

---

Subject: "Raw" thread support

Posted by [mirek](#) on Sun, 08 Apr 2012 17:21:01 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Primary motivation for this feature was creation of asynchronous DNS resolver `IpAddrInfo`.

The problem is that there are no easy to use nonblocking APIs for DNS, `getaddrinfo` is blocking.

The easiest solution to the situation is to use separate thread to perform blocking call. Anyway, I want still to keep single-threaded mode, because some code can run 5-15% faster if compiled single-threaded. This is because in single-threaded mode, most synchronization routines are just NOPs.

Anyway, that does not preclude to have auxiliary threads in single-threaded, if some rules are followed. Basically, if nothing related to U++ heap is used, it should be OK.

It is also worth to encapsulate two basic MT features, `StartRawThread` and `RawMutex`, to avoid platform differences. `StartRawThread` and `RawMutex` thus exist and work even in single-threaded mode...

To see more details, examine `IpAddrInfo`.

---