


```
template<typename UpdaterType>
struct UpdaterTest : public UpdaterType
{
    UpdaterTest() = default;

    void sendUpdate()
    {
        hasDelivered = false;
        UpdaterType::triggerAsyncUpdate();
    }

    void handleAsyncUpdate() override
    {
        hasDelivered = true;
        event.signal();
        JUCE_ASSERT_MESSAGE_THREAD;
    }

    WaitableEvent event;
    std::atomic<bool> hasDelivered { false };
};
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```

```
template<typename UpdaterType>
void runAsyncUpdateTest()
{
    UpdaterTest<UpdaterType> updater;
    PerformanceCounter pc ("RealTimeAsyncUpdaterCounter", 1000);
    std::atomic<bool> hasFinished { false };

    std::thread t ([&]
    {
        for (int i = 0; i < 10'000; ++i)
        {
            pc.start();
            updater.sendUpdate();
            updater.event.wait (-1);
            pc.stop();

            if (! updater.hasDelivered.load())
                expect (false);
        }

        hasFinished = true;
    });

    while (! hasFinished.load())
        MessageManager::getInstance()->runDispatchLoopUntil (5);

    t.join();
    expect (updater.hasDelivered.load());
}
```