

# Virtual threads (JDK 21)

With the support of JDK 21 by Blueriq, you are able to use virtual threads in your application. Virtual threads offer a lightweight alternative to the resource-intensive platform threads that we knew so far, which should allow us to write high throughput applications that better utilize resources.

Whilst The latest release of Blueriq supports and compiles against JDK 21. Currently we still rely on the existing platform thread architecture, which also includes a concept called `ThreadLocal`. It is known that when you use virtual threads and these `ThreadLocals`, that it will hurt performance (<https://youtu.be/WsCJYQDPrrE?t=1895>). For this reason, we cannot yet support virtual threads with Blueriq as of yet. In the future, we can take the steps needed to migrate the `ThreadLocals` to the virtual threads architecture. Note that this also involves a lot of frameworks that Blueriq relies upon, so we cannot make any guarantees when this migration will be completed.