

Minutes of the UPDF Working Group Meeting

September 11, 2000

Meeting Attendees

Mark VanderWiele	IBM
Geoff Soord	Software 2000
Norbert Schade	Oak Technology

Some months ago the UPDF group announced that it will concentrate on some very technical work, mainly device font handling, which needs serious expertise in details. So we expected to be a small group for some conferences and we got it done as expected.

A side effect was that we competed with UPnP all the time, which did not bother us too much, as long as we had this specific target of device font handling. But that time is over now and we are happy not only to be able to show the results in device font handling, but also in constraints.

Major items discussed

As there were no open font questions so far, the main section of the meeting was [constraints](#).

With Mark VanderWiele, Geoff Soord and Norbert Schade we were three people living in driver development for more than a decade each. So we quickly agreed on the problems to be solved and started working on the proposals prepared before the meeting.

We eventually agreed on a solution that incorporates several key requirements, which makes this a very competitive solution to others known in the market.

- Simple constraints (filter a control, if the setting meets a certain other condition) are as easy as in other concepts. All other features are optional. This ensures a kind of backwards compatibility in philosophy.
- Complex constraints can be defined and read like in human language. This should ease the understanding of the concept.
- The number of conditions to be combined to a constraint is practically indefinite.
- Operations AND and OR are realized in constraints. Complex conditions can be combined to one constraint, where it makes sense. This leads to a more realistic list of constraints than an endless list of simple constraints.
- Filtering is not the only action resolving a constraint. The format also supports messages and automatic selections in other controls.
- Constraints can be defined global or operating system specific.

We think that a successful architecture of UPDF must be based on four columns:

- Parameter Converter (done on the first level)
- Event Handlers
- Constraints (almost done on the first level)
- Predefined sets

With the current spec for constraints we think we can provide a very flat, 1-level model without losing any flexibility. This is especially true for media handling.

We are accompanying the DTD with a small specification document, explaining the ideas behind the concept.

We verified the spec with samples in XML. Some samples will be shared with the community.

The constraints section needs a few more days of polishing, before we will share it with the community.

As IPP is short of constraints up to now, we would like that group to study the spec, too. It is a separate DTD right now, very compact and short.

The remaining time was used to prepare a decision on the [overall architecture and final file structure](#). This needs further discussion. So far we agreed to only support long file names.

You may want to watch the email traffic next weeks for that.

We have seen that especially driver developers from printer manufacturers and operating system vendors are contributing much value to the spec.

So we send a special invitation out to driver developers to contribute to the spec and attend the UPDF day at the conference.

This includes not only the complete Windows world, but the Mac and upcoming concepts under Linux as well.