
Appendix C. Upgrading to 3.0

For the most part, the API for qpdf version 3.0 is backward compatible with versions 2.1 and later. There are two exceptions:

- The method *QPDFObjectHandle::replaceStreamData* that uses a **StreamDataProvider** to provide the stream data no longer takes a *length* parameter. While it would have been easy enough to keep the parameter for backward compatibility, in this case, the parameter was removed since this provides the user an opportunity to simplify the calling code. This method was introduced in version 2.2. At the time, the *length* parameter was required in order to ensure that calls to the stream data provider returned the same length for a specific stream every time they were invoked. In particular, the linearization code depends on this. Instead, qpdf 3.0 and newer check for that constraint explicitly. The first time the stream data provider is called for a specific stream, the actual length is saved, and subsequent calls are required to return the same number of bytes. This means the calling code no longer has to compute the length in advance, which can be a significant simplification. If your code fails to compile because of the extra argument and you don't want to make other changes to your code, just omit the argument.
- Many methods take `long long` instead of other integer types. Most if not all existing code should compile fine with this change since such parameters had always previously been smaller types. This change was required to support files larger than two gigabytes in size.