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Yarrow algorithm

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- This article includes a [list of references](#), but **its sources remain unclear** because it has **insufficient inline citations**. *(September 2013)*
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The **Yarrow algorithm** is a [cryptographically secure pseudorandom number generator](#). The name is taken from the [yarrow](#) plant, the stalks of which are dried and used as a randomising agent in [I Ching divination](#).

It was designed by [Bruce Schneier](#), [John Kelsey](#), and [Niels Ferguson](#) of [Counterpane Labs](#) (Kelsey et al., 1999). The Yarrow algorithm is explicitly unpatented, royalty-free and open source; no license is required to use it. An improved design from Ferguson and Schneier, [Fortuna](#), is described in their book, *Practical Cryptography*.

Yarrow is incorporated in [iOS](#)^[1] and [Mac OS X](#) for their [/dev/random](#) devices. [FreeBSD](#) also used Yarrow for [/dev/random](#), but phased it out in favor of [Fortuna](#).^[2]

External links [\[edit\]](#)

- [Yarrow algorithm page](#) [↗](#)
- Yarrow-160: Notes on the Design and Analysis of the Yarrow Cryptographic Pseudorandom Number Generator*, J. Kelsey, B. Schneier, and N. Ferguson [↗](#)

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- ↑ http://www.apple.com/ipad/business/docs/iOS_Security_Oct12.pdf [↗](#)
- ↑ <https://svnweb.freebsd.org/base?view=revision&revision=284959> [↗](#)



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