

Opinion on BitTorrent Propagation

Certain decentralized forms of peer-to-peer file sharing present a challenge to the unidirectional view of distribution that is implicit in GPLv2 and Draft 1 of GPLv3. It is neither straightforward nor reasonable to identify an upstream/downstream link in BitTorrent distribution; such distribution is multidirectional, cooperative and anonymous. In systems like BitTorrent, participants act both as transmitters and recipients of blocks of a particular file, but they see themselves as users and receivers, and not as distributors in any conventional sense. At any given moment of time, most peers will not have the complete file.

The GPL permits distribution of a work in object code form over a network, provided that the distributor offers equivalent access to copy the Corresponding Source Code “in the same way through the same place.” This wording might be interpreted to permit BitTorrent distribution of binaries if they are packaged together with the source code, but this impractical, for at least two reasons. First, even if the source code is packaged with the binary, it will only be available to a non-seeding peer at the end of the distribution process, but the peer will already have been providing parts of the binary to others in the network, functioning rather like a router or a cache proxy. Second, in practice BitTorrent and similar peer-to-peer forms of transmission have been less suitable means for distributing source code. In large distributions, packaging source code with the binary may result in a substantial increase in file size and transmission time. Source code packages themselves tend not to be transmitted through BitTorrent owing to reduced demand. There generally will be too few participants downloading the same source package at the same time to enable effective seeding and distribution.

We have made two changes that recognize and facilitate distribution of covered works in object code form using BitTorrent or similar peer-to-peer methods. First, under new subsection 6e, if a licensee conveys such a work using peer-to-peer transmission, that licensee is in compliance with section 6 so long as the licensee knows, and informs other peers where, the object code and its Corresponding Source are publicly available at no charge under subsection 6d. The Corresponding Source therefore need not be provided through the peer-to-peer system that was used for providing the binary. Second, we have revised section 9 to make clear that ancillary propagation of a covered work that occurs as part of the process of peer-to-peer file transmission does not require acceptance, just as mere receipt and execution of the Program does not require acceptance. Such ancillary propagation is permitted without limitation or further obligation.

Draft 1 did not address peer-to-peer transmission; it was an issue that had escaped our notice. The experts on the discussion committees we formed in January did not call this issue to our attention either. Rather, the issue was pointed out to us by two unaffiliated members of the free software user community. Acting independently, in different countries, these two users shared their concerns with us by submitting comments 240 and 766 on draft section 6 through the web interface we set up at <http://gplv3.fsf.org/comments>. In revising the license draft, we have listened to and benefited from the insights and proposals of these and other members of the public. The GPLv3 discussion process is working well.