```
class RealTimeAsyncUpdater::RealTimeAsyncUpdateDispatcher   : private HighResolutionTimer,
                                                              private AsyncUpdater
{
public:
    RealTimeAsyncUpdateDispatcher();
   ~RealTimeAsyncUpdateDispatcher();

    void add (RealTimeAsyncUpdaterMessage&);
    void remove (RealTimeAsyncUpdaterMessage&);

    void signal()
    {
        needsToService.store (true);
    }

private:
    void hiResTimerCallback() override
    {
        if (needsToService.exchange (false))
            triggerAsyncUpdate();
    }

    void handleAsyncUpdate() override
    {
        serviceUpdaters();
    }

    void serviceUpdaters();

    CriticalSection lock;
    Array<RealTimeAsyncUpdaterMessage*> updaters;
    std::atomic<bool> needsToService { false };
};
```

```
void RealTimeAsyncUpdaterMessage::postUpdate()
{
    shouldDeliver.compareAndSetBool (1, 0);
    dispatcher->signal();
}
```

```cpp
class RealTimeAsyncUpdater::RealTimeAsyncUpdateDispatcher   : private HighResolutionTimer,
                                                              private AsyncUpdater
{
public:
    RealTimeAsyncUpdateDispatcher();
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    CriticalSection lock;
    Array<RealTimeAsyncUpdaterMessage*> updaters;
    std::atomic<bool> needsToService { false };
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```

```cpp
void RealTimeAsyncUpdaterMessage::postUpdate()
{
    shouldDeliver.compareAndSetBool (1, 0);
    dispatcher->signal();
}
```

juce::AsyncUpdater
Average = 20 microsecs, minimum = 5 microsecs, maximum = 102 microsecs

RealTimeAsyncUpdater (Timer Based)
Average = 41 millisecs, minimum = 239 microsecs, maximum = 92 millisecs