
Subject: Re: What does SSE2 usage enhance?
Posted by [crydev](#) on Thu, 18 Apr 2013 09:43:22 GMT
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Here is a small code snippet. If you see anything that is strange or wrong I would appreciate feedback.

The memcpy line is the line where I copy, in this case, 4 bytes from the address of i in array buffer to float variable tempStore.

```
template<>
void MemoryScanner::ScanWorker(const MemoryRegion& region, const float& value)
{
    Byte *buffer = (Byte*)MemoryAlloc(region.MemorySize);
    if (!ReadProcessMemory(this->mOpenedProcessHandle, (void*)region.BaseAddress, buffer
        , region.MemorySize, NULL))
    {
        MemoryFree(buffer);
        return;
    }

    Vector<MemoryBlockBase*> localResults;

    for (int i = 0; i < region.MemorySize; i++)
    {
        float tempStore;
        memcpy(&tempStore, &(buffer[i]), sizeof(float));

        if (TemplateCompare(tempStore, value)) // WRITES TO FREED BLOCKS DETECTED
        {
            MemoryBlock<float>* mb = new MemoryBlock<float>();
            mb->Address = static_cast<unsigned int>(region.BaseAddress + i);
            mb->Size = sizeof(float);
            mb->Buffer = tempStore;
            localResults.Add(mb);
        }
    }

    MemoryFree(buffer);

    AtomicInc(this->ThreadFinishCount);

    if (localResults.GetCount() > 0)
    {
        this->AddThreadSpecificSearchResults(localResults);
    }

    this->UpdateScanningProgress(this->ThreadFinishCount);
```

}
