

---

Subject: NEW: BufferStream

Posted by [kohait00](#) on Wed, 11 Aug 2010 09:25:17 GMT

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

---

hi guys,

i was in need of a BufferStream, a stream that can store data inside a `Vector<byte>`, which i find beeing more convenient than the `StringBuffer`, which is quite hard to understand (having both a `String` data and a `StringBuffer` etc..where data is copied around i think..which is not what i needed). BTW: why was that nessessary, why couldnt it have been only `StringBuffer` or only `String` data?

so i tried to use my brandnew Stream knowledge to make a `Vector<byte>` based buffer, maybe one could take a look on it and spot some conceptional mistakes, if any..(ofcarse there are:)

it should support storing data and `GetResult` a `Vector<byte>` back, picking internal one, which then is resetet to be used again. it reserves some more space in advance..which is not equal to currently stored stuff there..so this is definitely fix issue yet.

maybe a i only dont understand the `StringBuffer` well, maybe it could do it for me as well. but for for now it is my inly option. if somebody can explain the internal concept of `StringBuffer`, i'd appreciate it.. so here comes the class, attached a Test app.

```
class BufferStream : public MemStream {  
protected:  
    virtual void _Put(int w) { byte h = w; _Put(&h, 1); }  
    virtual void _Put(const void *data, dword size)  
    {  
        if(size > (dword)(uintptr_t)(wrlim - ptr)) {  
            Reserve(size + 128);  
        }  
        memcpy(ptr, data, size);  
        ptr += size;  
    }  
}
```

public:

```
    virtual void SetSize(int64 asize)  
    {  
        dword size = (dword)asize;  
        dword p = (dword)(uintptr_t)(ptr - buffer);  
        data.SetCount(size);  
        Open(data);  
        SetStoring();  
        Seek(min(p, size));  
    }
```

protected:

```

Vector<byte> data;

public:
void    Open(Vector<byte> & d)
{
if(&data != &d) data = d; //pick
MemStream::Create((byte*)data, data.GetCount());
}

void    Create()
{
data.Clear();
Open(data);
SetStoring();
}

void    Reserve(int n)
{
SetSize((int)GetSize() + n);
}

Vector<byte> GetResult()
{
Vector<byte> d = data; //pick
Create();
return d;
}
operator  Vector<byte>()      { return GetResult(); }

BufferStream()           { Create(); }
BufferStream(Vector<byte>& d)    { Open(d); }
};

typedef BufferStream VectorStream;

```

EDIT: luckily noone has downloaded this one so far..  
so i exchange it with an update..GetResult now trims data to only used..

#### File Attachments

---

1) [BufferStream.rar](#), downloaded 215 times

---



---

Subject: Re: NEW: BufferStream

Posted by [mirek](#) on Fri, 13 Aug 2010 08:57:11 GMT

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

---

kohait00 wrote on Wed, 11 August 2010 05:25hi guys,

i was in need of a BufferStream, a stream that can store data inside a Vector<byte>, which i find beeing more convenient than the StringBuffer, which is quite hard to understand (having both a String data and a StringBuffer etc..where data is copied around i think..which is not what i needed). BTW: why was that nessessary, why couldnt it have been only StringBuffer or only String data?

Because sometimes the code uses Stream interface.

E.g. you have Serialize and you want to store the output to String (or read the input).

---

---

---

---

Subject: Re: NEW: BufferStream

Posted by [kohait00](#) on Fri, 13 Aug 2010 09:02:33 GMT

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

---

didn't quite get it yet, sorry, which code? Stream interface is used always, or not?

---

---

---

---

Subject: Re: NEW: BufferStream

Posted by [mirek](#) on Fri, 13 Aug 2010 19:48:54 GMT

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

---

kohait00 wrote on Fri, 13 August 2010 05:02didn't quite get it yet, sorry, which code? Stream interface is used always, or not?

Now I see, you wanted to add Stream interface to String?

Well, that is not a good idea for many reasons...

---

---

---

---

Subject: Re: NEW: BufferStream

Posted by [kohait00](#) on Sun, 15 Aug 2010 06:14:59 GMT

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

---

why? selfgrowing buffers? forgetting to flush? reallocation?

---