Subject: [SOLVED][FeatureRequests]Use HttpRequest to upload large file
Posted by kasome on Tue, 17 Sep 2013 04:06:16 GMT
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Hello,

class HttpRequest can be used to upload file by using Post member function, e.g.

```
HttpRequest httpRequest;
Upp::int64 offset = 0;
Upp::String uploadFile = "test.mkv";
httpRequest.SSL(true).Url( someUrl ).ClearPost().ClearHeaders().Post(
Upp::LoadFile(uploadFile).Mid(offset) ).Execute();
```

But when the file is large, larger than 1GB, for example, than HttpRequest will need large memory to upload by using Upp::LoadFile

Is there possible to add feature to HttpRequest, something like:

```
HttpRequest httpRequest;
Upp::int64 offset = 0;
Upp::String uploadFile = "test.mkv";
Upp::FileIn in( uploadFile );
in.Seek(offset);
httpRequest.SSL(true).Url( someUrl ).ClearPost().ClearHeaders().Post( in ).Execute();
```

Thanks.

Subject: Re: [FeatureRequests]Use HttpRequest to upload large file
Posted by mirek on Sat, 21 Sep 2013 16:56:50 GMT
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Definitely a good idea, added to RM. Might take a while to implement though... (contributions welcome).

Mirek

Subject: Re: [FeatureRequests]Use HttpRequest to upload large file
Posted by kasome on Sun, 22 Sep 2013 01:37:47 GMT
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I see. and Thanks.

Subject: Re: [FeatureRequests]Use HttpRequest to upload large file
Posted by kasome on Mon, 14 Jul 2014 08:08:10 GMT
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hi,

Inorder to upload large file, I make some modification to HttpRequest to do so.

Here is the usage:

```
Upp::int64 uploadFileSourceStartPosition = 1000;
Upp::String uploadFileSourcePath = "TestVideo.mkv";
_httpRequest.ClearPost().PUT().SSL( true ).Url( hostName ).Path( hostPath
).ClearHeaders().Header( "Content-Length", contentLength ).KeepAlive( true ).ContentType(
contentType ).PostDataStream( uploadFileSourcePath, uploadFileSourceStartPosition
).Execute();
//_httpRequest.ClearPost().PUT().SSL( true ).Url( hostName ).Path( hostPath
).ClearHeaders().Header( "Content-Length", contentLength ).KeepAlive( true ).ContentType(
contentType ).PostData(  Upp::LoadFile(uploadFileSourcePath).Mid(uploadFileSourceStar
tPosition) ).Execute();
```

The total modification is as follows:

1. upp\uppsrc\Core\Inet.h

Original (version:7373)

```
class HttpRequest : public TcpSocket {
public:
 .....
 HttpRequest&  PostData(const String& pd)            { postdata = pd; return *this; }
 .....
 HttpRequest&  ClearPost()                       { PostData(Null); multipart.Clear(); GET(); return
*this; }
 .....
};
```

Modified

```
class HttpRequest : public TcpSocket {
 .....
 int64       postdataPos;  // Added
 Upp::String postdataName;  // Added

 .....
 bool   SendingStream(); // Added
public:
```

```
 .....
 HttpRequest&  PostData(const String& pd)                  { postdata = pd; return *this; }
 HttpRequest&  PostDataStream(const String& pdn, const int64 pos = 0)       { postdataName =
pdn; postdataPos = pos; return *this; } // Added

 .....
// HttpRequest&  ClearPost()                          { PostData(Null); multipart.Clear(); GET(); return
*this; } // Delete
 HttpRequest&  ClearPost()                         { PostData(Null); PostDataStream(Null);
multipart.Clear(); GET(); return *this; } // Added

 .....
};
```

2. upp\uppsrc\Core\Http.cpp

Original (version:7373)

```
bool HttpRequest::Do()
{
 .....
 case REQUEST:
  if(SendingData())
   break;
  StartPhase(HEADER);
  break;
 .....
}

void HttpRequest::StartRequest()
{
 .....
 if(method == METHOD_GET || method == METHOD_HEAD)
  pd.Clear();
 .....
   if(pd.GetCount() || method == METHOD_POST || method == METHOD_PUT)
   data << "Content-Length: " << pd.GetCount() << "\r\n";
 .....
}

bool HttpRequest::SendingData()
{
 for(;;) {
  int n = min(2048, data.GetLength() - (int)count);
  n = TcpSocket::Put(~data + count, n);
  if(n == 0)
```

```
   break;
  count += n;
 }
 return count < data.GetLength();
}
```

Modified

```
bool HttpRequest::Do()
{
 .....
 case REQUEST:
  if( IsNull(postdataName) ) {
   if(SendingData())
    break;
  }
  else {
   if(SendingStream())
    break;
  }
  StartPhase(HEADER);
  break;
 .....
}

void HttpRequest::StartRequest()
{
 .....
 if(method == METHOD_GET || method == METHOD_HEAD){
  pd.Clear();
  postdataName.Clear();
 }
 .....
   if((IsNull(postdataName)? pd.GetCount() : Upp::GetFileLength(postdataName)-postdataPos) ||
method == METHOD_POST || method == METHOD_PUT)
    data << "Content-Length: " << (IsNull(postdataName)? pd.GetCount() :
Upp::GetFileLength(postdataName)-postdataPos) << "\r\n";
 .....
}

bool HttpRequest::SendingData()
{
 for(;;) {
  int n = min(2048, data.GetLength() - (int)count);
  n = TcpSocket::Put(~data + count, n);
  if(n == 0)
```

```
   break;
  count += n;
 }
 return count < data.GetLength();
}

bool HttpRequest::SendingStream() {
 Upp::FileIn in( postdataName );
 in.Seek( postdataPos );

 int bufferSize = 2048 - (data.GetLength() & 2047);

 Upp::StringBuffer buffer( bufferSize );
 int readingSize = in.Get( buffer, bufferSize );
 int64 postdataSize = in.GetSize() - postdataPos - readingSize;

 data << Upp::String( ~buffer, readingSize );

 for(;;) {
  int n = min(2048, data.GetLength() - (int)count);
  if( data.GetLength() - (int)count < 0 ) {
   int kk = 0;
  }
  n = TcpSocket::Put(~data + count, n);
  if(n == 0)
   break;
  count += n;
 }

 if( data.GetLength() == count ) {
  Upp::StringBuffer buffer( 2048 );
  for(;;) {
   int n = min((int64)2048, (int64)data.GetLength() + postdataSize - (int64)count);
   int readingSize = in.Get( buffer, n );
   n = TcpSocket::Put(~buffer, readingSize);
   if(n == 0)
    break;
   count += n;
  }
 }
 return count < data.GetLength() + postdataSize;
}
```

Hope that helps.

File Attachments
1) HttpRequest.txt, downloaded 522 times

Subject: Re: [FeatureRequests]Use HttpRequest to upload large file
Posted by kasome on Wed, 16 Jul 2014 05:39:16 GMT
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Add some error handling to prevent the program from crashing.

```
bool HttpRequest::SendingStream() {
 Upp::FileIn in( postdataName );
 in.Seek( postdataPos );

 int readingSize = 0;
 Upp::String dataPadding = data;
 if( dataPadding.GetLength() & 2047 ) {
  int bufferSize = 2048 - (dataPadding.GetLength() & 2047);

  Upp::StringBuffer buffer( bufferSize );
  readingSize = in.Get( buffer, bufferSize );
  dataPadding << Upp::String( ~buffer, readingSize );
 }
 int64 postdataSize = in.GetSize() - postdataPos - readingSize;

 if( count == 0 ) {
  for(;;) {
   int n = min(2048, dataPadding.GetLength() - (int)count);
   n = TcpSocket::Put(~dataPadding + count, n);
   if(n == 0)
    break;
   count += n;
  }

  if( (count == dataPadding.GetLength()) && postdataSize ) {
   Upp::StringBuffer buffer( 2048 );
   for(;;) {
    int n = min((int64)2048, (int64)dataPadding.GetLength() + postdataSize - (int64)count);
    int readingSize = in.Get(buffer, n);
    n = TcpSocket::Put(~buffer, readingSize);
    if(n == 0)
     break;
    count += n;
   }
  }
 }
 else {
```

```
  if( count < dataPadding.GetLength() ) {
   for(;;) {
    int n = min(2048, dataPadding.GetLength() - (int)count);
    n = TcpSocket::Put(~dataPadding + count, n);
    if(n == 0)
     break;
    count += n;
   }
  }
  if( (count >= dataPadding.GetLength()) && postdataSize ) {
   Upp::StringBuffer buffer( 2048 );
   in.Seek( postdataPos + readingSize + (count - dataPadding.GetLength()) );
   for(;;) {
    int n = min((int64)2048, (int64)dataPadding.GetLength() + postdataSize - (int64)count);
    int readingSize = in.Get(buffer, n);
    n = TcpSocket::Put(~buffer, readingSize);
    if(n == 0)
     break;
    count += n;
   }
  }
 }
 return count < dataPadding.GetLength() + postdataSize;
}
```

Subject: Re: [FeatureRequests]Use HttpRequest to upload large file
Posted by mirek on Wed, 16 Jul 2014 06:39:22 GMT
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Would it be possible to post the whole file here as attachment, please? Much easier to compare it with existing one...

Mirek

Subject: Re: [FeatureRequests]Use HttpRequest to upload large file
Posted by kasome on Wed, 16 Jul 2014 07:01:45 GMT
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Sorry. The whole file is post as attachment now. (modified from the original upp version 7373)

File Attachments

1) Inet.h, downloaded 478 times

2) Http.cpp, downloaded 534 times

Subject: Re: [FeatureRequests]Use HttpRequest to upload large file
Posted by mirek on Mon, 28 Jul 2014 10:27:17 GMT
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I think this should be more flexible (not coupled to filesystem), something like

HttpRequest& PostStream(Stream& s, int64 len = Null);

I would also like to ask what is the deal with all that padding code?

Mirek

Subject: Re: [FeatureRequests]Use HttpRequest to upload large file
Posted by mirek on Mon, 28 Jul 2014 11:17:41 GMT
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I have tried that altered variant, please check it that is OK.

Mirek

Subject: Re: [FeatureRequests]Use HttpRequest to upload large file
Posted by kasome on Mon, 28 Jul 2014 11:45:36 GMT
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Hi, Mirek

Quote:
I think this should be more flexible (not coupled to filesystem), something like

HttpRequest& PostStream(Stream& s, int64 len = Null);

Great! That is better than mine.

Quote:I would also like to ask what is the deal with all that padding code?
I am just try to make the two different part of the data combined as if they are the same continuous data, but i am really not sure if it is necessary.

Quote:I have tried that altered variant, please check it that is OK.
I will check it, and thanks a lot.
