernel.org/debian squeeze-proposed-updates
main contrib
```

The next time you run **apt-get update**, the system will become aware of the packages in the `proposed-updates` section and will consider them when looking for packages to upgrade.

這嚴格來説並不是 Debian 的新功能，只是之前不太為人所知罷了。

The stable-updates section

Some packages from `proposed-updates` may also be made available via the `squeeze-updates` mechanism. This path will be used for updates which many users may wish to install on their systems before the next point release is made, such as updates to virus scanners and timezone data. All packages from `squeeze-updates` will be included in point releases.

Note that this replaces the functionality previously provided by the volatile.debian.org archive [http://volatile.debian.org/].

In order to use packages from `squeeze-updates`, you can add an entry to your `sources.list`:

```
deb      http://mirrors.kernel.org/debian squeeze-updates main
contrib
deb-src http://mirrors.kernel.org/debian squeeze-updates main
contrib
```

The next time you run **apt-get update**, the system will become aware of the packages in the `squeeze-updates` section and will consider them when looking for packages to upgrade.

When a new package is made available via `squeeze-updates`, this will be announced on the debian-stable-announce [http://lists.debian.org/debian-stable-announce/] mailing list.

backports.org/backports.debian.org

The service provided by the backports.org repositories has been integrated in Debian infrastructure and is now an official Debian service [http://www.debian.org/News/2010/20100905], hosted at backports.debian.org [http://backports.debian.org/].

Debian Live

With squeeze Debian provides official Live systems for the amd64 and i386 architectures. ▯▯▯▯

A Debian Live system is a Debian system that can be booted directly from removable media (CD-ROMs, DVDs, USB keys) or from another computer over the network without the need of installation. The images are produced by a tool named `live-build`▯▯, which can easily be used to create custom live images. More information about the Debian Live project can be found at http://live.debian.net/.

analysis (e.g. `ants`⬚), diffusion imaging and tractography (e.g. `mrtrix`⬚), stimulus delivery (e.g. `psychopy`⬚), MRI sequence development (e.g. `odin` ⬚), as well as a number of versatile data processing and analysis suites (e.g. `nipype`⬚). Moreover, this release has built-in support for all major neuroimaging data formats. See the Debian Science [http:// blends.alioth.debian.org/science/tasks/neuroscience-cognitive] and Debian Med [http://debian-med.alioth.debian.org/tasks/imaging] task pages for a comprehensive list of included software and the NeuroDebian webpage [http:// neuro.debian.net] for further information. ⬚ ⬚ ⬚ ⬚ ⬚ ⬚ ⬚ ⬚ ⬚

章 3. 系統安裝

Debian Installer 是 Debian 的官方安裝系統。它提供了多種不同的安裝方式。您可以依據您硬體架構的不同而有種種不同的安裝方式可供選擇。

可以在 Debian 站台 [http://www.debian.org/releases/stable/debian-installer/] 上同時取得 squeeze 的安裝影像檔以及安裝指引。

安裝指引也同時會包含在 Debian 官方的 CD/DVD 集裡的第一張 CD/DVD 的:

```
/doc/install/manual/language/index.html
```

您還可以到 戡誤表 [http://www.debian.org/releases/stable/debian-installer/index#errata] 上查看 debian-installer 的一些已知問題之列表。

安裝系統有何改變?

There has been a lot of development on the Debian Installer since its first official release with Debian GNU/Linux 3.1 (sarge) resulting in both improved hardware support and some exciting new features.

在本發行情報裡, 我們只會列出在安裝程式裡的一些重大改變。如果您想知道在 lenny 之後它的一些詳盡的改變列表, 請檢閱在 Debian Installer 的 新聞歷程 [http://www.debian.org/devel/debian-installer/News/] 上有關 squeeze beta 及 RC 版發行公告。

主要改變

Dropped platforms	Support for the Alpha ('alpha'), ARM ('arm') and HP PA-RISC ('hppa') architectures has been dropped from the installer. The 'arm' architecture is obsoleted by the ARM EABI ('armel') port.
Support for kFreeBSD	The installer can be used to install the kFreeBSD instead of the Linux kernel and test the technology preview. To use this feature the appropriate installation image (or CD/DVD set) has to be used.
GRUB 2 is the default	The bootloader that will be installed by default is `grub-pc` (GRUB 2).
Help during the installation process	The dialogs presented during the installation process now provide help information. Although not currently used in all dialogs, this feature would be increasingly used in future releases. This will improve the user experience during the installation process, especially for new users.
Installation of Recommended packages	The installation system will install all recommended packages by default throughout the process except for some specific situations in which the general setting gives undesired results.
Automatic installation of hardware-specific packages	The system will automatically select for installation hardware-specific packages when they are appropriate. This is achieved through the use of `discover-pkginstall` from the `discover` package.
Support for installation of previous releases	The installation system can be also used for the installation of previous release, such as lenny.
Improved mirror selection	The installation system provides better support for installing both squeeze as well as lenny and older releases (through the use of archive.debian.org). In addition, it will also check that the selected mirror is consistent and holds the selected release.
Changes in partitioning features	This release of the installer supports the use of the ext4 file system and it also simplifies the creation of RAID, LVM and crypto protected partitioning systems. Support for the reiserfs file system is no longer included by default, although it can be optionally loaded.

| Support for loading firmware debs during installation | It is now possible to load firmware package files from the installation media in addition to removable media, allowing the creation of PXE images and CDs/DVDs with included firmware packages. |
| | Starting with Debian 6.0, non-free firmware has been moved out of main. To install Debian on hardware that needs non-free firmware, you can either provide the firmware yourself during installation or use pre-made non-free CDs/DVDs which include the firmware. See the Getting Debian section [http://www.debian.org/distrib] on the Debian website for more information. |

自動安裝

在之前的章節中所提到了許多的改變，其中也包含了在安裝程式裡利用事先準備好的設定檔來進行自動安裝。這意謂著，如果您手上有著用來和 lenny 安裝程式搭配使用的事先準備好的設定檔，若未經修改將難以和新的安裝程式搭配使用。

在 安裝指引 [http://www.debian.org/releases/stable/installmanual] 上已有更新了的獨立附錄，上有如何使用事先準備好的設定檔之大量資訊。

章 4. **Upgrades from Debian** 5.0 (**lenny**)

系統升級之準備

在進行升級之前，我們建議您能同時參閱 章 5, *在 squeeze 裡您必須知道的一些問題* 所提供的資訊。在那個章節裡包含了一些和升級程序無直接相關，但在開始之前您仍然得要知道的可能潛在問題。

備份資料及設定資訊

在升級您的系統之前，我們強烈建議您能進行一次完整的備份，或至少您也應該把那些絕對不能出任何差錯的資料和設定資訊給備份起來。升級時所使用的工具和升級過程應該不會出什麼差錯，但在升級過程中若發生了什麼硬體錯誤可能會導致系統嚴重受損。

The main things you'll want to back up are the contents of /etc, /var/lib/dpkg, /var/lib/apt/extended_states and the output of dpkg --get-selections "*" (the quotes are important). If you use **aptitude** to manage packages on your system, you will also want to back up /var/lib/aptitude/pkgstates.

這個升級的程序它本身並不會修改在 /home 目錄裡的任何資料，但是已知有某些應用程式（例如：部份的 Mozilla 家族程式及 GNOME、KDE 桌面環境）在使用者第一次以新的版本啟動時，會以新的預設值覆蓋使用者原有的設定。為了以防萬一，您也許想要針對在使用者的主目錄裡的隱藏檔案及目錄（"dotfiles"，以 . 開頭的檔案或目錄）進行備份。這個備份可以用來回復或重新建立舊有的設定。您也許有必要讓使用者知道有這個問題存在。

Any package installation operation must be run with superuser privileges, so either log in as root or use **su** or **sudo** to gain the necessary access rights.

升級有其必要條件，您應該在實地進行升級之前先行確認一次。

事先知會使用者

您應該在進行任何升級之前先把您的計畫告知所有使用者，雖然一些像是利用 **ssh** 連線來從遠端存取系統的使用者在升級過程中可能不會發現什麼異狀，且他們的工作也應該不會因而中斷。如果您希望能採取額外的預防措施的話，請在升級前備份或卸載使用者的分割區 (/home)。除非您計劃同時進行 Kernel 的升級，否則您在升級前後通常並不需要重新開機。

If you wish to take extra precautions, back up or unmount the /home partition before upgrading.

You will have to do a kernel upgrade when upgrading to squeeze, so a reboot will be necessary.

Prepare for downtime on services

During the upgrade process, there might be services associated with packages that will be include in the upgrade. If this is the case, these services might be stopped while the packages that are going to be upgraded are being replaced and configured. During this time, these services will not be available.

The precise downtime for these service will vary depending on the number of packages being upgraded in the system, and it also includes the time the system administrator answers the configuration questions from different package upgrades (if any). Notice that if the upgrade process is left unattended and the system requests input throughout the upgrade there is a high possibility of services being unavailable for a significant period of time.

If the system being upgraded provides critical services for your users or network, you can reduce the downtime if you do a minimal system upgrade, as described in "系統最低限度升級", followed by a kernel upgrade and reboot (see "Upgrading the kernel and udev"), and then upgrade the packages associated with your critical services. Upgrade these packages prior to doing the full upgrade described in "Upgrading the system". This way you can ensure that these critical services are running and available through the full upgrade process, and their downtime is reduced.

回復準備

由於 lenny 和 squeeze 間的 kernel 在像是驅動程式、硬體偵測、命名方式及裝置檔的順序上之變動太大了，在升級完成之後、重新啓動系統之時，您必須冒著可能會遭遇問題的風險。一些已知的可能問題記述於發行情報中的這個及下個章節。

也因此，當您的系統可能會再也無法開機，或者是無法啓用網路（對於遠端管理系統而言）之時，確保您有辦法進行回復就變得很重要了。

如果您是藉由 **ssh** 連線來從遠端進行更新的話，在此非常建議您能採取必要的預防措施，讓您能有辦法經由遠端序列終端來存取伺服器。這是因為偶爾在升級 Kernel 並重新開機之後，有些裝置的名稱被改變了（如同 "重新排序裝置列表" 裡的說明），導致您得經由本機主控台才能修正系統的設定。同樣的，如果系統在升級途中意外得重新開機了，您將可能得由本機主控台才能進行修復。

第一個最顯而易見的方法是試著用您舊的 Kernel 開機，儘管如此，由於在本文件其它地方所陳述的種種原因，這個方法無法保証一定有效。

如果這個方法失敗了，您必須另尋其它方式來啓動您的系統，讓您可以進行存取並修復它。方法之一是利用特定的救援影像檔或 Linux 的 live CD。利用它們開機之後，您應該可以掛載您的 root 檔案系統並 chroot 進去以檢查並修復問題。

另一個我們建議的作法是使用 squeeze Debian 安裝程式的 *rescue mode*。使用安裝程式的好處是您可以在它所提供的許多安裝方式中選擇一個最符合您的狀況的方式。請參閱在 Installation Guide [http://www.debian.org/releases/stable/installmanual] 的第 8 節"回復毀損的系統"及 Debian Installer FAQ [http://wiki.debian.org/DebianInstaller/FAQ]以取得更詳盡的資訊。

在開機過程中使用 **initrd** 的除錯介面 **(debug shell)**

initramfs-tools⬚⬚ 會在它所產生的 initrds 裡放入一個 debug shell。比如説，當您無法掛載您的 root 檔案系統時，您會進入這個提供了一些基本功能的 debug shell，以用來追蹤問題並試著修復它。

基本的檢查包括了：在 /dev 中是否有出現正確的裝置檔；已載入了哪些模組（cat /proc/modules）；在 **dmesg** 的輸出裡是否有驅動無法載入的資訊。在 **dmesg** 的輸出裡也會顯示了哪個裝置檔已被指定為使用哪個磁碟；您應該把它和 echo $ROOT 的輸出進行比較以確保 root 檔案系統是掛載在正確的裝置上。

如果您已採取行動解決問題，鍵入 exit 將會跳出除錯介面並會由開機失敗的地方繼續進行開機。當然了，您也必須由根本修復問題並重新產生 initrd，讓下次開機時不會又因而失敗。

準備一個安全無虞的環境以進行升級

您應該在本機透過文字模式的虛擬主控台（或直接連線的序列終端機）、或由遠端透過 **ssh** 連線來進行發行版間的升級。

重要

If you are using some VPN services (such as tinc⬚⬚) they might not be available throughout the upgrade process. Please see "Prepare for downtime on services".

在以遠端進行更新時，為了能得到更多的安全保障，在此建議您在 **screen** 程式所提供的虛擬主控台裡進行升級程序。它能夠讓您一再地重複連線，以確保如果遠端連線中斷時，也不會干擾到升級程序的進行。

重要

您不應該透過 **telnet**、**rlogin**、**rsh**，或是由您要進行升級的機器上的 **xdm**、**gdm** 或 **kdm** 等等所管理的 X 行程來進行升級。這是因為這些服務在升級的過程中都可能會被中斷，因而將會留下了一個只完成部分升級而 *無法存取* 的系統。

Remove conflicting packages

Due to bug #512951 [http://bugs.debian.org/512951], the `splashy` package needs to be purged prior to the upgrade.

```
# apt-get purge splashy
```

檢查系統的狀況

在這個章節中所說明的升級過程是專門為"純粹的" lenny 所寫的，也就是在系統中沒有安裝任何其它協力套件。為了確保升級程序能平順進行，您也許會希望在升級之前先從系統裡移除那些協力套件。

Direct upgrades from Debian releases older than 5.0 (lenny) are not supported. Please follow the instructions in the Release Notes for Debian GNU/Linux 5.0 [http://www.debian.org/releases/lenny/releasenotes] to upgrade to 5.0 c

而在這個過程中也假設您的系統已更新至 lenny 的最新釋出版本。如果您尚未完成或是您根本無從確定，請遵循在 "更新您的 lenny 系統" 裡的相關說明。

重新檢視在套件管理程式的懸而未決之動作

在某些情況下，使用 **apt-get** 而不是 **aptitude** 來安裝套件可能會讓 **aptitude** 認為某個套件是"無用"的且會計劃要將其移除。一般來說，您應該在進行升級程序前確保系統已完全更新且"乾淨"。

Because of this you should review if there are any pending actions in the package manager **aptitude**. If a package is scheduled for removal or update in the package manager, it might negatively impact the upgrade procedure. Note that correcting this is only possible if your `sources.list` still points to *lenny* and not to *stable* or *squeeze*; see "檢查您的來源列表".

To perform this review, launch **aptitude** in "visual mode" and press **g** ("Go"). If it shows any actions, you should review them and either fix them or implement the suggested actions. If no actions are suggested you will be presented with a message saying "No packages are scheduled to be installed, removed, or upgraded".

關閉 **APT** 的釘鎖 **(Pinning)** 功能

如果您將 APT 設定為可以安裝除了 stable 發行版之外的套件，（像是：testing），您可能必須修改您的 APT 的釘鎖 (Pinning) 設定（儲存於 `/etc/apt/preferences` 中）來讓將要進行升級的套件能夠升級至新的 stable 發行版。您可以在 apt_preferences(5) 取得 APT 的釘鎖功能的更多詳盡資訊。

檢查套件的狀態

不論您是用什麼方式進行系統的更新，我們都建議您先檢查所有套件的狀態，並確認所有的套件都能夠順利升級。以下的指令會顯示所有狀態為半安裝 (Half-Installed) 或設定失敗 (Failed-Config) 或有其他任何錯誤的套件。

除此之外，檢查系統中所有套件狀態的方法還包括使用使用 **dselect**、**aptitude**、或是利用以下的指令:

```
# dpkg -l | pager
```

或是

```
# dpkg --get-selections "*" > ~/curr-pkgs.txt
```

最佳的做法是在進行系統升級前將所有的套件解除保留 (hold) 狀態。如果在升級過程中有任何的關鍵套件的狀態被設定為保留，那麼升級的作業就會失敗。

請注意到，**aptitude** 使用了和 **apt-get** 及 **dselect** 迥然不同的方式來登錄哪些是保留套件。您可以使用以下方式來確認在 **aptitude** 裡有哪些套件是被保留住的:

```
# aptitude search "~ahold" | grep "^.h"
```

如果您想要檢查那些套件是被 **apt-get** 所保留住的，請使用:

```
# dpkg --get-selections | grep hold
```

如果您自行在系統中變更並重新編譯了某個套件，但卻沒有將其更名或在版本號碼中使用 epoch（自行定義版本號碼），那您就必須把它設定為保留狀態，以防止它被升級到新的版本。

The "hold" package state for **apt-get** can be changed using:

```
# echo package_name hold | dpkg --set-selections
```

Replace hold with install to unset the "hold" state.

如果還有什麼地方尚待修正，最好再次確認您的 sources.list 仍然是指向 lenny，如同 "檢查您的來源列表" 裡的說明。

proposed-updates

如果您有把 `proposed-updates` 區段加入了您的 `/etc/apt/sources.list` 檔中的話，您應當在進行系統升級之前把它從檔案中移除。這是降低潛在的衝突發生前的預防工作。

如果在您的系統裡安裝了不是由 Debian 所提供的套件，您必須要知道，在升級的過程中它們可能會因為相依性的關係而被移除掉。如果這些套件是先在 `/etc/apt/sources.list` 新增了額外的套件檔案庫然後再加以安裝的，您應該檢查一下那個檔案庫是否也提供了特別為 squeeze 而編譯的套件，在替 Debian 變更套件來源時也同時適當得修改這些套件的來源項目。

也許有些使用者會在他們的 lenny 上安裝了在 Debian *已有套件的非官方但"較新"的* backported 版本。這些套件很可能在升級的時候產生檔案衝突的問題，。在 "在升級過程中可能會發生的問題" 有一些當發生了檔案衝突時該如何解決的資訊。

APT 來源之準備工作

在開始進行升級之前，您必須先在 `apt` 的設定檔 `/etc/apt/sources.list` 中設定套件列表。

`apt` will consider all packages that can be found via any "deb" line, and install the package with the highest version number, giving priority to the first line in the file (thus where you have multiple mirror locations, you'd typically first name a local hard disk, then CD-ROMs, and then HTTP/FTP mirrors).

發行版通常可以使用它的代碼（如，`lenny`、`squeeze`）或是它的狀態名稱（如，`oldstable`、`stable`、`testing`、`unstable`）來表示。使用發行版的代碼有個好處是您將不用為了新的發行版的到來而感到不安，這也是為什麼會在此提出這個技巧的原因。理所當然的，這也表示了您必須自行去注意發行版是何時發佈的。如果您是替而使用狀態名稱的，在新的發行版發佈的同時，您將會立即發覺大量套件已有新的版本可供更新。

加入網際網路上的 **APT** 套件來源

雖然系統的預設設定是使用 Debian 在網際網路上的主要伺服器來進行安裝，但您還是可能會希望修改 /etc/apt/sources.list 來改為使用在網路上離您最近的其它鏡像站。

您也可以在 http://www.debian.org/distrib/ftplist 取得 Debian 的 HTTP 或 FTP 鏡像站的位址（請參考 "list of mirrors" 小節）。HTTP 鏡像站的傳輸速度通常會比 FTP 鏡像站來得快。

舉例來說，假設離您最近的 Debian 鏡像站是 http://mirrors.kernel.org。當您透過網頁瀏覽器或 FTP 程式來檢視這個網站時，您會發現其中的主要目錄架構會像是這個樣子：

```
http://mirrors.kernel.org/debian/dists/squeeze/main/binary-
i386/...
http://mirrors.kernel.org/debian/dists/squeeze/contrib/binary-
i386/...
```

```
deb http://mirrors.kernel.org/debian squeeze main contrib
```

請注意，`dists' 將會被自動加到路徑中，而在發佈代號之後的參數則會被用來展開成多個不同目錄的路徑。

在加入了新的來源之後，請在 sources.list 中原本的 "deb" 項目前加上井字符號 (#) 以關閉這些套件來源。

增加 **APT** 的本機鏡像套件來源

您可能也會想修改 /etc/apt/sources.list 中的設定，以使用本機（像是透過 NFS 掛載的）磁碟上的鏡像資料來取代透過 HTTP 或 FTP 存取遠端的套件鏡像站。

舉例來說，如果您的套件鏡像是放在 /var/ftp/debian/ 之下，而主要的目錄看起來是像這樣的話：

```
/var/ftp/debian/dists/squeeze/main/binary-i386/...
/var/ftp/debian/dists/squeeze/contrib/binary-i386/...
```

如果要和 apt 搭配使用，請把下行加入 sources.list 檔案之中：

```
deb file:/var/ftp/debian squeeze main contrib
```

請注意，`dists' 將會被自動加到路徑中，而在發佈代號之後的參數則會被用來展開成多個不同目錄的路徑。

在加入了新的來源之後，請在 sources.list 中原本的 "deb" 項目前加上井字符號 (#) 以關閉這些套件來源。

增加 **APT** 的 **CD-ROM** 或 **DVD** 的套件來源

如果光碟是*唯一*您想使用的媒體，請在 /etc/apt/sources.list 中原有的 "deb" 設定行前加入井字符號 **(#)** 以關閉這些套件來源。

請確定在 /etc/fstab 中有著能讓您的光碟機掛載在 /cdrom 這個掛載點下的項目（**apt-cdrom** 限定掛載點必須是 /cdrom）。舉例來說，如果您的光碟機的裝置是 /dev/hdc，那麼 /etc/fstab 中就應該要有像這樣的一行：

請注意在第四欄的 defaults,noauto,ro 的字中間一定*不能參雜空白字元*。

要確認您的設定是否正確，請放入一張光碟片，並試著執行

```
# mount /cdrom      # 這樣將會將這張 CD 掛載在該掛載點上
# ls -alF /cdrom    # 這樣將會列出 CD 的根目錄
# umount /cdrom     # 這樣將會卸載這張 CD
```

接下來對每一張 Debian 的程式光碟執行

```
# apt-cdrom add
```

來把每一張光碟的資料加到 APT 的資料庫中。

進行套件的升級

The recommended way to upgrade from previous Debian GNU/Linux releases is to use the package management tool **apt-get**. In previous releases, **aptitude** was recommended for this purpose, but recent versions of **apt-get** provide equivalent functionality and also have shown to more consistently give the desired upgrade results.

不要忘了用類似以下的指令把所有會用到的分割區（特別是 /usr 和 root 分割區）重新以可讀寫的模式掛載：

```
# mount -o remount,rw /mountpoint
```

接下來，您必須再次確認在 /etc/apt/sources.list 中的 APT 來源項目是指向 "squeeze" 或是 "stable"，且應該沒有任何來源項目是指向 lenny。

注

Source lines for a CD-ROM might sometimes refer to "unstable"; although this may be confusing, you should *not* change it.

記錄歷程

我們強烈建議您使用 **/usr/bin/script** 這個程式來記錄升級的完整過程。因為一旦發生了任何問題，您手上就會有發生了什麼問題的確實記錄，而在必要之時，在錯誤報告中也能據此提供確實的資訊。若要開始進行記錄，請使用

```
# script -t 2>~/upgrade-squeeze.time -a ~/upgrade-squeeze.script
```

　或類似的指令。請不要把記錄檔放在像是 `/tmp` 或 `/var/tmp` 之類的暫存目錄下（這些目錄中的檔案可能會在升級的過程中或在重新開機時被清除掉）。

　The typescript will also allow you to review information that has scrolled off-screen. If you are at the system's console, just switch to VT2 (using **Alt**+**F**2) and, after logging in, use `less -R ~root/upgrade-squeeze.script` to view

　在您完成升級作業後，您可以藉由在命令列上鍵入 `exit` 來關閉 **script**。

　如果您在 **script** 上使用了 *-t* 參數，您可以利用 **scriptreplay** 程式來重新播放整個過程：

```
# scriptreplay ~/upgrade-squeeze.time ~/upgrade-squeeze.script
```

更新套件的列表

　首先，必須先取得在新釋出版上的可取用的套件列表。這可以利用以下指令進行：

```
# apt-get update
```

確認您有足夠的空間可以用來進行升級

　You have to make sure before upgrading your system that you have sufficient hard disk space when you start the full system upgrade described in "Upgrading the system". First, any package needed for installation that is fetched from the network is stored in `/var/cache/apt/archives` (and the `partial/` subdirectory, during download), so you must make sure you have enough space on the file system partition that holds `/var/` to temporarily download the packages that will be installed in your system. After the download, you will probably need more space in other file system partitions in order to both install upgraded packages (which might contain bigger binaries or more data) and new packages that will be pulled in for the upgrade. If your system does not have sufficient space you might end up with an incomplete upgrade that might be difficult to recover from.

　apt-get can show you detailed information of the disk space needed for the installation. Before executing the upgrade, you can see this estimate by

```
# apt-get -o APT::Get::Trivial-Only=true dist-upgrade
[ ... ]
XXX upgraded, XXX newly installed, XXX to remove and XXX not
upgraded.
Need to get xx.xMB of archives.
After this operation, AAAMB of additional disk space will be used.
```

　　注

Running this command at the beginning of the upgrade process may give an error, for the reasons described in the next sections. In that case you will need to wait until you've done the minimal system upgrade as in "系統最低限度升級" and upgraded your kernel before running this command to estimate the disk space.

If you do not have enough space for the upgrade, **apt-get** will warn you with a message like this:

```
E: You don't have enough free space in /var/cache/apt/archives/.
```

In this situation, make sure you free up space beforehand. You can:

Remove packages that have been previously downloaded for installation (at `/var/cache/apt/archives`). Cleaning up the package cache by running **apt-get clean** will remove all previously downloaded package files.

Remove forgotten packages. If you have `popularity-contest`☐☐ installed, you can use **popcon-largest-unused** to list the packages you do not use that occupy the most space. You can also use **deborphan** or **debfoster** to find obsolete packages (see "被廢棄的套件"). Alternatively you can start **aptitude** in "visual mode" and find obsolete packages under "Obsolete and Locally Created Packages".

Remove packages that take up too much space and are not currently needed (you can always reinstall them after the upgrade). You can list the packages that take up the most disk space with **dpigs** (available in the `debian-goodies`☐☐ package) or with **wajig** (running `wajig size`).

You can list packages that take up most of the disk space with `aptitude` ☐☐. Start **aptitude** in "visual mode", select Views → New Flat Package List, press **l** and enter `~i`, press **S** and enter `~installsize`, then it will give you nice list to work with.

Remove translations and localization files from the system if they are not needed. You can install the `localepurge`☐☐ package and configure it so that only a few selected locales are kept in the system. This will reduce the disk space consumed at `/usr/share/locale`.

把存放在 `/var/log/` 裡的系統記錄檔暫時移至其它的系統，或是乾脆刪除它們。

使用暫時的 `/var/cache/apt/archives`：您可以使用位於另一個檔案系統（USB 儲存裝置、暫用的硬碟、正在使用中的檔案系統...）上的暫存快取目錄。

注

不要使用 NFS 掛載點，因為網路連線可能會在升級的過程中中斷。

比如說，如果您有個 USB 裝置掛載在 `/media/usbkey` 上：

移除之前在安裝時所下載的套件：

```
# apt-get clean
```

把 `/var/cache/apt/archives` 目錄複製到 USB 裝置：

```
# cp -ax /var/cache/apt/archives /media/usbkey/
```

將暫存快取目錄掛載到該目錄上：

```
# mount --bind /media/usbkey/archives /var/cache/apt/archives
```

在升級完畢後，還原原本的 `/var/cache/apt/archives` 目錄：

```
# umount /media/usbkey/archives
```

移除剩下的 `/media/usbkey/archives`。

您可以在任何已掛載於您的系統的檔案系統上建立暫存快取目錄。

Do a minimal upgrade of the system (see "系統最低限度升級") or partial upgrades of the system followed by a full upgrade. This will make it possible to upgrade the system partially, and allow you to clean the package cache before the full upgrade.

章 5. 在 **squeeze** 裡您必須知道的一些問題

潛在的問題

Sometimes, changes introduced in a new release have side-effects we cannot reasonably avoid, or they expose bugs somewhere else. This section documents issues we are aware of. Please also read the errata, the relevant packages' documentation, bug reports and other information mentioned in "閱讀更多資訊".

Migration of disk drivers from IDE to PATA subsystem

The new Linux kernel version provides different drivers for some PATA (IDE) controllers. The names of some hard disk, CD-ROM, and tape devices may change.

It is now recommended to identify disk devices in configuration files by label or UUID (unique identifier) rather than by device name, which will work with both old and new kernel versions. Upon upgrading to the squeeze version of the Debian kernel packages, the `linux-base` package will offer to do this conversion for you in the config files for most of the filesystem-related packages on the system, including the various bootloaders included in Debian. If you choose not to update the system configuration automatically, or if you are not using the Debian kernel packages, you must update device IDs yourself before the next system reboot to ensure the system remains bootable.

mdadm metadata format change requires recent Grub

The following only applies to users who want to let the `grub-pc` bootloader load the kernel directly off a RAID device created with `mdadm` 3.x and default values, or when the metadata version is explicitly set using `-e`. Specifically, this includes all arrays created during or after the installation of Debian squeeze. Arrays created with older mdadm versions, and RAIDs created with the command-line option `-e 0.9` are not affected.

Versions of `grub-pc` older than 1.98+20100720-1 will not be able to boot directly off a RAID with the 1.x metadata formats (the new default is 1.2). To ensure a bootable system, please make sure to use `grub-pc` 1.98+20100720-1 or later, which is provided by Debian squeeze. An unbootable system may be rescued with Super Grub2 Disk [http://www.supergrubdisk.org/super-grub2-disk/] or grml [http://grml.org].

pam_userdb.so breakage with newer libdb

Some Berkeley Database version 7 files created with libdb3 cannot be read by newer libdb versions (see bug #521860 [http://bugs.debian.org/521860]). As a workaround, the files can be recreated with **db**4.8**_load**, from the `db4.8-util` package.

Potential issues with diversions of /bin/sh

If you have previously added a local diversion for `/bin/sh`, or modified the `/bin/sh` symlink to point to somewhere other than `/bin/bash`, then you may encounter problems when upgrading the `dash`▯▯ or `bash`▯▯ packages. Note that this includes changes made by allowing other packages (for example `mksh`▯▯) to become the default system shell by taking over `/bin/sh`.

If you encounter any such issues, please remove the local diversion and ensure that the symlinks for both `/bin/sh` and its manual page point to the files provided by the `bash`▯▯ package and then **dpkg-reconfigure --force**

```
dpkg-divert --remove /bin/sh
dpkg-divert --remove /usr/share/man/man1/sh.1.gz

ln -sf bash /bin/sh
ln -sf bash.1.gz /usr/share/man/man1/sh.1.gz
```

Change in kernel policy regarding resource conflicts

The default setting for the acpi_enforce_resources parameter in the Linux kernel has changed to be "`strict`" by default. This can lead some legacy sensor drivers to be denied access to the sensors' hardware. One workaround is to append "`acpi_enforce_resources=lax`" to the kernel command line.

LDAP support

▯▯

A feature in the cryptography libraries used in the LDAP libraries causes programs that use LDAP and attempt to change their effective privileges to fail when connecting to an LDAP server using TLS or SSL. This can cause problems for suid programs on systems using `libnss-ldap`▯▯ like **sudo**, **su** or **schroot** and for suid programs that perform LDAP searches like `sudo-ldap`▯▯

It is recommended to replace the `libnss-ldap`▯▯ package with `libnss-ldapd`▯▯, a newer library which uses separate daemon (**nslcd**) for all LDAP lookups. The replacement for `libpam-ldap`▯▯ is `libpam-ldapd`▯▯.

Note that `libnss-ldapd`▯▯ recommends the NSS caching daemon (`nscd`▯▯) which you should evaluate for suitability in your environment before installing. As an alternative to `nscd`▯▯ you can consider `unscd`▯▯.

Further information is available in bugs #566351 [http://bugs.debian.org/566351] and #545414 [http://bugs.debian.org/545414].

`sieve` service moving to its IANA-allocated port

The IANA port allocated for ManageSieve is 4190/tcp, and the old port used by **timsieved** and other managesieve software in many distributions (2000/tcp) is allocated for Cisco SCCP usage, according to the IANA registry [http://www.iana.org/assignments/port-numbers].

Starting with the version 4.38 of the Debian `netbase` package, the `sieve` service will be moved from port 2000 to port 4190 in the `/etc/services` file.

Any installs which used the `sieve` service name instead of a numeric port number will switch to the new port number as soon as the services are restarted or reloaded, and in some cases, immediately after `/etc/services` is

This will affect Cyrus IMAP. This may also affect other sieve-enabled software such as DoveCot.

In order to avoid downtime problems, mail cluster administrators using Debian are urged to verify their Cyrus (and probably also DoveCot) installs, and take measures to avoid services moving from port 2000/tcp to port 4190/tcp by surprise in either servers or clients.

It is worth noting that:

`/etc/services` will only be automatically updated if you never made any modifications to it. Otherwise, you will be presented with a prompt by dpkg asking you about the changes.

You can edit `/etc/services` and change the `sieve` port back to 2000 if you want (this is not recommended, though).

You can edit `/etc/cyrus.conf` and any other relevant configuration files for your mail/webmail cluster (e.g. on the sieve web frontends) ahead of time to force them all to a static port number.

You can configure cyrus master to listen on both ports (2000 and 4190) at the same time, and thus avoid the problem entirely. This also allows for a much more smooth migration from port 2000 to port 4190.

KDE 桌面

Squeeze is the first Debian release to ship with the full support for the next generation KDE that is based on Qt 4. Most official KDE applications are at version 4.4.5 with the exception of `kdepim` that is at version 4.4.7. You can read the announcements from the KDE Project [http://www.kde.org/announcements/] to learn more about the changes.

Upgrading from KDE 3

KDE 3 Desktop Environment is no longer supported in Debian 6.0. It will be automatically replaced by the new 4.4 series on upgrade. As this is a major change, users should take some precautions in order to ensure as smooth of an upgrade process as possible.

重要

It is discouraged to upgrade while there is an active KDE 3 session on the system. Otherwise, the process might render the running session dysfunctional with the possibility of data loss.

Upon the first login on the upgraded system, existing users will be prompted with the Debian-KDE guided migration procedure called `kaboom` which will assist in the process of migrating the user's personal data and optionally backing up old KDE configuration. For more information, visit the Kaboom homepage [http://pkg-kde.alioth.debian.org/kaboom.html].

New KDE metapackages

As noted earlier, Debian 6.0 introduces a new set of KDE related

You are strongly advised to install the `kde-standard` package for normal desktop usage. `kde-standard` will pull in the KDE Plasma Desktop [http://www.kde.org/workspaces/plasmadesktop/] by default, and a selected set of commonly used applications.

If you want a minimal desktop you can install the `kde-plasma-desktop` package and manually pick the applications you need. This is a rough equivalent of the `kde-minimal` package as shipped in Debian 5.0.

For small form factor devices, there is an alternative environment called KDE Plasma Netbook [http://www.kde.org/workspaces/plasmanetbook/] that can be installed with the `kde-plasma-netbook` package. Plasma Netbook and Plasma Desktop can live in the same system and the default can be configured in System Settings (replacement of the former KControl).

If you want a full set of official KDE applications, you have the possibility to install the `kde-full` package. It will install KDE Plasma Desktop by

GNOME 桌面的變更和支援

There have been many changes in the GNOME desktop environment from the version shipped in lenny to the version in squeeze, you can find more information in the GNOME 2.30 Release Notes [http://library.gnome.org/misc/release-notes/2.30/]. Specific issues are listed below.

console, or with only one open GNOME session. Note that settings from GDM 2.20 will **not** be migrated. For a standard desktop system, however, simply installing gdm3⧉ should be enough.

Device and other administrative permissions

Specific permissions on devices are granted automatically to the user currently logged on physically to the system: video and audio devices, network roaming, power management, device mounting. The cdrom, floppy, audio, video, plugdev and powerdev groups are no longer useful. See the `consolekit`⧉ documentation for more information.

Most graphical programs requiring root permissions now rely on PolicyKit [http://www.freedesktop.org/wiki/Software/PolicyKit] to do so, instead of `gksu`⧉. The recommended way to give a user administrative rights is to add it to the `sudo` group.

network-manager and ifupdown interaction

Upon upgrading the `network-manager`⧉ package, interfaces configured in /etc/network/interfaces to use DHCP with no other options will be disabled in that file, and handled by NetworkManager instead. Therefore the **ifup** and **ifdown** commands will not work. These interfaces can be managed using the NetworkManager frontends instead, see the NetworkManager documentation [http://live.gnome.org/NetworkManager/SystemSettings].

Conversely, any interfaces configured in `/etc/network/interfaces` with more options will be ignored by NetworkManager. This applies in particular to wireless interfaces used during the installation of Debian (see bug #606268 [http://bugs.debian.org/606268]).

Graphics stack changes

There have been a number of changes to the X stack in Debian 6.0. This section lists the most important and user-visible.

Obsolete Xorg drivers

The `cyrix`, `imstt`, `sunbw2` and `vga` Xorg video drivers are no longer provided. Users should switch to a generic such as `vesa` or `fbdev` instead.

The old `via` driver was no longer maintained, and has been replaced by the `openchrome` driver, which will be used automatically after the upgrade.

The `nv` and `radeonhd` drivers are still present in this release, but are deprecated. Users should consider the `nouveau` and `radeon` drivers instead,

The `calcomp`, `citron`, `digitaledge`, `dmc`, `dynapro`, `elo2300`, `fpit`, `hyperpen`, `jamstudio`, `magellan`, `microtouch`, `mutouch`, `palmax`, `spaceorb`, `summa`, `tek4957` and `ur98` X input drivers have been discontinued and are not included in this release. Users of these devices might want to switch to a suitable kernel driver and the evdev X driver. For many serial devices, the **inputattach** utility allows attaching them to a Linux input device which can be recognized by the evdev X driver.

Kernel mode setting

Kernel drivers for Intel (starting from i830), ATI/AMD (from the original Radeon to the Radeon HD 5xxx "Evergreen" series) and for NVIDIA graphics chipsets now support native mode setting.

Support for old-style userspace mode setting is discontinued in the `intel` X driver, which requires a recent kernel. Users of custom kernels should make sure that their configuration includes `CONFIG_DRM_I915_KMS=y`.

Input device hotplug

The Xorg X server included in Debian 6.0 provides improved support for hotplugging of input devices (mice, keyboards, tablets, …). The old `xserver-xorg-input-kbd`⌨ and `xserver-xorg-input-mouse`⌨ packages are replaced by `xserver-xorg-input-evdev`⌨, which requires a kernel with the `CONFIG_INPUT_EVDEV` option enabled. Additionally, some of the keycodes produced by this driver differ from those traditionally associated with the same keys. Users of programs like **xmodmap** and **xbindkeys** will need to adjust their configurations for the new keycodes.

X server "zapping"

Traditionally, the **Ctrl**+**Alt**+**Backspace** combination would kill the X server. This combination is no longer active by default, but can be re-enabled by reconfiguring the `keyboard-configuration`⌨ package (system-wide), or using your desktop environment's keyboard preferences application.

章 6. 更多關於 **Debian GNU/Linux** 的資訊

閱讀更多資訊

Beyond these release notes and the installation guide, further documentation on Debian GNU/Linux is available from the Debian Documentation Project (DDP), whose goal is to create high-quality documentation for Debian users and developers. Documentation, including the Debian Reference, Debian New Maintainers Guide, and Debian FAQ are available, and many more. For full details of the existing resources see the Debian Documentation website [http://www.debian.org/doc/] and the Debian Wiki website [http://wiki.debian.org/]

個別套件的說明文件則會被安裝到 `/usr/share/doc/`*package* 目錄之中，其中可能會包含了版權資訊，專屬於 Debian 的一些訊息，以及任何原作者所提供的說明文件。

取得協助

Debian 的使用者可以從許多的管道取得協助、建議、和支援，但您應該只有在用盡了各種手段卻依然找不到問題的解答時才考慮尋求協助。這一節簡單的介紹了對 Debian 的新使用者可能會很有幫助的求助管道。

郵件論壇

Debian 的使用者最感興趣的郵件論壇應該是 debian-user 論壇（英文）以及其他的 debian-user-*language* 論壇（其他語言）了。您可以在http://lists.debian.org/ 取得這些論壇的相關細節，以及訂閱的方法。請您在論壇中發言前先檢查過去的論壇存檔中是否已經提供了問題的解答，並請遵守郵件論壇上的基本禮節。

IRC(Internet Relay Chat) 網路聊天室

Debian 在 OFTC IRC 上開設了一個 IRC 頻道，專門用來支援並幫助 Debian 的使用者。您只要把您慣用的 IRC 客戶端程式指向 irc.debian.org 並加入 #debian 就可以連上這個頻道了。

Please follow the channel guidelines, respecting other users fully. The guidelines are available at the Debian Wiki [http://wiki.debian.org/DebianIRC].

可以在 website [http://www.oftc.net/] 上取得更多 OFTC 的相關資訊。

回報錯誤

我們盡心盡力地讓 Debian GNU/Linux 成為一個高品質的作業系統，但這並不表示我們所提供的套件都是完全沒有任何問題的。為了和 Debian 一貫的"開放發展"原則相互呼應，也為了能對我們的使用者提供更好的服務，我們在我們自己的錯誤追蹤系統 (BTS) 中提供了對所有報告過的錯誤的所有資訊。您可以在 http://bugs.debian.org/ 瀏覽錯誤追蹤系統的網站。

如果您在我們的系統發行或其中的套件中發現了任何問題，請向我們回報，這樣我們才能在日後的發行版中將它修復。您需要擁有一個正確的電子郵件信箱才能夠回報問題，會有這個限制是因為這樣我們才能藉此追蹤錯誤報告的進展，而當開發人員需要更多資訊的時候也才能和原問題報告者取得連繫。

您可以藉由 **reportbug** 程式或是自行使用電子郵件來進行回報錯誤，您可以閱讀相關的參考文件（如果您有安裝 `doc-debian` 的話，可以在 `/usr/share/doc/debian` 裡找到）或到 問題追蹤系統 [http://bugs.debian.org/] 的線上網頁取得更多如何使用錯誤追蹤系統及其它的相關資訊。

如何對 **Debian** 做出貢獻

You do not need to be an expert to contribute to Debian. By assisting users with problems on the various user support lists [http://lists.debian.org/] you are contributing to the community. Identifying (and also solving) problems related to the development of the distribution by participating on the development lists [http://lists.debian.org/] is also extremely helpful. To maintain Debian's high quality distribution, submit bugs [http://bugs.debian.org/] and help developers track them down and fix them. If you have a way with words then you may want to contribute more actively by helping to write documentation [http://www.debian.org/doc/cvs] or translate [http://www.debian.org/international/] existing documentation into your own language.

如果您能投注更多的時間的話，您可以負責維護 Debian 中一部分的自由軟體。如果您能夠接續或維護其他使用者希望 Debian 所能提供的軟體的話就更好了，您可以在 亟需人手以及受到期待的套件資料庫 (WNPP) [http://www.debian.org/devel/wnpp/] 中取得相關的資訊。如果您的興趣是集中在特別的領域之中，那您可能會想要參加像是某個特定硬體平台的系統移植、Debian Jr. [http://www.debian.org/devel/debian-jr/] 以及 Debian Med [http://www.debian.org/devel/debian-med/] 之類在 Debian 中的子計畫。

不論如何，只要您以任何的方式參加了自由軟體社群的活動，不管是身為使用者、程式員、作者、還是譯者，您就已經對自由軟體的群體努力做出貢獻了。貢獻本身就是一件非常有益而有趣的事情，除了能讓您不斷地遇見新的伙伴之外，也能讓您的心中充滿了溫暖的感覺。

附錄 **A**. **Managing your lenny system before the upgrade**

這個附錄包含了在您升級至 squeeze 之前，如何讓您能夠順利地安裝或更新 lenny 套件的相關說明。這只有在某些特殊狀況之下才會有這個需求。

更新您的 **lenny** 系統

基本上，這和您所進行過的 lenny 的升級並沒有什麼不同。唯一的不同是您必須先確認您的套件列表是否還是指向 lenny，請參考在 "檢查您的來源列表" 裡的說明。

如果您是使用 Debian 鏡像站來更新您的系統的話，它會自動得被更新至 lenny 的最新釋出版。

檢查您的來源列表

If any of the lines in your `/etc/apt/sources.list` refer to 'stable', you are effectively already "using" squeeze. This might not be what you want if you are not ready yet for the upgrade. If you have already run `apt-get update`, you can still get back without problems following the procedure below.

如果您已經安裝了來自 squeeze 的套件，那麼再安裝來自 lenny 的套件就已經沒有太多意義了。在此狀況之下，您應該要自行決定是否要繼續進行。進行套件的降級並不是不可能的事，但是在此並沒有針對這個加以說明。

使用您慣用的編輯器，以 root 的身份開啟 `/etc/apt/sources.list` 這個檔案，然後檢查所有以 `deb http:` 或 `deb ftp:` 開頭的項目，看看是否有參照至 "stable"。如果有的話，將其中的 `stable` 改為 `lenny`。

如果您有任何項目是以 `deb file:` 開頭的，您必須自行檢查這些項目所提供的是 lenny 還是 squeeze 的檔案庫。

重要

不要修改任何以 `deb cdrom:` 開頭的項目。否則，這些項目將會因而無法使用，使得您只能再執行一次 **apt-cdrom**。如果您發現某個 'cdrom' 的來源項目是指向 "unstable" 時請不要覺得太訝異。雖然有點奇怪，但這卻是很正常的。

如果您進行了任何改變，將檔案儲存並執行

```
# apt-get update
```

來更新套件的列表。

Upgrade legacy locales to UTF-8

If your system is localised and is using a locale that is not based on UTF-8 you should strongly consider switching your system over to using UTF-8 locales. In the past, there have been bugs identified that manifest itself only when using a non-UTF-8 locale. On the desktop, such legacy locales are supported through ugly hacks in the libraries internals, and we cannot decently provide support for users who still use them.

To configure your system's locale you can run **dpkg-reconfigure locales**. Ensure you select an UTF-8 locale when you are presented with the question asking which locale to use as a default in the system. In addition, you should review the locale settings of your users and ensure that they do not have legacy locales definitions in their configuration environment.

附錄 B. Contributors to the Release Notes

Many people helped with the release notes, including, but not limited to

Adam Di Carlo, Andreas Barth, Andrei Popescu, Anne Bezemer, Bob Hilliard, Charles Plessy, Christian Perrier, Daniel Baumann, Eddy Petrişor, Emmanuel Kasper, Esko Arajärvi, Frans Pop, Giovanni Rapagnani, Gordon Farquharson, Javier Fernández-Sanguino Peña, Jens Seidel, Jonas Meurer, Josip Rodin, Justin B Rye, LaMont Jones, Luk Claes, Martin Michlmayr, Michael Biebl, Moritz Mühlenhoff, Noah Meyerhans, Noritada Kobayashi, Osamu Aoki, Peter Green, Rob Bradford, Samuel Thibault, Simon Bienlein, Simon Paillard, Stefan Fritsch, Steve Langasek, Tobias Scherer, Vincent McIntyre, and W. Martin Borgert.

This document has been translated into many languages. Many thanks to the translators!

索引

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小辭彙

ACPI	電源進階設定介面
ALSA	先進 Linux 音效架構
APM	進階電源管理
CD	Compact Disc
CD-ROM	Compact Disc Read Only Memory
DHCP	Dynamic Host Configuration Protocol
DNS	網域名稱系統
DVD	數位光碟
GIMP	GNU 圖形處理程式
GNU	GNU's Not Unix
GPG	GNU Privacy Guard
IDE	集成設備電路
LDAP	輕量級目錄存取協定
LILO	Linux 載入程式
LSB	Linux Standard Base
LVM	邏輯卷軸管理程式
MTA	郵件傳送代理程式
NFS	網路檔案系統
NIC	網路介面卡
NIS	網路資訊服務
OSS	開放音效系統
RAID	磁碟陣列
RPC	Remote Procedure Call
SATA	串列式傳輸介面技術
SSL	Secure Sockets Layer
TLS	Transport Layer Security
USB	通用序列匯流排
UUID	通用唯一識別碼
VGA	視訊圖像陳列
WPA	Wi-Fi 存取協定