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Applies To:

Web Application Server, Web technology in general

Summary

There has been much fuss about Microsoft Internet Explorer (MIE) 7 not passing the Acid2 test. What is this test all about, and what are the consequences for SAP web developers?

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Date: 13 September 2005

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The week that I wrote this article was one of amazement and grief. The latter was caused by the news that Robert Moog had died four months after an incurable brain tumor had been discovered. Without Moog's invention, The Monkees, The Beatles, Pink Floyd, The Doors, The Beach Boys, Herbie Hancock, Kraftwerk, The Cure and more recent groups like Radiohead would surely have sounded quite different. I wondered what Clockwork Orange would have sounded like if Walter/Wendy Carlos didn't use a Moog. For those of you who still don't know who Robert Moog was; he was the inventor of the [analogue synthesizer](#), with the Poly Moog, Mini Moog and Modular Moog as highlights. It all started with his fascination for the Thereminvox which was invented in 1919 by a Russian called Lev Sergeivitch Termen. This musical instrument, which was extensively used by The Beach Boys, amongst others, was rather unusual since one didn't actually have to touch the instrument itself. It works by combining two high frequency radio signals to generate an audio signal. The pitch and volume are controlled by moving the hands around the 2 antennas.

The amazement is based on the realization that Windows 95 was launched 10 years ago. Hip, hip, hurray! (sic?). I'm not going to enter the debate into whether that's a good thing or not. I'm simply telling you this since I was in a nostalgic mood rereading an article that I wrote a decade ago. The article was called "Tart it up". The fun thing was that the first letter of the first word was originally an "F", but it didn't pass the editor in chief. He probably thought that people in the field of education – it was a Dutch/Belgian magazine for that sector – would take offence at this word. Anyway, here goes for a roughly translated excerpt of the article: "What do you do when you can miss a few bucks and want to promote a new product? Pretending to be Hitchcock you keep the exact release date in suspense. In addition, you tease the American D.O.J. with their anti-trust investigation. You make the life of the PC manufacturers tough with an extra clause in the license agreements. Furthermore, you buy the rights of a song by a couple of old ****" this word was in Dutch a double entendre on the term rockers, which end up in [this word](#) if you translate it (EDC) "and give the Brits among us a free paper.

The software pirates lend you a hand to bring the whole thing in to the news. And the shop did a roaring trade during its initial sale; people spent the night camped out in front of the shop doors in order to get hold of a copy. It looks like the publicity campaign of that other weirdo: Michael Jackson. Yours truly set off two days after its release in search of the Dutch version of the King of Soft – or is it Soft King? I deliberately didn't go to the local small store but went instead to Brussels to guarantee the success of my mission. On arrival I was lost in amazement. There was no run on the shop, no would be Rambo's fighting for that last desirable box. No, within those more than 1000 square meters there were only 5 salesmen trying to sell a PC to the one and only sinister looking, unshaven, customer. I broke out in a cold sweat. Was I too late and thus needed to wait another couple of months in order to be one of the happy few? Not by a long chalk: the three custom made showcases literally bulged with W95 in different languages and formats. Had the atomic bomb fallen over here? Didn't anyone know about W-Day? Did nobody care at all? Or are Belgians simply sober minded? The clever boys of the mega store had also been putting out extra boxes with hard drives and extra RAM. As if that isn't conditional sale. It's time that the US JOD needs to come by". The article continues for another 4,5 pages but I will spare you that.

10 candles in the wind

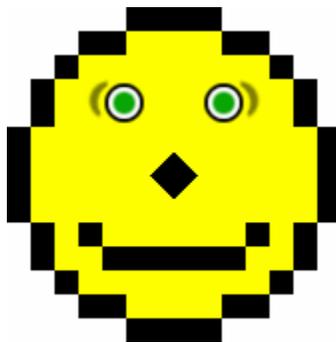
Why am I so nostalgic mentioning all this? The strange thing is that another birthday is connected to the release of Windows 95, namely Internet Explorer, but nobody seems to bother about this. Bill Gates didn't bother in the early days either. In fact he didn't believe that the internet would be as expansive as it is now. Yours truly also had his considerations based on the wretched way people had to find their way about on the internet. I didn't see Johnny Average working with VT100 terminal software as I did. But history has shown something else. The problem was that William didn't have any browser so, as he mostly did, he bought things somewhere else. In this case he licensed Spyglass Mosaic. I won't ruminate on my previous [article](#) covering browser history, but I would like to mention that version after version swiftly followed and Microsoft won the browser war. And then in 2001 it all stopped, when the last big version (6) of MIE was released. In fact, Microsoft even announced a couple of years ago that MIE wouldn't be available as a standalone product

any more, starting with the next version. Yet early this year Bill Gates announced a new standalone version anyway. He couldn't really afford to do otherwise.

This article won't be a review of the newborn version though as there has already been a lot of coverage of it. As you may have noticed the new version has already been heavily criticized. Too little too late is the major tenor of the arguments. However I was struck dumb by an argument that doesn't hold true at all. I'm referring to the statement that MIE 7 doesn't pass the Acid2 test and thus is no good.

Sourpuss

What exactly is the Acid2 test and how important is this for you as a SAP web developer? Well it comes to this little fellow:



It sounds silly, but this one is the reason for a lot of grinding of teeth. This will test basic browser support of PNG, Data URLs, HTML4 and CSS1. I could elaborate on the techniques and coding in detail, but I won't. This can all be found at the [Web Standards Project](#) and I don't want to reinvent the wheel. So let's look at this test from a SAP web developer point of view and see what's in it for you. Which are the things to remember when one wants to develop and make sure that it will work on all browsers larded with some additional info?

- Transparent PNGs: as you know there is a patent issue with GIFs, so PNG was invented in order to overcome this and replace GIFs. Browsers usually support this format, but not always as it should. GIF only supports binary transparency, which means that only one colour is completely transparent. It's all or nothing. No gradation is possible and one needs to pick out a colour that isn't used elsewhere in the image. PNG transparency a.k.a alpha channel transparency overcomes these issues. All main browsers support this except for MIE 6, which only supports plain PNG. It has been announced that this will be fixed in MIE 7.
- Data URLs: are (at least for me) complicated, explained in [RFC 2397](#) and the official notation is data:URL. In essence it boils down to the ability to include small data on the client side instead of on the server side. This must be done in the following format:

```
data:[<mediatype>][;base64],<data>.
```

Let's take the classical gif as example. The old HTML (bare bone) way to retrieve gifs is:

```

```

This indicates that the image needs to be retrieved on the server side. If we do this the XHTML way via data:URL, it comes to

``
ABCD is Base64 octet representation of that image.

Again, all main browsers support this, except for MIE.

Quicksand

The two terms that are left are [HTML 4](#) and [CSS 1](#). Shouldn't all browsers support these by now? Well, it depends on how you use these technologies. Let's take a look.

1. The textual group is rather an obvious one since it's been supported by all main browsers for quite a while now. EDI has covered this in his web log.:
 - a. Absolute, relative and fixed positioning
 - b. Margins
 - c. Preventing table tag
2. Linked to the previous is the so called box model. It's extensively explained at [W3](#), but simplified it comes down to the idea that every element in a document has to be seen as a rectangular box containing a content area surrounded by padding, a border and margins. They are all optional, and boxes can be nested, with the browser window as master parent. There are 2 types of boxes: inline and block boxes. The latter can be set by elements like TABLE, DIV and P. Style elements like EM (a.k.a I), STRONG (a.k.a B), SPAN and actual content, like text and images, are considered as inline boxes.
3. Annotations and hovering. I talked about overlib in my [Always look on the dynamic site of life](#) article. In essence it comes to putting additional info on web page content without disturbing the layout of it. A classic example is cascading menus made in DHTML. But one uses CSS for this in the acid2 test. If you still don't know what I'm talking about, have a peek at this [Flickr photo](#) and point to the people represented on that picture.
4. Furthermore they've inserted some pitfalls such as:
 - a. Incorrect CSS in order to test the parsing of it
 - b. Overlapping content in order to see that the order is correct.
 - c. Some [CSS 2.1](#) specific behaviours, despite it being in the working draft phase.

Putting them on the rack

Enough theory, let's put all these things in to practice and start testing. I'll take the last available versions of the major browsers.

On Windows

Firefox 1.06



Netscape 8.0.3.3 in MIE mode



Netscape 8.0.3.3 in Firefox mode

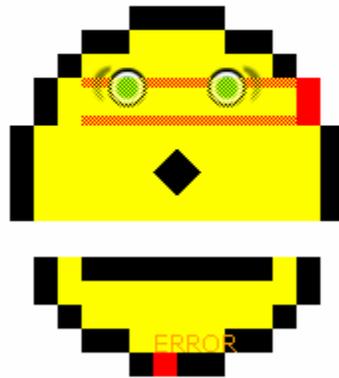


Internet Explorer 6.0.2900.2180



Opera 8.02 Build 7680

Hello World!



On Macintosh (OS X 10.4.2)

Safari 2.01 (412.5)

Hello World!



Conclusion

Well that's a surprising result, isn't it? What started out as the major critical point for the upcoming MIE 7 ends up as a nightmare for all browsers. It was certainly a surprise to me. When I first read the specifications of Acid2 I thought that it was a new attempt at MIE-bashing. One knew beforehand that the current version of MIE doesn't support lots of techniques used in this test. Chris Wilson, head of MIE development said that even version 7 won't be fully compliant, but close. All the others suddenly announced that they will launch a new version or update to be Acid2 compliant later this year. David Hyatt already claimed in April earlier this year to be compliant, but sadly enough I have to dispute this, based on the test I've done on my iMac G5.

To conclude I wonder what the use of this test is? OK, I know the 'web standards compliance' argument which the anti Microsoft people tend to use. But will lot of SAP web developers make use of it, and will SAP generated (e.g. Web Dynpro) code be compliant? Or is it a storm in a teacup? It certainly reminds me of the fuss that was made when the Mercedes A-class didn't pass the moose-test. Being a web developer it certainly doesn't keep me awake at night.

Author Bio



Eddy De Clercq has 20 years experience in computing. He currently works at the Katholieke Universiteit Leuven, the oldest university of the Low Countries and the largest Flemish university. Eddy makes part of the E-university team that creates mostly self services (web) applications.