

Professional XML with PHP

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- 1 Overview
 - Welcome
 - Overview
- 2 XML
- 3 XML in PHP
- 4 Open part



- Arne Blankerts <arne@thephp.cc>
- PHP since 1999 (10 years of PHP!)
- Co-Founder of thePHP.cc
- ballyhoo. werbeagentur.
- Open source addicted
 - Inventor and lead developer of fCMS site system
 - Contributor and translator for the PHP manual



- Tobias Schlitt <toby@php.net>
- PHP since 2001
- Freelancing consultant
- Qualified IT Specialist
- Studying CS at TU Dortmund
(finishing 2010)
- OSS addicted
 - PHP
 - eZ Components
 - PHPUnit



So, what about you?



- That is why both begin with con. . .
- Who are you?
- What is your business?
- What is your intention behind coming to IPC?
- What do you expect from this workshop?

What can you expect?

Workshop

- Introduction to XML
- Working on XML data with PHP
- Practical tips and tricks
- Interactive: What would you like to know?

XPath

- Tuesday, 13:45 - 14:45
- XPath in depth

Validating XML

- Tuesday, 15:15 - 16:15
- DTD, XML Schema and RelaxNG

- **Allways** Stick to your place!
- Never ask! Repeat: I will **not** ask anything!
- We are **not** here to show you anything useful!
- The **only** correct solution is told by us!
- Do **not** give feedback on <http://joind.in/1041>

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1 Overview

2 XML

- Overview
- Get into code...

3 XML in PHP

4 Open part



What is XML?

- General specification for creating markup languages
- Data exchange between computer systems
 - System independent
 - Human readable
 - Most used on the web
 - Successor of SGML
- W3C recommendation
 - 1.0 1998 (last update 2008-11-26)
 - 1.1 2004 (last update 2006-08-16)

- XHTML
 - XML variant of the popular HTML
- RSS
 - Really Simple Syndication
 - Provide news / updates / ... of websites
 - Read by special clients
 - Aggregation on portals / planets
- SVG
 - Scalable Vector Graphics
 - Describe vector graphics in XML
 - Potentially interactive / animated (via ECMAScript)

Schema

A schema defines the structure XML instance documents.

XMLSchema

- Written in XML
- W3C recommendation
- Popular

RelaxNG

- 2 syntax variants
 - XML based
 - Short plain text based
- OASIS / ISO standard
- Popular

DTD

- Plain text
- W3C recommendation
- Deprecated

Query

A query extracts a sub-set of information from a data source.

- XPath
 - W3C recommendation
 - Navigation in XML documents
 - more on that later...
- XQuery
 - Functional programming language
 - Allows complex queries

Let's dig into the code



1 Overview

2 XML

3 XML in PHP

- DOM
- XMLReader/-Writer

4 Open part



XML APIs

PHP has quite some XML APIs.

- The most important are:
 - DOM
 - XMLReader / XMLWriter
 - SimpleXML
- Deprecated are:
 - DOM XML
 - XML Parser

- Document Object Model
- Standardized API to access XML tree
 - W3C recommendation
 - Level 1 in 1999
 - Currently: Level 3 (2004)
- Available in many languages
 - C
 - Java
 - Perl
 - Python
 - ...
- Represents XML nodes as objects
- Loads full XML tree into memory

- Popular approach to access XML data
- Similar implementations available in
 - Java
 - C#
- Pull / push based
- Does not load XML fully into memory

- Very simple access to XML data
- Unique (?) to PHP
- Represents XML structures as objects
- Initial implementation hackish
- Loads full XML tree into memory
- You don't want to use SimpleXML, seriously!

APIs compared

	DOM	XMLReader/-Writer	SimpleXML
Read	★	★	●
Write	★	★	○
Manipulate	★	●	●
Full control	★	★	-
Namespaces	★	★	○
XPath	★	-	★
Validate	DTD Schema RelaxNG	DTD Schema RelaxNG	-
Comfort	●	○	★

- ★ Fully supported
- Supported but not nice
- Poorly supported
- Not supported at all

Let's dig into the code



Let's dig into the code



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What would you like to do?

- Discuss a particular problem?
- See a special XML technique in PHP?
- Get to know related techniques?

- Are there any questions left?
- Please give us some feedback!

Thank you!

- We hope you enjoyed the workshop!
- Slides and material
 - Delivered by Software & Support
 - <http://schlitt.info/opensource>
 - On Slideshare (<http://slideshare.net>)
- Contact us:
 - Arne Blankerts <arne@thephp.cc>
 - Tobias Schlitt <toby@php.net>
- Give us feedback on <http://joind.in/1041>