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gnu grub2 *
```

Description:

A flaw was found in grub2. When reading data from a squash4 filesystem, grub's squash4 fs module uses user-controlled parameters from the filesystem geometry to determine the internal buffer size, however, it improperly checks for integer overflows. A maliciously crafted filesystem may lead some of those buffer size calculations to overflow, causing it to perform a `grub_malloc()` operation with a smaller size than expected. As a result, the `direct_read()` will perform a heap based out-of-bounds write during data reading. This flaw may be leveraged to corrupt grub's internal critical data and may result in arbitrary code execution, by-passing secure boot protections.

Main problems:

787 "Out-of-bounds Write"