README..txt

This directory attempts to document the ABI between the Linux kernel and userspace, and the relative stability of these interfaces. Due to the everchanging nature of Linux, and the differing maturity levels, these interfaces should be used by userspace programs in different ways.

We have four different levels of ABI stability, as shown by the four different subdirectories in this location. Interfaces may change levels of stability according to the rules described below.

The different levels of stability are:

stable/

This directory documents the interfaces that the developer has defined to be stable. Userspace programs are free to use these interfaces with no restrictions, and backward compatibility for them will be guaranteed for at least 2 years. Most interfaces (like syscalls) are expected to never change and always be available.

testing/

This directory documents interfaces that are felt to be stable, as the main development of this interface has been completed. The interface can be changed to add new features, but the current interface will not break by doing this, unless grave errors or security problems are found in them. Userspace programs can start to rely on these interfaces, but they must be aware of changes that can occur before these interfaces move to be marked stable. Programs that use these interfaces are strongly encouraged to add their name to the description of these interfaces, so that the kernel developers can easily notify them if any changes occur (see the description of the layout of the files below for details on how to do this.)

obsolete/

This directory documents interfaces that are still remaining in the kernel, but are marked to be removed at some later point in time. The description of the interface will document the reason why it is obsolete and when it can be expected to be removed. The file Documentation/feature-removal-schedule txt may describe some of these interfaces, giving a schedule for when they will be removed.

removed/

This directory contains a list of the old interfaces that have been removed from the kernel.

Every file in these directories will contain the following information:

What: Short description of the interface

Date: Date created

KernelVersion: Kernel version this feature first showed up in.

Contact: Primary contact for this interface (may be a mailing list)

Description: Long description of the interface and how to use it.
Users: All users of this interface who wish to be notified when

it changes. This is very important for interfaces in the "testing" stage, so that kernel developers can work

第1页

README..txt

with userspace developers to ensure that things do not break in ways that are unacceptable. It is also important to get feedback for these interfaces to make sure they are working in a proper way and do not need to be changed further.

How things move between levels:

Interfaces in stable may move to obsolete, as long as the proper notification is given.

Interfaces may be removed from obsolete and the kernel as long as the documented amount of time has gone by.

Interfaces in the testing state can move to the stable state when the developers feel they are finished. They cannot be removed from the kernel tree without going through the obsolete state first.

It's up to the developer to place their interfaces in the category they wish for it to start out in.