ZGC (Z Garbage Collector) is a scalable, low-latency garbage collector for Java. It was introduced in Java 11 as an experimental feature, and became a production feature in Java 15.

ZGC is designed to provide very low pause times, even for large heaps. It achieves this by performing all garbage collection work concurrently with application threads. This means that ZGC does not stop the world for garbage collection, which can significantly improve application response times.

ZGC is also designed to be scalable. It can handle heaps ranging from 8MB to 16TB, with pause times that do not increase with heap size. This makes ZGC a good choice for applications that require low latency and/or use a large heap.

Here are some of the key features of ZGC:

* Low pause times: ZGC can achieve pause times of less than 10ms, even for large heaps.
* Scalability: ZGC can handle heaps ranging from 8MB to 16TB.
* Concurrent: ZGC performs all garbage collection work concurrently with application threads.
* Experimental: ZGC is still an experimental feature, but it is becoming increasingly stable.

If you are looking for a garbage collector that can provide low latency and scalability, then ZGC is a good option to consider. However, it is important to note that ZGC is still an experimental feature, so it may not be suitable for all applications.

Here are some of the limitations of ZGC:

* It is not as efficient as some other garbage collectors, such as G1.
* It can be more difficult to tune than some other garbage collectors.
* It is not yet supported by all Java platforms.

Overall, ZGC is a promising new garbage collector that can provide low latency and scalability for Java applications. However, it is important to be aware of its limitations before using it in production.

Here are some resources that you may find helpful:

* ZGC - OpenJDK: https://openjdk.org/projects/zgc/
* An Introduction to ZGC: A Scalable and Experimental Low-Latency JVM Garbage Collector: https://www.baeldung.com/jvm-zgc-garbage-collector
* ZGC: The Z Garbage Collector: https://wiki.openjdk.org/display/zgc/Main