Subject: Animated GIF support, anybody?
Posted by mirek on Mon, 10 May 2010 06:13:00 GMT
View Forum Message <> Reply to Message

I guess this is a valid request:

http://www.ultimatepp.org/forum/index.php?t=msg&th=2967& amp;start=0&

Well, anybody willing to add animated GIF support to plugin/GIF?

Mirek

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Tue, 15 Jun 2010 13:33:42 GMT
View Forum Message <> Reply to Message

luzr wrote on Mon, 10 May 2010 08:13I guess this is a valid request:

http://www.ultimatepp.org/forum/index.php?t=msg&th=2967& amp; amp;start=0&

Well, anybody willing to add animated GIF support to plugin/GIF?

Mirek
Hello Mirek

This is very easy. The code is there.

Just tell how you want the interface for:
- loading images: How to cross through StreamRaster-Raster-GIFRaster
- showing them.

Subject: Re: Animated GIF support, anybody?
Posted by mirek on Tue, 15 Jun 2010 17:19:14 GMT
View Forum Message <> Reply to Message

koldo wrote on Tue, 15 June 2010 09:33luzr wrote on Mon, 10 May 2010 08:13I guess this is a valid request:

http://www.ultimatepp.org/forum/index.php?t=msg&th=2967& amp; amp; amp;start=0&

Well, anybody willing to add animated GIF support to plugin/GIF?

Mirek

Hello Mirek

This is very easy. The code is there.

Just tell how you want the interface for:
- loading images: How to cross through StreamRaster-Raster-GIFRaster
- showing them.

Actually, interfaces are already there for Raster:

```
class Raster {
....
public:
 virtual void    SeekPage(int page);
 virtual int     GetActivePage() const;
 virtual int     GetPageCount();
```

RasterEncoder might need one or two new virtual methods.

Mirek

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Tue, 15 Jun 2010 21:52:29 GMT
View Forum Message <> Reply to Message

luzr wrote on Tue, 15 June 2010 19:19koldo wrote on Tue, 15 June 2010 09:33luzr wrote on Mon, 10 May 2010 08:13I guess this is a valid request:

http://www.ultimatepp.org/forum/index.php?t=msg&th=2967& amp; amp; amp; amp; amp;start=0&

Well, anybody willing to add animated GIF support to plugin/GIF?

Mirek
Hello Mirek

This is very easy. The code is there.

Just tell how you want the interface for:
- loading images: How to cross through StreamRaster-Raster-GIFRaster
- showing them.

Actually, interfaces are already there for Raster:

```
class Raster {
....
public:
 virtual void    SeekPage(int page);
 virtual int     GetActivePage() const;
 virtual int     GetPageCount();
```

RasterEncoder might need one or two new virtual methods.

Mirek
Hello Mirek

I imagine you say the frame rate (time between frames per every frame) or the aspect ratio .

Meanwhile please think about visualization interface.

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Wed, 16 Jun 2010 12:15:21 GMT
View Forum Message <> Reply to Message

Hello Mirek

Here I enclose you the files changed.

Just for testing (do not consider it a serious player) I have used the next simple code. It shows 100 frames repeating them if the gif have less frames. Delay is considered but aspect is not.

```
 FileIn in(fileName);
 One<StreamRaster> raster = StreamRaster::OpenAny(in);
 int ind = 0;
 for (int i = 0; i < 100; ++i) {
  raster->SeekPage(ind);
  image = raster->GetImage();

  Refresh();
  Ctrl::ProcessEvents();

  int delay = raster->GetPageDelay(ind);
  if (delay <= 0)
   Sleep(100);
```

```
  else
   Sleep(delay*10);

  if (ind < raster->GetPageCount()-1)
   ind++;
  else
   ind = 0;
 }
```

I have added two new virtual functions:

```
virtual int GetPageAspect(int n);
virtual int GetPageDelay(int n);
```

In GIF format it is defined a delay per frame, but an aspect ratio for all frame set, so a GetAspect(void) version would be valid.

File Attachments

1) GifFiles.7z, downloaded 455 times

Subject: Re: Animated GIF support, anybody?
Posted by mirek on Fri, 18 Jun 2010 08:22:32 GMT
View Forum Message <> Reply to Message

Wonderful, thank you.

But what about Encoder?

Also, maybe you could send me complete testing package so that we can add reference example... (Or you can do it yourself).

Mirek

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Fri, 18 Jun 2010 09:11:44 GMT
View Forum Message <> Reply to Message

luzr wrote on Fri, 18 June 2010 10:22Wonderful, thank you.

But what about Encoder?

Also, maybe you could send me complete testing package so that we can add reference example... (Or you can do it yourself).

Mirek
Hello Mirek

Before doing the encoder I would prefer to prepare the player class . I think it has higher priority.

Anyway do you want to include a Reference example for multipage decoding?. This example (as code updated before) would serve for .GIF and for :TIFF files too.

Subject: Re: Animated GIF support, anybody?
Posted by mirek on Sun, 20 Jun 2010 21:22:02 GMT
View Forum Message <> Reply to Message

Quoting Koldo's PM:

Quote:
- Our Gif support does not work well for all samples I have tested from here (http://www.animatedgif.net/).
I have tested bad files with previous U++ GIF support and the problems also appear, so they are not caused by last changes.

Do you know what was the source of our original GIF code to try to get an update or try to now where the problem comes?

Subject: Re: Animated GIF support, anybody?
Posted by rylek on Sun, 20 Jun 2010 21:26:49 GMT
View Forum Message <> Reply to Message

Hi Koldo!

Mirek asked me to have a look at the malfunctioning GIF's. Can you please send me links to some GIF's from the web page you mentioned which don't work?

Thanks

Tomas

Subject: Re: Animated GIF support, anybody?
Posted by dolik.rce on Sun, 20 Jun 2010 22:24:02 GMT

Hi,

I just tested the reference player with this image, which is one of the nonworking ones. I came to conclusion that the troubles come from the fact that it is optimized. (Some of the subimages have smaller size).

If I changed the layer sizes in gimp and resaved, it works almost fine, it only changes the disposal method. That could be probably fixed too.

The changed file is attached for reference...

Honza

File Attachments

1) plasma_ball_full_layers.gif, downloaded 784 times



Subject: Re: Animated GIF support, anybody?
Posted by koldo on Mon, 21 Jun 2010 07:16:40 GMT

Hello Tomas

Some days ago I hacked your code to decode animated GIFs.

It works well for some files but there are problems with other.

I checked some of the failed files with old code and the problem appeared.

Honza (dolik.rce) has detected one source of the failure. The Gif he includes has different image size per page (subimage). I think he has got the problem as it happens the same with other failed files:

- the images seems scrambled
- however, the images colors look right
- there is at least one image right

It seems to indicate that the colors are decoded right, but some of the pages begin and end are taken wrong.

I have tried to implement this change in subimage size but results do not improve.

Could you do/fix the code or give me some info about the inner details of GIF format you used to do your code?

Subject: Re: Animated GIF support, anybody?
Posted by dolik.rce on Mon, 21 Jun 2010 07:38:37 GMT
View Forum Message <> Reply to Message

I had a quick look at the GIF format spec. The relevant part is paragraph 20. The data block described there should be loaded in GifLocalInfo::Load(). The code seems that it is already doing that.

But since the picture loaded is distorted, it seems that this information (GifLocalInfo::{x,y,width,height}) is not treated in GifProcessor::LoadSubimage(). It only checks if the values are sane. I guess it should also pad the actual image with transparent frame according to the x,y,width and height.

Sorry I don't dig into it myself, but my finals are coming tommorow But expect my helping in few days, if it is not finished by then.

Honza

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Mon, 21 Jun 2010 08:53:31 GMT
View Forum Message <> Reply to Message

I had a quick look at the GIF format spec. The relevant part is paragraph 20. The data block described there should be loaded in GifLocalInfo::Load(). The code seems that it is already doing that.

But since the picture loaded is distorted, it seems that this information (GifLocalInfo::{x,y,width,height}) is not treated in GifProcessor::LoadSubimage(). It only checks if the values are sane. I guess it should also pad the actual image with transparent frame according to the x,y,width and height.

Sorry I don't dig into it myself, but my finals are coming tommorow But expect my helping in few days, if it is not finished by then.

Honza
Agree. Working on that now.

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Mon, 21 Jun 2010 09:35:45 GMT
View Forum Message <> Reply to Message

Problem found and solved! Now failed Gifs are opened well

The problem came from animated GIFs have different bitmaps with different sizes and locations, so lets say subimage 3 is the mix of 0, 1, 2 and 3 overlapped in their locations!!

This is an extreme sample of it

Thank you Honza.

File Attachments
1) AG00052_.GIF, downloaded 1797 times



Subject: Re: Animated GIF support, anybody?
Posted by koldo on Mon, 21 Jun 2010 14:13:36 GMT
View Forum Message <> Reply to Message

You did the 95% of the job .

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Mon, 21 Jun 2010 22:24:39 GMT
View Forum Message <> Reply to Message

Hello Mirek

Included new code for Raster and plugin/Gif.

Virtual funcions added are:
- Rect GetPageRect(int n). Gets the subimage Rect
- int GetPageDisposal(int n). Gets the way the subimage has to be handled by the renderer

Reference/RasterMultiPage example has been uploaded covering these changes.

File Attachments
1) Gif.7z, downloaded 438 times

Subject: Re: Animated GIF support, anybody?
Posted by mirek on Thu, 24 Jun 2010 18:52:08 GMT
View Forum Message <> Reply to Message

Thank you.

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Thu, 24 Jun 2010 21:27:47 GMT
View Forum Message <> Reply to Message

Very good

Now last disposal method ("Restore to previous") is included in RasterMultiPage Reference demo.

And now is the time for the GIF animation player control. If you tell me the basic class methods I can do it for yourself.

Subject: Re: Animated GIF support, anybody?
Posted by mirek on Sat, 26 Jun 2010 16:02:23 GMT
View Forum Message <> Reply to Message

koldo wrote on Thu, 24 June 2010 17:27Very good

Now last disposal method ("Restore to previous") is included in RasterMultiPage Reference demo.

And now is the time for the GIF animation player control. If you tell me the basic class methods I can do it for yourself.

You mean like specialized Ctrl to display GIF animation? Or rather some generic animation player?

Mirek

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Sat, 26 Jun 2010 16:12:21 GMT

luzr wrote on Sat, 26 June 2010 18:02koldo wrote on Thu, 24 June 2010 17:27Very good

Now last disposal method ("Restore to previous") is included in RasterMultiPage Reference demo.

And now is the time for the GIF animation player control. If you tell me the basic class methods I can do it for yourself.

You mean like specialized Ctrl to display GIF animation? Or rather some generic animation player?

Mirek
Yes

Something somebody puts in the layout designer, enter a file name or String with GIF file, and just plays the animation when the window is opened.

Subject: Re: Animated GIF support, anybody?
Posted by mirek on Tue, 06 Jul 2010 07:29:08 GMT

koldo wrote on Sat, 26 June 2010 12:12luzr wrote on Sat, 26 June 2010 18:02koldo wrote on Thu, 24 June 2010 17:27Very good

Now last disposal method ("Restore to previous") is included in RasterMultiPage Reference demo.

And now is the time for the GIF animation player control. If you tell me the basic class methods I can do it for yourself.

You mean like specialized Ctrl to display GIF animation? Or rather some generic animation player?

Mirek
Yes

Something somebody puts in the layout designer, enter a file name or String with GIF file, and just plays the animation when the window is opened.

No want to spoil the fun, but I think this is way specialized.... and the moment you add this, people will start requiring support for "real" video (divx, xvid, x264). Are your ready for THAT?

That said, encapsulation of those formats would be really really nice.

But without them, animation player should be reserved for examples or bazaar IMO.

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Sun, 11 Jul 2010 04:44:41 GMT
View Forum Message <> Reply to Message

luzr wrote on Tue, 06 July 2010 09:29koldo wrote on Sat, 26 June 2010 12:12luzr wrote on Sat, 26 June 2010 18:02koldo wrote on Thu, 24 June 2010 17:27Very good

Now last disposal method ("Restore to previous") is included in RasterMultiPage Reference demo.

And now is the time for the GIF animation player control. If you tell me the basic class methods I can do it for yourself.

You mean like specialized Ctrl to display GIF animation? Or rather some generic animation player?

Mirek
Yes

Something somebody puts in the layout designer, enter a file name or String with GIF file, and just plays the animation when the window is opened.

No want to spoil the fun, but I think this is way specialized.... and the moment you add this, people will start requiring support for "real" video (divx, xvid, x264). Are your ready for THAT?

That said, encapsulation of those formats would be really really nice.

But without them, animation player should be reserved for examples or bazaar IMO.

Hello Mirek

I think a GIF animation is not used to display movies, just to show dynamic elements in motion, like an hourglass or a progress bar (remember the foot in Nautilus).

In fact I am working actively in a media player, but believe me, it is really much heavier than a GIF player.

Anyway if GIF animation is not going to be included in CtrlLib I will include it in Bazaar with pleasure .

Subject: Re: Animated GIF support, anybody?
Posted by mirek on Sun, 11 Jul 2010 20:22:33 GMT
View Forum Message <> Reply to Message

koldo wrote on Sun, 11 July 2010 00:44luzr wrote on Tue, 06 July 2010 09:29

No want to spoil the fun, but I think this is way specialized.... and the moment you add this, people will start requiring support for "real" video (divx, xvid, x264). Are your ready for THAT?

That said, encapsulation of those formats would be really really nice.

But without them, animation player should be reserved for examples or bazaar IMO.

Hello Mirek

I think a GIF animation is not used to display movies, just to show dynamic elements in motion, like an hourglass or a progress bar (remember the foot in Nautilus).

Well, I have only outlined what IMO people will want after you add any kind of player

Quote:
In fact I am working actively in a media player, but believe me, it is really much heavier than a GIF player.

Still, if current Raster interface is good enough for that, creating Raster player would make possible to connect it with streaming video one day... (represented as Raster).

Quote:
Anyway if GIF animation is not going to be included in CtrlLib I will include it in Bazaar with pleasure .

Well, I can include it with uppsrc, but I do not think it is a generic widget for CtrlLib. After all, RichEdit or Report are separate packages as well.

Mirek

Subject: Re: Animated GIF support, anybody?
Posted by klrkt on Sun, 22 Aug 2010 20:43:18 GMT
View Forum Message <> Reply to Message

I have UPP 2467, windows 7 and sdk 7.0
I downloaded the above file "gif.7z" and rebuilt all the "ImageView" sample however:
1. Yes now the gif files display
2. BUT they are NOT animated

by NOT animated I mean that ImageView will display the gif file, but the SAME gif file is animated in the browser (IE, FireFox, etc)

For testing purposes you can use any of the "Smiley Shortcut" gifs
I used icon_redface.gif

Is there a newer version of the plugin available?

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Sun, 22 Aug 2010 21:44:13 GMT
View Forum Message <> Reply to Message

klrkt wrote on Sun, 22 August 2010 22:43I have UPP 2467, windows 7 and sdk 7.0
I downloaded the above file "gif.7z" and rebuilt all the "ImageView" sample however:
1. Yes now the gif files display
2. BUT they are NOT animated

by NOT animated I mean that ImageView will display the gif file, but the SAME gif file is animated in the browser (IE, FireFox, etc)

For testing purposes you can use any of the "Smiley Shortcut" gifs
I used icon_redface.gif

Is there a newer version of the plugin available?
Hello klrkt

I had left this waiting this post to be solved
http://www.ultimatepp.org/forum/index.php?t=msg&goto=280 35&

In fact it is not directly related

Now plugin/Gif supports animated gifs... but do not play them.

I will post it in few time.

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Tue, 24 Aug 2010 09:49:38 GMT
View Forum Message <> Reply to Message

Hello klrkt

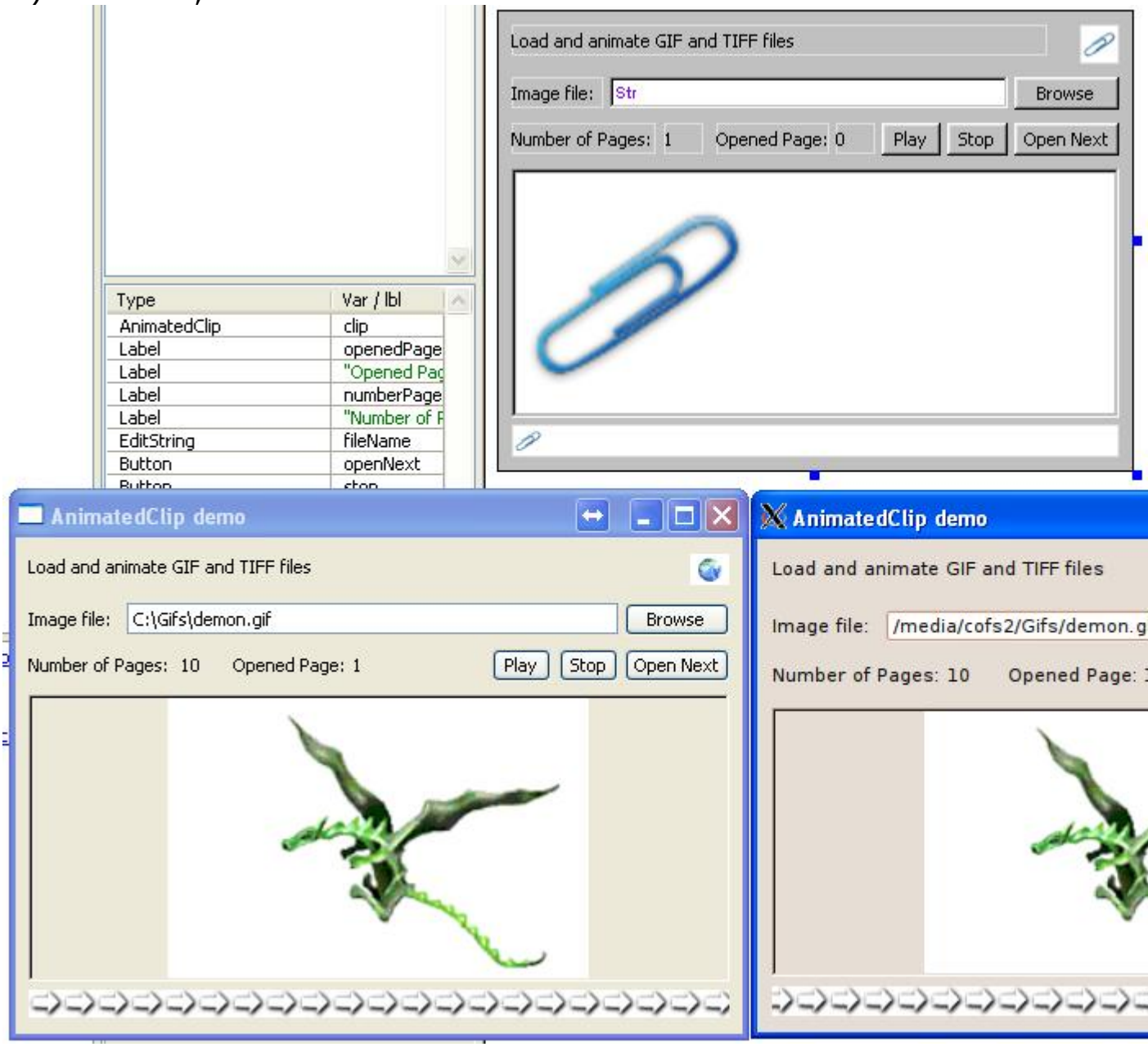
The class and demo are ready to be uploaded today.

This is an screenshot of the demo in Windows, Linux and Layout Designer.

The new class is called AnimatedClip.
Is it better RasterPlayer?

File Attachments

1) dib.JPG, downloaded 1737 times



Subject: Re: Animated GIF support, anybody?
Posted by mirek on Wed, 08 Sep 2010 07:11:00 GMT
View Forum Message <> Reply to Message

Sweet!

Subject: Re: Animated GIF support, anybody?
Posted by Mindtraveller on Wed, 08 Sep 2010 07:19:26 GMT
View Forum Message <> Reply to Message

How to get this class? I haven't found it in U++ sources.

Subject: Re: Animated GIF support, anybody?
Posted by mirek on Wed, 08 Sep 2010 07:20:28 GMT
View Forum Message <> Reply to Message

Mindtraveller wrote on Wed, 08 September 2010 03:19How to get this class? I haven't found it in U++ sources.

Adding it rigth now...

Koldo, is there any example I could put in examples?

Subject: Re: Animated GIF support, anybody?
Posted by mirek on Wed, 08 Sep 2010 07:23:19 GMT
View Forum Message <> Reply to Message

Just thinking: Does it really need to be multithreaded?

At least, perhaps it should be possible to us it single-threaded too...

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Wed, 08 Sep 2010 07:46:41 GMT
View Forum Message <> Reply to Message

Quote:Koldo, is there any example I could put in examples?

Yes, here: "upp\reference\AnimatedClip" .

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Wed, 08 Sep 2010 07:47:18 GMT
View Forum Message <> Reply to Message

Quote:The new class is called AnimatedClip.
Is it better RasterPlayer?

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Wed, 08 Sep 2010 07:51:40 GMT
View Forum Message <> Reply to Message

luzr wrote on Wed, 08 September 2010 09:23Just thinking: Does it really need to be multithreaded?

At least, perhaps it should be possible to us it single-threaded too...

Yes of course. Using SetTimeCallback(). I can include it.

Subject: Re: Animated GIF support, anybody?
Posted by mirek on Wed, 08 Sep 2010 07:57:07 GMT
View Forum Message <> Reply to Message

Well, the interesting question is what is to be the difference.

I believe MT version should be better if the application performs long processing. But not all apps are MT.

Perhaps the player should be able to do both (or we could have 2 players), and in ST be only able to work with in ST mode, in MT in both modes.

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Wed, 08 Sep 2010 07:59:23 GMT
View Forum Message <> Reply to Message

luzr wrote on Wed, 08 September 2010 09:57Well, the interesting question is what is to be the difference.

I believe MT version should be better if the application performs long processing. But not all apps are MT.

Perhaps the player should be able to do both (or we could have 2 players), and in ST be only able to work with in ST mode, in MT in both modes.
It could be an option, by default ST.

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Thu, 09 Sep 2010 07:08:47 GMT

View Forum Message <> Reply to Message

Hello

It is done. Now RasterPlayer default is single threaded.

If compiled with GUI MT it is possible to use SetMT(bool) function to set MT or ST.

"Reference/AnimatedClip" demo is uploaded including both modes.

I am really surprised. Both in Linux and Windows, the ST version goes as smooth as the MT version. Perhaps until now I have used MT sometimes it was not necessary. I am reconsidering my point of view about using timers more frequently .

In few days I will upload the doc.

Subject: Re: Animated GIF support, anybody?
Posted by Mindtraveller on Thu, 09 Sep 2010 07:09:20 GMT
View Forum Message <> Reply to Message

It looks like RasterPlayer package has linking errors:
Linking...
$blitz.obj : error LNK2005: "class Upp::Image __cdecl GetRect(class Upp::Image const &,struct Upp::Rect_<int> const &)" (?GetRect@@YA?AVImage@Upp@@ABV12@
ABU?$Rect_@H@2@@Z) already defined in RasterPlayer.obj with MSC9 compiler, if Functions4U is added to project.
This is because GetRect duplicates one from Functions4U.
I've changed function name to GetRectRP and it links fine (quick & dirty).

It would be also great to support gif transparency.

Subject: Re: Animated GIF support, anybody?
Posted by Mindtraveller on Sat, 11 Sep 2010 17:57:09 GMT
View Forum Message <> Reply to Message

Quick & dirty solution for transparent gifs is to change White colors to SColorFace in RasterPlayer.cpp

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Sat, 11 Sep 2010 19:06:36 GMT
View Forum Message <> Reply to Message

Mindtraveller wrote on Sat, 11 September 2010 19:57Quick & dirty solution for transparent gifs is to change White colors to SColorFace in RasterPlayer.cpp

Hello Pavel

Could you include a sample .gif?

Subject: Re: Animated GIF support, anybody?
Posted by koldo on Sat, 11 Sep 2010 19:08:42 GMT
View Forum Message <> Reply to Message

Mindtraveller wrote on Thu, 09 September 2010 09:09It looks like RasterPlayer package has linking errors:
Linking...
$blitz.obj : error LNK2005: "class Upp::Image __cdecl GetRect(class Upp::Image const &,struct Upp::Rect_<int> const &)" (?GetRect@@YA?AVImage@Upp@@ABV12@
ABU?$Rect_@H@2@@Z) already defined in RasterPlayer.obj with MSC9 compiler, if Functions4U is added to project.
This is because GetRect duplicates one from Functions4U.
I've changed function name to GetRectRP and it links fine (quick & dirty).

It would be also great to support gif transparency.
Hello Pavel

Thank you. Included.

Mirek: Could you include

Image GetRect(const Image& orig, const Rect &r)

(or something equivalent) in Draw?

Subject: Re: Animated GIF support, anybody?
Posted by Mindtraveller on Sun, 12 Sep 2010 09:22:07 GMT
View Forum Message <> Reply to Message

koldo wrote on Sat, 11 September 2010 23:06Mindtraveller wrote on Sat, 11 September 2010 19:57Quick & dirty solution for transparent gifs is to change White colors to SColorFace in RasterPlayer.cpp
Hello Pavel

Could you include a sample .gif?
Done.

File Attachments
1) load.gif, downloaded 1406 times



Subject: Re: Animated GIF support, anybody?
Posted by koldo on Mon, 13 Sep 2010 07:24:10 GMT
View Forum Message <> Reply to Message

Hello Mindtraveller

Finally I have included a more clean solution.

As .gif raster handles well transparent color, now it is included Alpha() in RasterPlayer drawing, so from now transparent colors are transparent .

Thank you for your feedback.

Subject: Re: Animated GIF support, anybody?
Posted by Mindtraveller on Mon, 13 Sep 2010 07:41:10 GMT
View Forum Message <> Reply to Message

Excellent! Thanks!

Subject: Re: Animated GIF support, anybody?
Posted by ratah on Wed, 23 Feb 2011 09:41:37 GMT
View Forum Message <> Reply to Message

Hi everybody,

I can't find RasterPlayer package, i created a program using this package and i recently re-install upp. So my program does not compile.