

3.– 6. September 2012
in Nürnberg



Herbstcampus

Wissenstransfer
par excellence

Building Performance

Client-seitige Performance-Optimierung automatisiert sicherstellen

Oliver Ochs

Holisticon AG

Holisticon AG

"Die Holisticon AG ist eine Management- und IT-Beratung mit Sitz in Hamburg. Mit einem ganzheitlichen Beratungsansatz unterstützen wir unsere Kunden in ihren Entwicklungsprojekten auf technischer, taktischer wie auch strategischer Ebene."



Agenda

Auslieferung

Templating

Buildprozess

CSS

Images

JS

Maven Plug-ins

Alternativen

Bonpoint

Auslieferung





Alice Home



www.dsl.o2online.de

Maximal mögliche
ADSL-Geschwindigkeit
bei sehr hoher
Leitungsstabilität

Kostenlose Bestell-Hotline: 0800 422 04 21

Alice S
Ihr Surf-Flatrate
Paket für zuhause



Aktion bis 02.09.2012
Bis zu 110,-€ sparen

Die ersten 3 Monate
danach 24,99 € mtl.¹ **14,99 €** mtl.

[zum Produkt](#)

Alice M
Ihr Doppel-
Flatrate Paket
für zuhause



Empfehlung

Aktion bis 02.09.2012
Bis zu 110,-€ sparen

Die ersten 3 Monate
danach 29,99 € mtl.¹ **19,99 €** mtl.

[zum Produkt](#)

Alice L
Ihr Premium-
Paket für
zuhause

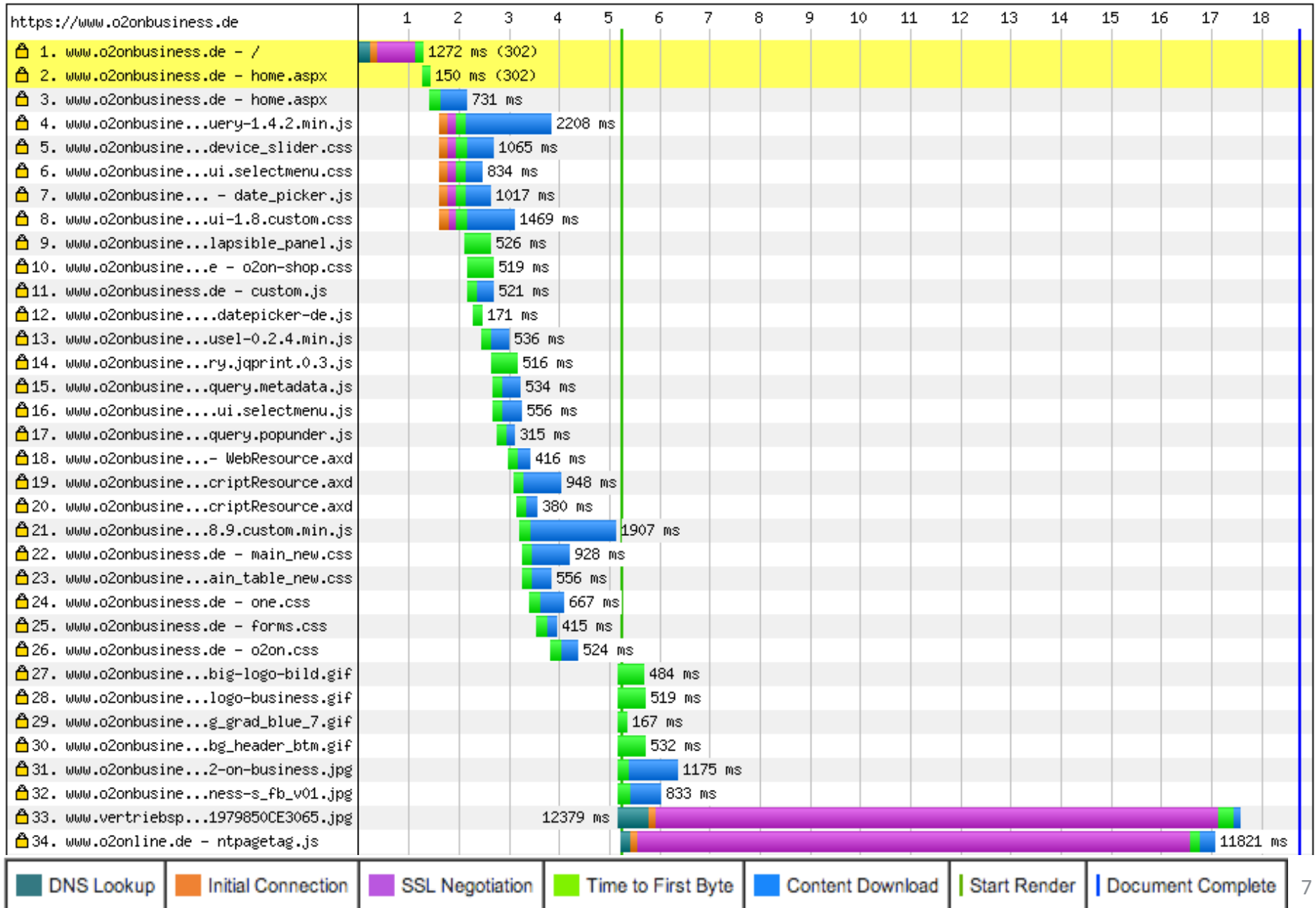


Aktion bis 02.09.2012
Bis zu 110,-€ sparen

Die ersten 3 Monate
danach 34,99 € mtl.¹ **24,99 €** mtl.

[zum Produkt](#)

HTTP-Request



Webserver-Konfiguration

Cache-Control:	public, max-age=3628800
Date:	Fri, 31 Aug 2012 12:19:32 GMT
Expires:	Mon, 30 Sep 2013 12:19:32 GMT
Last-Modified:	Tue, 28 Feb 2011 14:24:06 GMT
Content-Encoding:	Gzip

Nutze Caching / ermögliche Proxy-Caching
Komprimiere Ressourcen



Cookie-freier Host



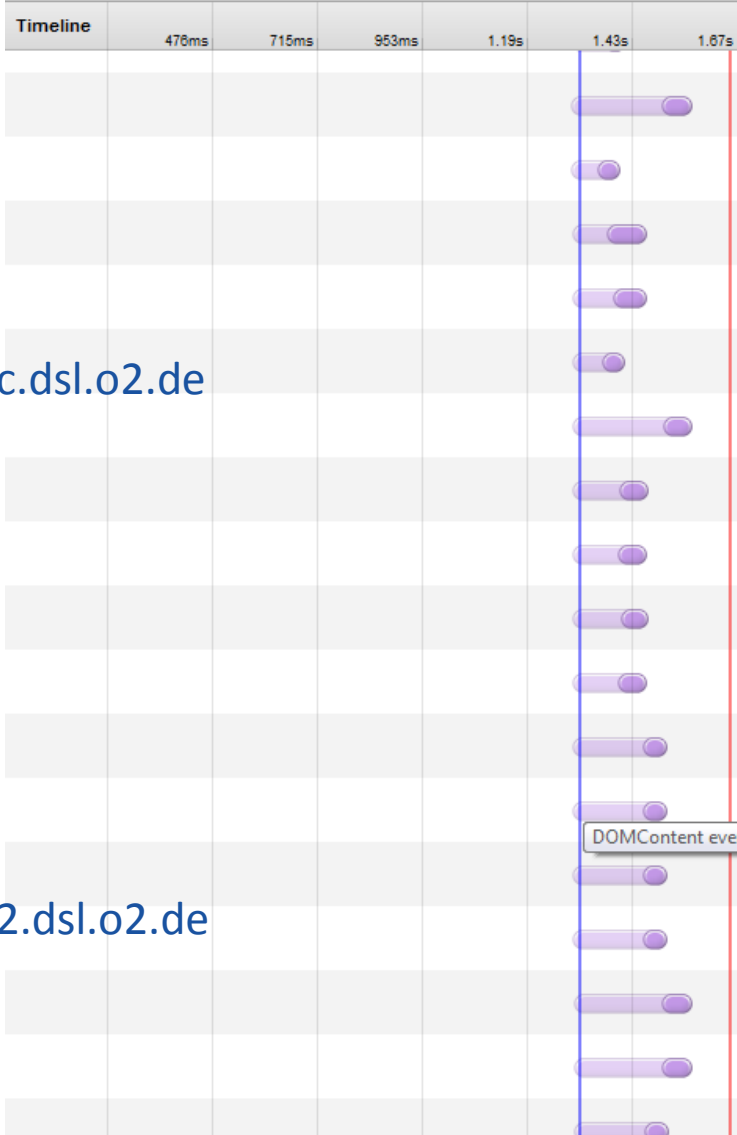
static.dsl.o2.de

Request URL: http://static.dsl.o2online.de/provider/content/staticdownload/anbieter/603142964/11/thumbnail/Produkt_AliceM_fuer_Subhome.jpg
Request Method: GET
Status Code: ● 200 OK

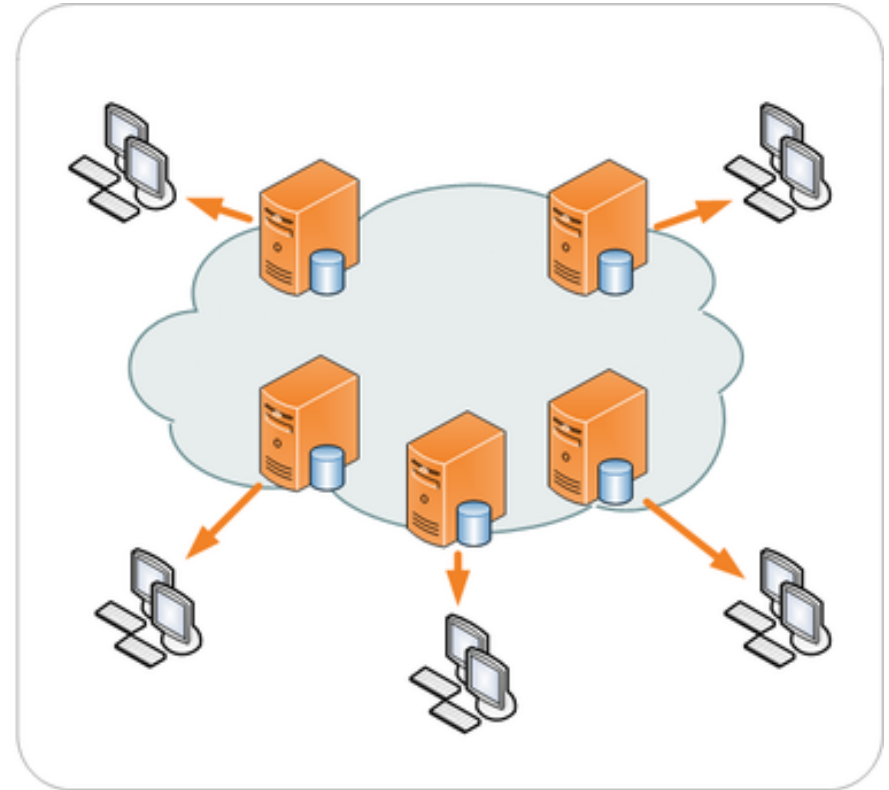
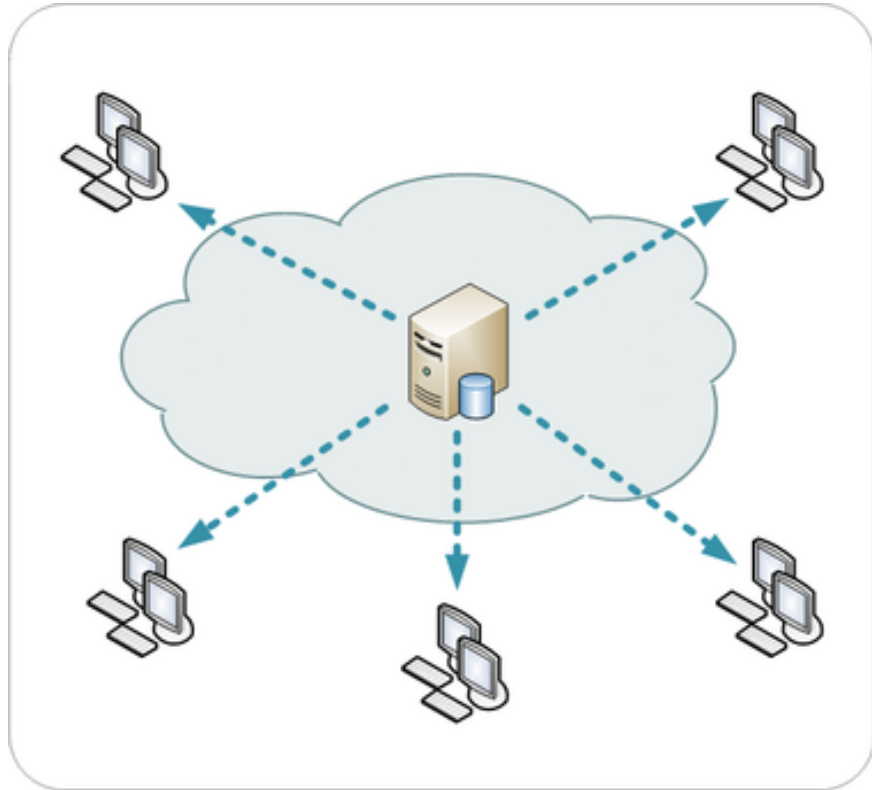
▼ Request Headers [view source](#)

```
Accept: */*
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.3
Accept-Encoding: gzip,deflate,sdch
Accept-Language: de-DE,de;q=0.8,en-US;q=0.6,en;q=0.4
Cache-Control: no-cache
Connection: keep-alive
Cookie: unicaID=4yjbjpaJ20p-XZFhKPa; o2-Cust=CUST:1#FV:null#; webShop=%3FexclusivId%3Ddepo2p_12x4-b_o2-blue-select_offer100min; touchPoints=PPPPPPPPPPPPPPPPPPPPPPPP|20120814080247; al_tg=Interessant#A33#ABTest70#B#VisitorOnlineOrder#Interessant
Host: static.dsl.o2online.de
```


Parallelisiere Downloads



CDN

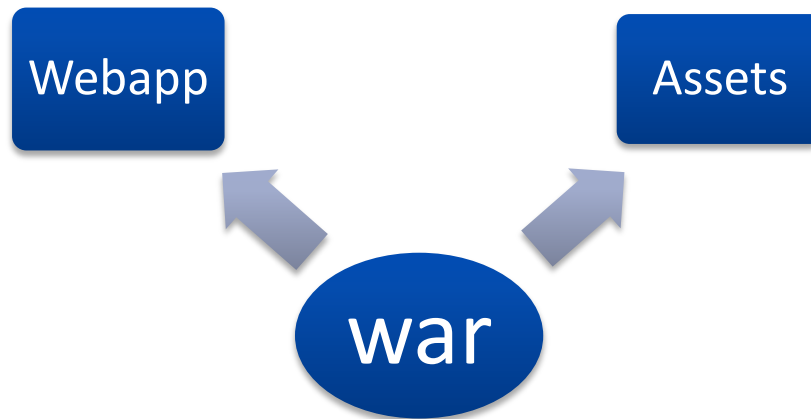


Grafik: CC BY-SA by Kanoha, http://en.wikipedia.org/wiki/File:NCDN_-_CDN.png

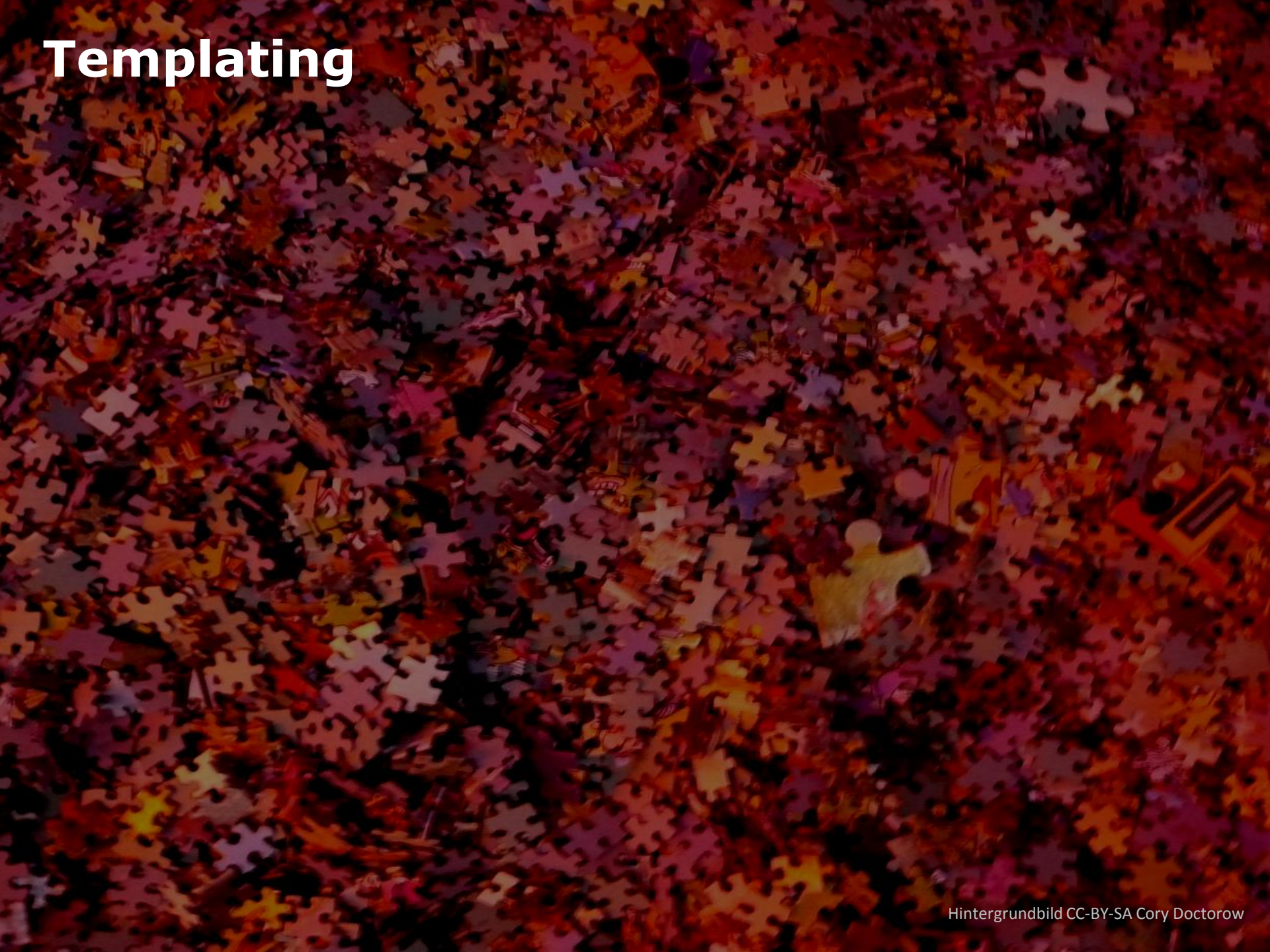
Statische Inhalte paketieren

Im Java-Umfeld werden Anwendung und Assets in einer ZIP-Datei (Web Archive) zusammen ausgeliefert

Trennung von Code und statischem Inhalt (Assets) in einem Build-Prozess



Templating

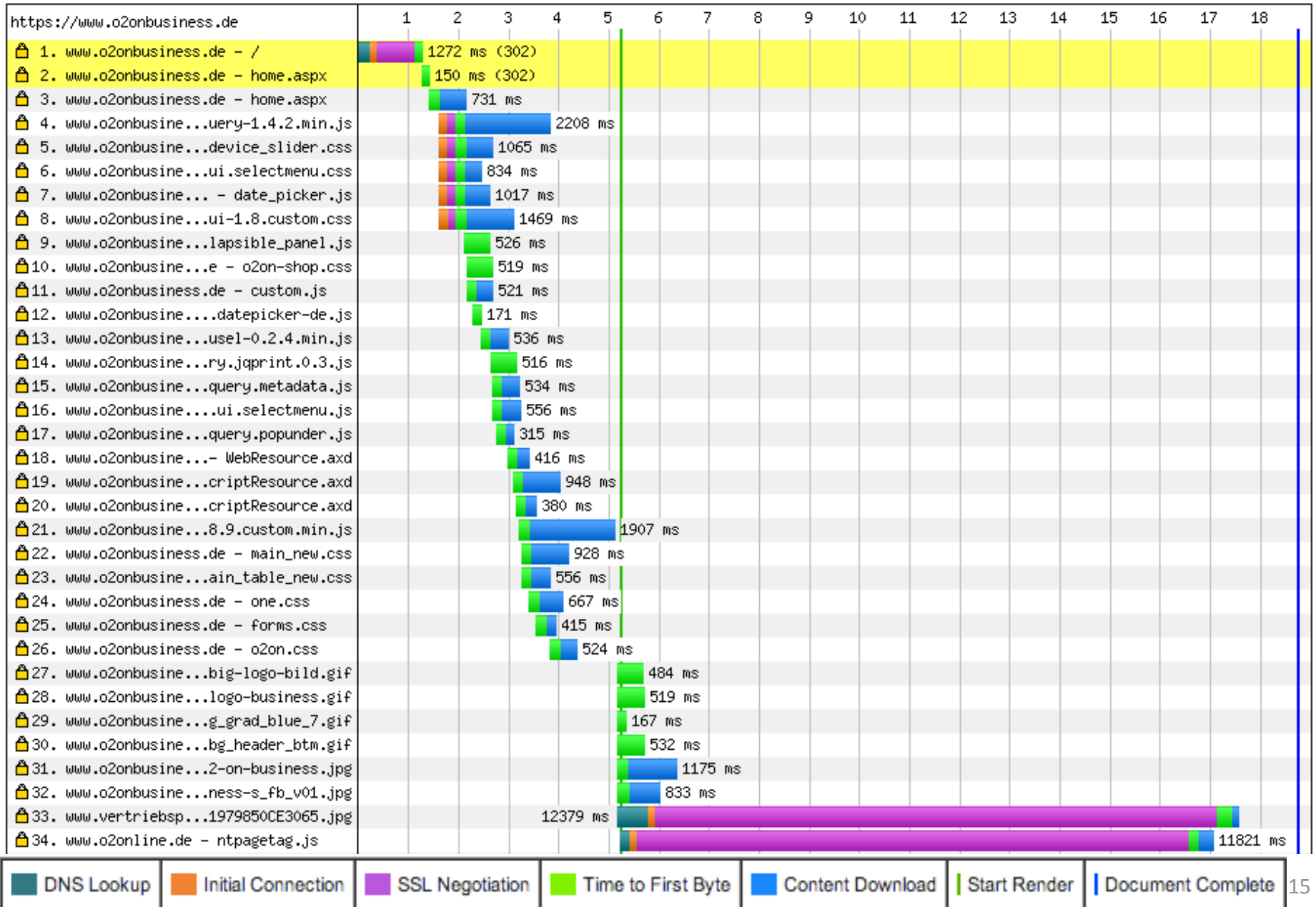


CSS in den Seitenkopf einbauen

CSS vor JavaScript einbinden

```
<html>
<head>
<link rel="stylesheet" type="text/css" href="./global.css"/>
<link rel="stylesheet" type="text/css" href="./specific.css"/>
<script src="./global.js"></script>
...
</head>
<body>
</body>
</html>
```

HTTP-Request



Globales JavaScript im Header einbinden

JavaScript modularisieren (evtl. AMD verwenden)

Seiten-lokales JavaScript inlinen bzw. im Fuß der Seite einbinden

```
<html>
<head>
<link rel="stylesheet" type="text/css" href="./global.css"/>
<link rel="stylesheet" type="text/css" href="./specific.css"/>
<script src="./global.js"></script>
...
</head>
<body>
...
<script>
alert(„Hello“);
</script>
<script src="./specific.js"></script>
</body>
</html>
```

3rd Party

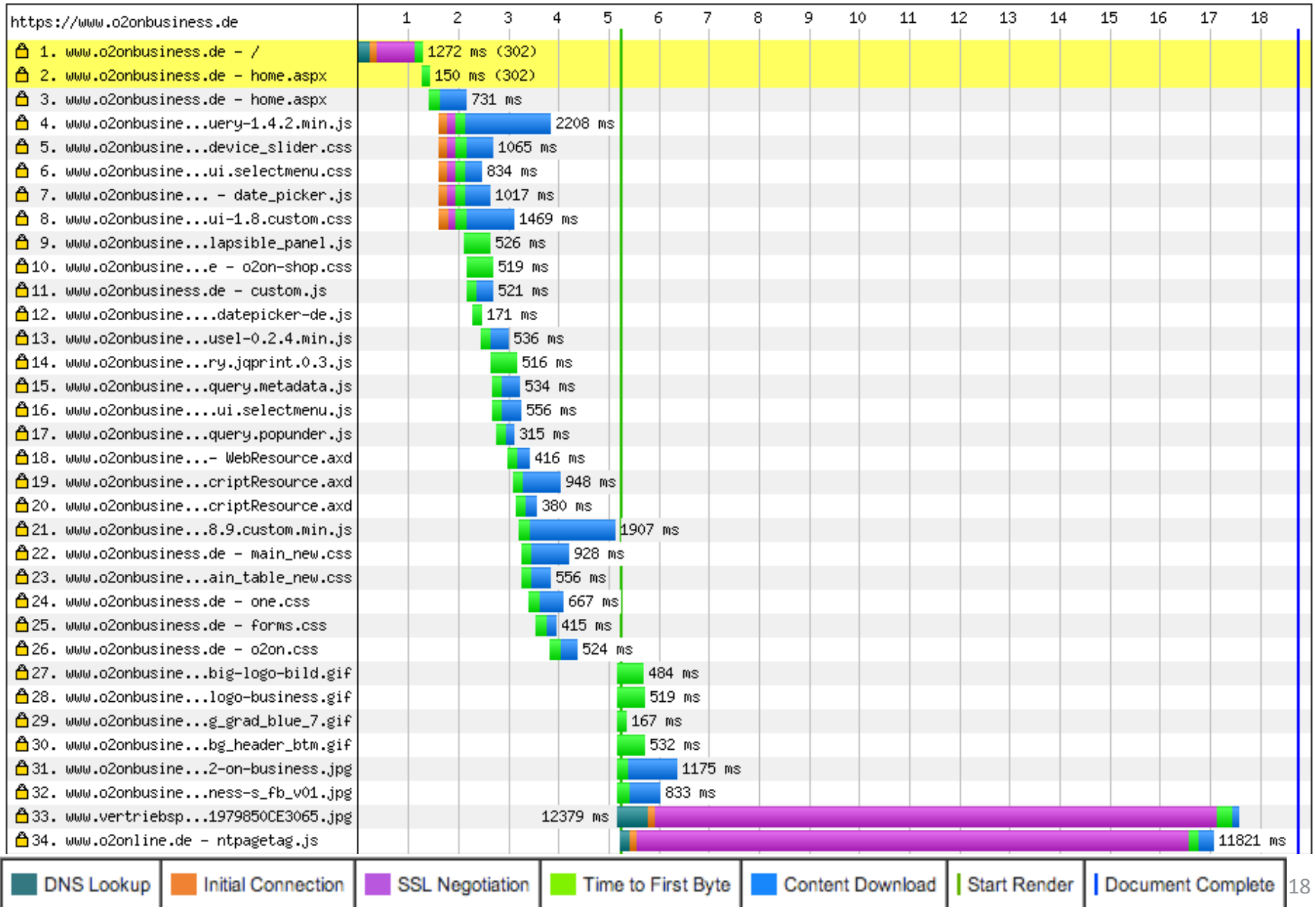
Lade 3rd Party-Content asynchron

Reduziere / verschiebe DNS-Lookups

Vermeide SPOF



HTTP-Request



Buildprozess



Build-Prozess



Bild:
CC MakerBot Industries

Wiederkehrende Aufgaben
automatisieren

Build Script, z.B. bash

Kompilierende Sprachen



make – C / Unix

ant – Java

Interpretierte Sprachen

Rake – Ruby

Phing – PHP

Jake – JavaScript

Java Enterprise-Umfeld

Plugin-Konzept

wro4j

maven-opti-png

jsdoctk-plugin

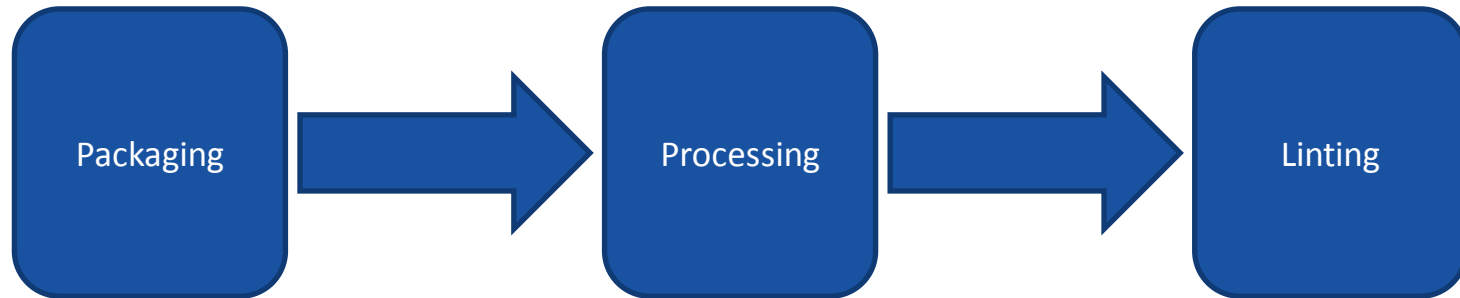
jasmine-maven-plugin

The Maven logo is displayed in a bold, italicized sans-serif font. The word "maven" is written in black, with the letter 'a' highlighted in orange.

CSS



Building Steps für CSS





Handys

Tarife

DSL & Festnetz

O2 More

Mein O2



Alice Home

DSL-Pakete zum Telefonieren und Surfen zuhause.

Alice Home & Go

Flatrates für schnelles Surfen zuhause und unterwegs.

Name Path	Method	Status Text	Type	Initiator	Size Content	Time Latency	Timeline	749ms	1.12s	1.50s
page.css.css static1.validation.dsl.o2online.de/provider.	GET	200 OK	text/css	<u>/provider/content/seqm</u> Parser	2.42KB 7.46KB	478ms 395ms				
global_imports2.css.css static1.validation.dsl.o2online.de/provider.	GET	200 OK	text/css	<u>/provider/content/seqm</u> Parser	823B 1.50KB	475ms 364ms				
footnotes.css.css static1.validation.dsl.o2online.de/provider.	GET	200 OK	text/css	<u>/provider/content/seqm</u> Parser	819B 770B	79ms 65ms				
teaser.css.css static1.validation.dsl.o2online.de/provider.	GET	200 OK	text/css	<u>/provider/content/seqm</u> Parser	4.69KB 18.97KB	94ms 80ms				
cart.css.css static1.validation.dsl.o2online.de/provider.	GET	200 OK	text/css	<u>/provider/content/seqm</u> Parser	2.55KB 8.19KB	95ms 80ms				80ms → 15ms
layer.css.css static1.validation.dsl.o2online.de/provider.	GET	200 OK	text/css	<u>/provider/content/seqm</u> Parser	1.64KB 3.81KB	286ms 135ms				
selfcare_mydata.css.css static1.validation.dsl.o2online.de/provider.	GET	200 OK	text/css	<u>/provider/content/seqm</u> Parser	1.97KB 5.12KB	285ms 140ms				
footer_o2_context-info.css.css static1.validation.dsl.o2online.de/provider.	GET	200 OK	text/css	<u>/provider/content/seqm</u> Parser	1.76KB 5.25KB	285ms 135ms				
productOverview.css.css static1.validation.dsl.o2online.de/provider.	GET	200 OK	text/css	<u>/provider/content/seqm</u> Parser	1.73KB 5.18KB	284ms 144ms				
help.css.css	GET	200	text/css	<u>/provider/content/seqm</u>	2.44KB	284ms				

@import

```
@import url(http://static1.dsl.o2online.de/css/1200001398/149/global.css);
@import url(http://static1.dsl.o2online.de/css/1200001400/143/sim_card.css);
@import url(http://static1.dsl.o2online.de/css/1200002234/141/buttons.css);
@import url(http://static1.dsl.o2online.de/css/1200002236/156/grid.css);
@import url(http://static1.dsl.o2online.de/css/1200002238/142/iconbar.css);
@import url(http://static1.dsl.o2online.de/css/1200002334/141/navigation_cockpit.css);
@import url(http://static1.dsl.o2online.de/css/1200002336/141/navigation_main.css);
@import url(http://static1.dsl.o2online.de/css/1200002338/141/navigation_meta.css);
/* ... */
@import url(http://static1.dsl.o2online.de/css/1200001346/154/price.css);
@import url(http://static1.dsl.o2online.de/css/1200001372/142/header.css);
@import url(http://static1.dsl.o2online.de/css/1200001374/144/page.css);
@import url(http://static1.validation.dsl.o2online.de/css/1200001376/141/tooltip.css);
@import url(http://static1.dsl.o2online.de/css/25927260/40/global_imports2.css);
/* Kein CSS Import nach Zeile 30 wegen IE7 Restriktionen */
```

Packaging

```
css
├── accordion_extra.css 35590 28.03.12 13:57 zeyses
├── buttons.css 35763 10.04.12 10:53 zeyses
├── cart.css 35764 10.04.12 11:04 zeyses
├── content.css 35806 12.04.12 09:56 zeyses
├── footer_o2_context-info.css 35727 04.04.12 17:38 zeyses
├── footer.css 34479 03.02.12 11:42 bastian.schramm@o2.c
├── footnotes.css 34479 03.02.12 11:42 bastian.schramm@o
├── form.css 35665 02.04.12 09:54 ochso
├── global_imports.css 35590 28.03.12 13:57 zeyses
├── global_imports2.css 35613 28.03.12 16:39 zeyses
├── global.css 35806 12.04.12 09:56 zeyses
├── grid.css 35590 28.03.12 13:57 zeyses
├── hardwareshop.css 34159 20.01.12 15:03 silke.boettcher@
├── header.css 33375 27.12.11 17:20 silke.boettcher@hanser
├── help.css 35727 04.04.12 17:38 zeyses
├── iconbar.css 35727 04.04.12 17:38 zeyses
├── ie.css 35727 04.04.12 17:38 zeyses
├── jquery-ui-1.8.16.custom.css 35779 10.04.12 15:22 ochso
├── layer.css 35727 04.04.12 17:38 zeyses
├── loginbox.css 34706 15.02.12 15:42 schrammb
├── navigation_cockpit.css 34706 15.02.12 15:42 schrammb
├── navigation_main.css 35806 12.04.12 09:56 zeyses
├── navigation_meta.css 31442 24.10.11 16:37 jan.weinscher
├── navigation_order.css 35796 11.04.12 11:45 schrammb
├── navigation_sidebar.css 35665 02.04.12 09:54 ochso
├── o2-chat.css 35727 04.04.12 17:38 zeyses
├── order_navigation.css 35727 04.04.12 17:38 zeyses
├── page.css 35762 10.04.12 10:11 zeyses
├── price.css 35727 04.04.12 17:38 zeyses
├── price.css.bak
├── pricegraphic.css 31442 24.10.11 16:37 jan.weinschenker
├── print.css 31922 07.11.11 16:22 alejandro.gomez@spot-n
├── productOverview.css 35526 26.03.12 17:44 schrammb
├── productOverviewPromoSteering.css 35460 21.03.12 15:3
├── provider_startseite.css 35762 10.04.12 10:11 zeyses
├── selfcare_mydata.css 35781 10.04.12 15:47 zeyses
├── sim_card.css 34929 24.02.12 17:09 boettchs
├── subhome.css 35665 02.04.12 09:54 ochso
├── tablet.css 35052 01.03.12 17:25 zeyses
├── tarifvergleich.css 35791 11.04.12 10:40 zeyses
├── teaser.css 35806 12.04.12 09:56 zeyses
├── tooltip.css 34343 27.01.12 15:18 stefan.zeise@hansenet.
├── tv_movies.css 34479 03.02.12 11:42 bastian.schramm@c
├── unavailabilityFlags.css 35806 12.04.12 09:56 zeyses
└── vcheck.css 35747 05.04.12 11:06 schrammb
```



```
generated_css
├── global.css
├── hardwareshop.css
├── msie.css
├── provider_home.css
└── subhome.css
```

Packaged

The screenshot shows a web browser window displaying the 'Hardwareshop' page for O2. The URL is `dsl.o2online.de/selfcare/content/segment/kundencenter/mobilfunk/hardwareshop/`. The page features a navigation bar with 'Daten & Verträge', 'DSL & Festnetz', 'Mobilfunk', and 'Online Speicher'. The main content area is titled 'Hardwareshop' and includes a promotional banner for a Nokia Asha 300, priced at 2,50 € (monthly) + 61,- € (one-time payment). Below the browser window, a network analysis tool interface is visible, showing a table of network requests and a timeline visualization.

Name Path	Method	Status Text	Type	Initiator	Size Content	Time Latency	Timeline
<code>/selfcare/content/segment/kundencenter/mobilfunk/hardwareshop/</code>	GET	200 OK	text/html	Other	6.20KB 29.65KB	348ms 334ms	[Timeline bar]
<code>global.css.css</code> <code>static.dsl.o2online.de/selfcare/content/static/global.css</code>	GET	200 OK	text/css	<code>/selfcare/content/segment/kundencenter/mobilfunk/hardwareshop/</code> Parser	32.40KB 180.19KB	449ms 137ms	[Timeline bar]
<code>hardwareshop.css.css</code> <code>static.dsl.o2online.de/selfcare/content/static/global.css</code>	GET	200 OK	text/css	<code>/selfcare/content/segment/kundencenter/mobilfunk/hardwareshop/</code> Parser	1.04KB 1.89KB	446ms 66ms	[Timeline bar]
<code>global.js.js</code> <code>static.dsl.o2online.de/selfcare/content/static/global.css</code>	GET	200 OK	text/javascript	<code>/selfcare/content/segment/kundencenter/mobilfunk/hardwareshop/</code> Parser	114.99KB 368.69KB	446ms 191ms	[Timeline bar]
<code>hardwareshop.js.js</code> <code>static.dsl.o2online.de/selfcare/content/static/global.css</code>	GET	200 OK	text/javascript	<code>/selfcare/content/segment/kundencenter/mobilfunk/hardwareshop/</code> Parser	1.86KB 4.19KB	441ms 52ms	[Timeline bar]

Processing

CSS Variables Support

```
/* CSS Variables */
@variables {
  MyLogoBGColor: #fe8d12;
}

div.logoContainer {
  background-color: var(MyLogoBGColor);
}
```

```
/* Compiled CSS */
div.logoContainer {
  background-color: #fe8d12;
}
```

Less CSS (aber auch SASS)

```
/* LESS */
.rounded-corners (@radius: 5px) {
  border-radius: @radius;
  -webkit-border-radius: @radius;
  -moz-border-radius: @radius;
}

#header { .rounded-corners; }
#footer { .rounded-corners(10px); }
```

```
/* Compiled CSS */
#header { border-radius: 5px;
  -webkit-border-radius: 5px;
  -moz-border-radius: 5px; }

#footer { border-radius: 10px;
  -webkit-border-radius: 10px;
  -moz-border-radius: 10px; }
```

CSS LINT

Will hurt your feelings
(And help you code better)

CSS Lint is a tool to help point out problems with your CSS code. It does basic syntax checking as well as applying a set of rules to the code that look for problematic patterns or signs of inefficiency. The rules are all pluggable, so you can easily write your own or omit ones you don't want.

-- <http://lint.net>

CSS-Lint-Meldungen

Parsing Errors	Expected RBRACE at line 384, col 3. */	All
body#provider div.container_tsr_content div.unavailable_icon .unavailableType		
{		
top: 76px;		
right: 12px;		
*/		
}		

Images



OptiPNG

OptiPNG is a PNG optimizer that recompresses image files to a smaller size, without losing any information. This program also converts external formats (BMP, GIF, PNM and TIFF) to optimized PNG, and performs PNG integrity checks and corrections.

-- <http://optipng.sourceforge.net/>

-- <https://github.com/hammerhead/maven-optipng-plugin>

jpegtran

jpegtran transcodes JPEG lossless (e.g. removes meta data and headers)

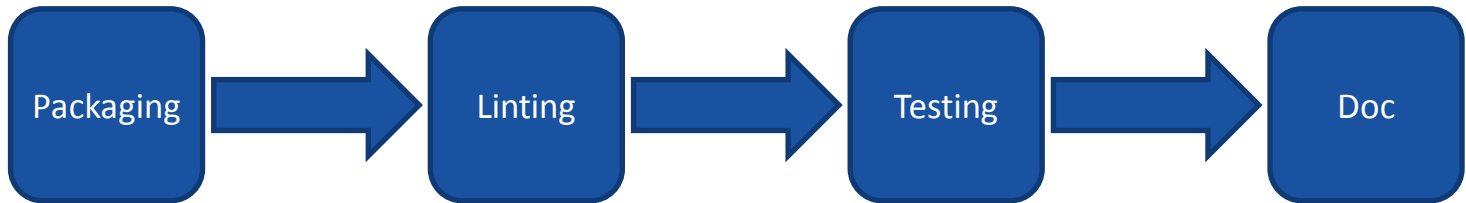
-- <http://jpegclub.org/>

JS

JS



JS Building Steps



Packaging

```
└─ javascript
  └─ lib
    └─ jasmine-1.0.2
      ├── jasmine-html.js 27720 13.04.11 15:52 oliver.ochs@hansenet.c
      ├── jasmine.css 27720 13.04.11 15:52 oliver.ochs@hansenet.com
      ├── jasmine.js 27720 13.04.11 15:52 oliver.ochs@hansenet.com
      └── MIT.LICENSE 27720 13.04.11 15:52 oliver.ochs@hansenet.co
    ├── cufon_O2.js 35694 03.04.12 09:28 zeyses
    ├── cufon-yui.js 35694 03.04.12 09:28 zeyses
    ├── hardwarecarousel.jquery.js 32442 24.11.11 17:03 oliver.ochs@har
    ├── jquery-1.7.2.js 35626 29.03.12 13:58 ochso
    ├── jquery-cookie.js 27720 13.04.11 15:52 oliver.ochs@hansenet.com
    ├── jquery-ui-1.8.16.custom.js 31408 24.10.11 16:06 jan.weinschenke
    ├── jquery-ui-datepicker-german.js 35626 29.03.12 13:58 ochso
    ├── jquery-unavailabilityTooltip.js 31408 24.10.11 16:06 jan.weinsche
    ├── jquery.ba-postmessage.js 33910 16.01.12 15:33 juergen.droste@h
    ├── jquery.cart.js 34110 19.01.12 11:15 oliver.ochs@hansenet.com
    ├── jquery.defaultValue.js 31408 24.10.11 16:06 jan.weinschenker@h
    ├── jquery.maskedinput-1.3.js 31408 24.10.11 16:06 jan.weinschenke
    ├── jquery.tmpl.js 33975 17.01.12 13:16 oliver.ochs@hansenet.com
    ├── jquery.tooltip.1.3.patched.js 31560 27.10.11 13:50 stefan.zeyse@P
    ├── jquery.validate.1.8.1.PATCHED.js 31408 24.10.11 16:06 jan.weinsc
    ├── o2-common.js 35626 29.03.12 13:58 ochso
    ├── postmessage.js 32437 24.11.11 16:04 oliver.ochs@hansenet.com
    ├── webtoolkit.base64.js 27720 13.04.11 15:52 oliver.ochs@hansenet.
    ├── alice_dialog.js 34663 13.02.12 17:40 zeyses
    ├── alice-ajax-utils.js 31407 24.10.11 16:06 jan.weinschenker@hansenet.c
    ├── alice-curtain.js 34811 20.02.12 13:57 zeyses
    ├── alice-datepicker-init.js 34469 02.02.12 13:06 malte.gessner@hansene
    ├── alice-errorhandling.js 32927 08.12.11 16:13 alejandro.gomez@spot-r
    ├── alice-form.js 32818 06.12.11 16:03 stefan.zeyse@hansenet.com
    ├── alice-masked-input-rules.js 31407 24.10.11 16:06 jan.weinschenker@
    ├── alice-navigation.js 31407 24.10.11 16:06 jan.weinschenker@hansene
    ├── alice-o2-cart-init.js 34177 23.01.12 10:28 oliver.ochs@hansenet.com
    ├── alice-search.js 33999 17.01.12 16:34 oliver.ochs@hansenet.com
    ├── alice-selfcare.js 34566 08.02.12 12:15 zeyses
    ├── alice-string-utils.js 31407 24.10.11 16:06 jan.weinschenker@hansene
    ├── alice-targeting.js 31407 24.10.11 16:06 jan.weinschenker@hansenet.
    ├── alice-tracking.js 34329 27.01.12 11:32 oliver.ochs@hansenet.com
    ├── alice-unavailabilityTooltip.js 32501 28.11.11 14:01 hannes.schluchtr
    ├── alice-validation-rules.js 33910 16.01.12 15:33 juergen.droste@hanser
    ├── cufon-calls.js 35761 10.04.12 10:10 zeyses
    ├── dialog-init.js 35626 29.03.12 13:58 ochso
    ├── footnotes.js 32846 07.12.11 13:53 stefan.zeyse@hansenet.com
    ├── hardwareshop.js 35676 02.04.12 12:24 ochso
    ├── o2-socialmedia.js 35626 29.03.12 13:58 ochso
    ├── provider_startseite.js 34301 26.01.12 11:45 silke.boettcher@hansenet
    └── shoppingcart-javascripts.js 31560 27.10.11 13:50 stefan.zeyse@hansc
```



```
└─ generated_js
  ├── global.js
  ├── hardwareshop.js
  ├── init-scripts.js
  └── provider_home.js
```

Minification Engines in wro4j

- Douglas Crockford's JsMin
- Google Closure compressor
- Yahoo UI Compressor
- Marijn Haverbeke's UglifyJs
- Dojo Shrinksafe

Minification

```
(function(bd,L){var av=bd.document,bu=bd.navigator,bm=bd.location;var b=(function(){var bF=function(b0,b1){return new bF.fn.init(b0,b1,bD)};bU=bd.jQuery,bH=bd.$,bD,bY=/^(?::[\w\W]+>)[^>]*$#[([\w\-*$)/\s/,\bI=/^\s+/,bE=/\s+$/,bA=/^<(\w+)\s*\>(?::<\>)?$/,bN=/^\[\],:;]\s*$/,bW=/\(\?:["'\\\bfrnt]|u[0-9a-fA-F]{4}\/g,bP="/[^\n\r]*"|true|false|null|-?\d+(?:\.\d*)?(?:[eE][+-]?)\d+\/g,bJ=/(?:^|,|)(?:\s*\|\/g,by=(webkit|V|([\w.]+)\/,bR=(opera)(?:.*version)?|V|([\w.]+)\/,bQ=/msie) ([\w.]+)\/,bS=(mozilla)(?:.*? v:([\w.]+)?)?/,bB=-([a-z])[0-9]/ig,bZ=/^ms-/,bT=function(b0,b1){return(b1+"").toUpperCase();},bX=bu.userAgent,bV,bC,e,bL=Object.prototype.toString,bG=Object.prototype.hasOwnProperty,bZ=Array.prototype.push,bK=Array.prototype.slice,bO=String.prototype.trim,bV=Array.prototype.indexOf,bX={};bF.fn=bF.prototype={constructor:bF,init:function(b0,b4,b3){var b2,b5,b1,b6;if(!b0){return this;}if(b0.nodeType){this.context=this[0]=b0;this.length=1;return this;}if(b0=="body"&&!b4&&av.body){this.context=av;this[0]=av.body;this.selector=b0;this.length=1;return this;}if(typeof b0=="string"){if(b0.charAt(0)=="<"&&b0.charAt(b0.length-1)==">"&&b0.length>=3){b2=[null,b0,null];}else{b2=bY.exec(b0)};if(b2&&(b2[1]||!b4)){if(b2[1]){b4=b4 instanceof bF?b4[0]:b4;b6=(b4?b4.ownerDocument||b4:av); b1=bA.exec(b0);if(b1){if(bF.isPlainObject(b4)){b0=[av.createElement(b1[1])];bF.fn.attr.call(b0,b4,true);}else{b0=[b6.createElement(b1[1])];}}else{b1=bF.buildFragment([b2[1],[b6]]);b0=(b1.cacheable?bF.clone(b1.fragment):b1.fragment).childNodes;}return bF.merge(this,b0);}else{b5=av.getElementById(b2[2]);if(b5&&b5.parentNode){if(b5.id==b2[2]){return b3.find(b0);}this.length=1;this[0]=b5;}this.context=av;this.selector=b0;return this;}else{if(!b4||b4.jquery){return(b4||b3).find(b0);}else{return this.constructor(b4).find(b0);}}else{if(bF.isFunction(b0)){return b3.ready(b0);}if(b0.selector!=L){this.selector=b0.selector;this.context=b0.context;}return bF.makeArray(b0,this);},selector:"",jquery:"1.7.2",length:0,size:function(){return this.length;},toArray:function(){return bK.call(this,0)};get:function(b0){return b0==null?this.toArray():(b0<0?this[this.length+b0]:this[b0]);},pushStack:function(b1,b3,b0){var b2=this.constructor();if(bF.isArray(b1)){b2.apply(b2,b1);}else{bF.merge(b2,b1);}b2.prevObject=this;b2.context=this.context;if(b3=="find"){b2.selector=this.selector+(this.selector?" ":"")+b0;}else{if(b3){b2.selector=this.selector+"."+b3+"("+b0+")";}}return b2;},each:function(b1,b0){return bF.each(this,b1,b0);},ready:function(b0){bF.bindReady();bC.add(b0);return this;},eq:function(b0){b0+=b0;return b0===-1?this.slice(b0):this.slice(b0,b0+1)};first:function(){return this.eq(0)};last:function(){return this.eq(-1)};slice:function(){return this.pushStack(bK.apply(this,arguments),"slice",bK.call(arguments).join(","));},map:function(b0){return this.pushStack(bF.map(this,function(b2,b1){return b0.call(b2,b1,b2)}));},end:function(){return this.prevObject||this.constructor(null)};push:bz,sort:[].sort,splice:[].splice}; bF.fn.init.prototype=bF.fn;bF.extend=bF.fn.extend=function(){var b9,b2,b0,b1,b6,b7,b5=arguments[0]||{};b4=1,b3=arguments.length,b8=false;if(typeof b5=="boolean"){b8=b5;b5=arguments[1]||{};b4=2;}if(typeof b5=="object"&&!bF.isFunction(b5)){b5={};}if(b3===b4){b5=this;--b4;}for(;b4<b3;b4++){if((b9=arguments[b4])!=null){for(b2 in b9){b0=b5[b2];b1=b9[b2];if(b5===b1){continue;}if(b8&&b1&&(bF.isPlainObject(b1)||b6=bF.isArray(b1))){if(b6){b6=false;b7=b0&&bF.isArray(b0)?b0[];}else{b7=b0&&bF.isPlainObject(b0)?b0:{};b5[b2]=bF.extend(b8,b7,b1);}else{if(b1!=L){b5[b2]=b1;}}}}return b5;};bF.extend({noConflict:function(b0){if(bd.$===bF){bd.$=bH;}if(b0&&bd.jQuery===bF){bd.jQuery=bU;}return bF;},isReady:false,readyWait:1,holdReady:function(b0){if(b0){bF.readyWait++;}else{bF.ready(true);},ready:function(b0){if((b0===true&&!bF.readyWait)||b0===true&&!bF.isReady){if(!av.body){return setTimeout(bF.ready,1);}bF.isReady=true;if(b0===true&&bF.readyWait>0){return;}bC.fireWith(av,[bF]);}if(bF.fn.trigger){bF(av).trigger("ready").off("ready");}},bindReady:function(){if(bC){return;}bC=bF.Call backs("once memory");}if(av.readyState=="complete"){return setTimeout(bF.ready,1);}if(av.addEventListener){av.addEventListener("DOMContentLoaded",e,false);bd.addEventListener("load",bF.ready,false);}else{if(av.attachEvent){av.attachEvent("onreadystatechange",e);bd.attachEvent("onload",bF.ready);var b0=false;try{b0=bd.frameElement==null;}catch(b1){}if(av.documentElement.doScroll&&b0){bW();}}},isFunction:function(b0){return bF.type(b0)=="function"};isArray:Array.isArray|function(b0){return b0.type(b0)=="array"};isWindow:function(b0){return b0!=null&&b0==b0.window};isNumeric:function(b0){return !isNaN(parseFloat(b0))&&isFinite(b0)};type:function(b0){return b0==null?String(b0):bX[bL.call(b0)]||"object"};isPlainObject:function(b2){if(!b2||bF.type(b2)!="object"||b2.nodeType||bF.isWindow(b2)){return false;}try{if(b2.constructor&&!bG.call(b2,"constructor")&&!bG.call(b2.constructor.prototype,"isPrototypeOf")){return false;}catch(b1){return false;}}
```

JSLint



JSLint - ... Will hurt your feelings. It takes a JavaScript source and scans it. If it finds a problem, it returns a message describing the problem and an approximate location within the source. The problem is not necessarily a syntax error, although it often is.

-- <http://www.jshint.com/lint.html>
-- <http://code.google.com/p/jshint4java/>

JSHint



JSHint is a community-driven tool to detect errors and potential problems in JavaScript code and to enforce your team's coding conventions.

-- <http://www.jshint.com/>

JSLint Build Failure

```
[INFO] Executing tasks
```

```
main:
```

```
  [jslint] [...] \src\main\webapp\javascript\alice-string-utils.js:30:9:  
Expected '===', and instead saw '=='.
```

```
  [jslint]   if (i == false) {
```

```
  [jslint]           ^
```

```
[INFO] -----  
-----
```

```
[INFO] BUILD FAILURE
```

```
[INFO] -----  
-----
```

BDD mit Jasmine



```
describe("Jasmine", function() {  
    it("makes testing JavaScript awesome!", function() {  
        expect(yourCode).toBeLotsBetter();  
    });  
});
```

-- <http://pivotal.github.com/jasmine/>

Jasmine Specs

```
describe("StringUtils.startsWith and StringUtils.endsWith", function() {
  var testString;

  beforeEach(function() {
    testString = new String("Anfang Ende");
  });

  it("should match a specified string on the beginning of a string", function() {
    expect(testString.startsWith("anfang", true)).toBeTruthy();
    expect(testString.startsWith("anfang", false)).toBeFalsy();
    expect(testString.startsWith("Ende", true)).toBeFalsy();
  });

  it("should match a specified string on the ending of a string", function() {
    expect(testString.endsWith("ende", true)).toBeTruthy();
    expect(testString.endsWith("ende", false)).toBeFalsy();
    expect(testString.endsWith("Anfang", true)).toBeFalsy();
  })
});
```

Executing Jasmine Specs

```
-----  
J A S M I N E   S P E C S  
-----
```

```
[INFO]
```

```
Jasmine
```

```
  makes testing JavaScript awesome
```

```
StringUtils.trim
```

```
  should trim a string
```

```
StringUtils.startsWith and StringUtils.endsWith
```

```
  should match a specified string on the beginning of a string
```

```
  should match a specified string on the ending of a string
```

```
Mapping CID incl PostViewSales
```

```
  should map Alice S + Option Home&Go Surf-flat L 1 Monat to 246201
```

```
  should map Alice M + Option Home&Go Surf-flat L 1 Monat to 246209
```

```
  should map Alice L + Option Home&Go Surf-flat L 1 Monat to 246217
```

```
  should map Alice S + Option Home&Go Surf-flat L 24 Monate to 246203
```

```
  should map Alice M + Option Home&Go Surf-flat L 24 to 246211
```

```
  should map Alice L + Option Home&Go Surf-flat L to 246219
```

```
[...]
```

```
Results: 138 specs, 0 failures
```

Documentation

JSDocToolkit - JsDoc Toolkit is an application, written in JavaScript, for automatically generating template-formatted, multi-page HTML (or XML, JSON, or any other text-based) documentation from commented JavaScript source code.

-- <http://code.google.com/p/jsdoc-toolkit/>
-- <http://code.google.com/p/jsdoctk-plugin/>

Generated documentation

The screenshot shows a web browser window with the title "JsDoc Reference - HN.TRACKING". The address bar shows the file path: "file:///localhost/Users/simonox/Dropbox/Telefonica/WebPerfHH/hansenet-frontend/target/jsdoc/...". The main content area displays the documentation for the "Namespace HN.TRACKING".

Namespace HN.TRACKING
Defined in: [alice-tracking.js](#).

Classes

- [_global_](#)
- [HN.TARGETING](#)
- [HN.TRACKING](#)
- [jasmine](#)
- [jasmine.Block](#)
- [jasmine.Clock](#)
- [jasmine.Env](#)
- [jasmine.JsApiReporter](#)
- [jasmine.Matchers](#)
- [jasmine.MultiReporter](#)
- [jasmine.NestedResults](#)
- [jasmine.Reporter](#)
- [jasmine.Runner](#)
- [jasmine.Spec](#)
- [jasmine.Spy](#)
- [jasmine.Suite](#)
- [jasmine.util](#)
- [jasmine.WaitsForBlock](#)
- [String](#)

Namespace Summary

	HN.TRACKING Object for TRACKING
--	--

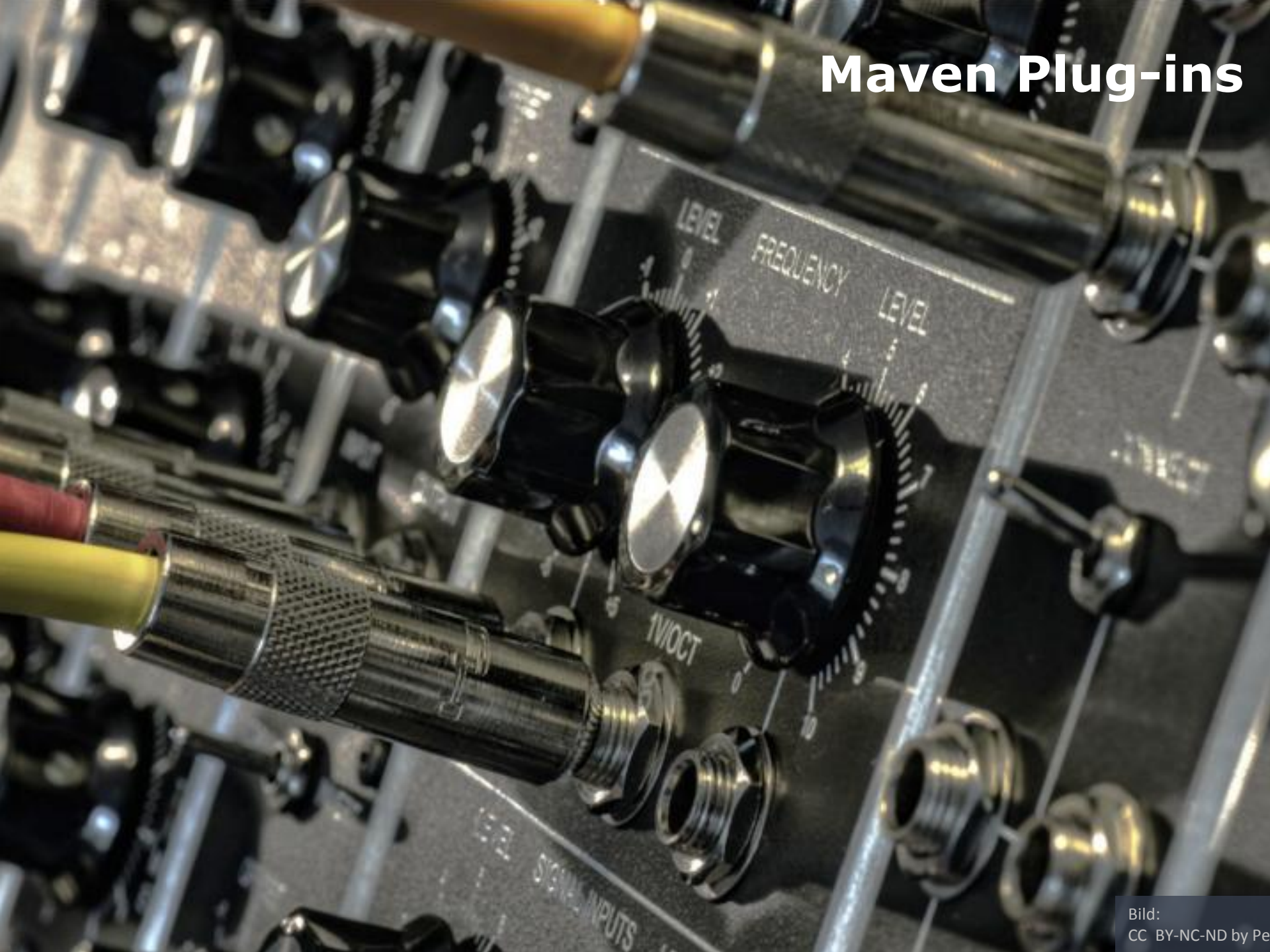
Field Summary

<static>	HN.TRACKING.trackingPixelFunctions Internal Array to store Tracking Pixel Functions
----------	--

Method Summary

<static>	HN.TRACKING.addTrackingPixel (trackingFunction) Add a Tracking Pixel Object to the Array of Tracking Pixel Functions.
<static>	HN.TRACKING.deleteHTBCookie () Deletes the Post View Cookie.
<static>	HN.TRACKING.deleteOOCookie () Deletes the Affiliate Cookie.
<static>	HN.TRACKING.getOOCookie () Return the Affiliate Cookie as an Object
<static>	HN.TRACKING.mapCID (order) Mapping for CID
<static>	HN.TRACKING.mapEprofessional (order) Mapping for eProfessional
<static>	HN.TRACKING.mapOptimizeItThankyou (order) Mapping for Optimizie It ONLINEBERATER on the thank you page
<static>	HN.TRACKING.mapPBIId (order) Mapping for PBIId

Maven Plug-ins



Web Resource Optimizer for Java

Free and Open Source Java project which brings together almost all the modern web tools: JsHint, CssLint, JsMin, Google Closure compressor, YUI Compressor, UglifyJs, Dojo ShrinkSafe, Css Variables Support, JSON Compression, Less, Sass, CoffeeScript and much more.

-- <http://code.google.com/p/wro4j/>



wro4j-maven-plugin

```
<plugin>
  <groupId>ro.isdc.wro4j</groupId>
  <artifactId>wro4j-maven-plugin</artifactId>
  <version>1.4.4</version>
  <executions>
    <execution>
      <phase>compile</phase>
      <goals><goal>run</goal><goal>csslint</goal><goal>jshint</goal></goals>
    </execution>
  </executions>
  <configuration>
    <minimize>true</minimize>
    <wroFile>${basedir}/src/main/webapp/WEB-INF/wro.xml</wroFile>
    <wroManagerFactory>
      ro.isdc.wro.extensions.manager.standalone.GoogleStandaloneManagerFactory
    </wroManagerFactory>
    <!-- this can fix your build - DO NOT USE THIS-->
    <failNever>true</failNever>
  </configuration>
</plugin>
```

wro4j.xml für CSS

```
<groups>
  <group name='global'>
    <css>/css/buttons.css</css>
    <css>/css/grid.css</css>
    <css>/css/iconbar.css</css>
    <css>/css/navigation_cockpit.css</css>
    <css>/css/navigation_main.css</css>
    <css>/css/navigation_order.css</css>
    [...]
  </group>
  <group name='hardwareshop'>
    <css>/css/hardwareshop.css</css>
  </group>
  <group name='msie'>
    <css>/css/ie.css</css>
  </group>
</groups>
```

wro4j.xml für JS

```
<groups>  
  <group name='global'>  
    <js>/javascript/lib/jquery-latest.js</js>  
    <js>/javascript/lib/webtoolkit.base64.js</js>  
    <js>/javascript/lib/jquery.ba-postmessage.js</js>  
    <js>/javascript/tracking.js</js>  
    <js>/javascript/targeting.js</js>  
    [...]  
  </group>  
  <group name='hardwareshop'>  
    <js>/javascript/lib/hardwarecarousel.jquery.js</js>  
    <js>/javascript/hardwareshop.js</js>  
  </group>  
</groups>
```

maven-optipng-plugin

```
<plugin>
  <groupId>de.kabambo</groupId>
  <artifactId>maven-optipng-plugin</artifactId>
  <version>1.0-SNAPSHOT</version>
  <executions>
    <execution>
      <goals><goal>optimize</goal></goals>
    </execution>
  </executions>
  <configuration>
    <pngDirectories>
      <pngDirectory>${basedir}/src/main/webapp/png</pngDirectory>
    </pngDirectories>
  </configuration>
</plugin>
```

jasmine-maven-plugin

```
<plugin>
  <groupId>com.github.searls</groupId>
  <artifactId>jasmine-maven-plugin</artifactId>
  <executions>
    <execution>
      <goals>
        <goal>test</goal>
      </goals>
    </execution>
  </executions>
  <configuration>
    <jsSrcDir>${basedir}/src/main/webapp/javascript</jsSrcDir>
    <sourceIncludes>
      <include>*.js</include>
    </sourceIncludes>
  </configuration>
</plugin>
```

jsdoctk-plugin

```
<plugin>  
  <groupId>nl.windgazer</groupId>  
  <artifactId>jsdoctk-plugin</artifactId>  
  <version>2.3.2</version>  
  <configuration>  
    <srcDir>${basedir}/src/main/webapp/javascript</srcDir>  
    <recurse>5</recurse>  
  </configuration>  
</plugin>
```

Results

The image displays two screenshots of the YSlow performance tool interface, showing the results of a page load analysis.

Top Screenshot (Grade D):

- Overall performance score: 70
- Ruleset applied: YSlow(V2)
- URL: <https://dev-cmredaktion.corp.hansenet.com:30280/selfcare/content/segment/kundencenter/>
- Filter by: CONTENT (6) | COOKIE (2) | CSS (6) | IMAGES (2) | JAVASCRIPT (4) | SERVER (6)
- Issues listed:
 - F Make fewer HTTP requests** (Grade F): This page has 34 external stylesheets. Try combining them into one.
 - F Use a Content Delivery Network (CDN)** (Grade F): This page has 11 external background images. Try combining them with CSS sprites.
 - A Avoid empty src or href** (Grade A)
 - F Add Expires headers** (Grade F)
 - F Compress components with gzip** (Grade F)
 - A Put CSS at top** (Grade A)
 - A Put JavaScript at bottom** (Grade A)
 - A Avoid CSS expressions** (Grade A)
 - n/a Make JavaScript and CSS external** (Grade n/a)
 - A Reduce DNS lookups** (Grade A)
 - A Minify JavaScript and CSS** (Grade A)
 - A Avoid URL redirects** (Grade A)
 - A Remove duplicate JavaScript and CSS** (Grade A)
 - A Configure entity tags (ETags)** (Grade A)
 - A Make AJAX cacheable** (Grade A)

Bottom Screenshot (Grade A):

- Overall performance score: 96
- Ruleset applied: YSlow(V2)
- URL: <http://dslo2online.de/selfcare/content/segment/kundencenter/>
- Filter by: CONTENT (6) | COOKIE (2) | CSS (6) | IMAGES (2) | JAVASCRIPT (4) | SERVER (6)
- Issues listed:
 - B Make fewer HTTP requests** (Grade B): This page has 12 external background images. Try combining them with CSS sprites.
 - A Use a Content Delivery Network (CDN)** (Grade A): Decreasing the number of components on a page reduces the number of HTTP requests required to render the page, resulting in faster page loads. Some ways to reduce the number of components include: combine files, combine multiple scripts into one script, combine multiple CSS files into one style sheet, and use CSS Sprites and image maps. [»Read More](#)
 - A Avoid empty src or href** (Grade A)
 - A Add Expires headers** (Grade A)
 - A Compress components with gzip** (Grade A)
 - A Put CSS at top** (Grade A)
 - A Put JavaScript at bottom** (Grade A)
 - A Avoid CSS expressions** (Grade A)
 - n/a Make JavaScript and CSS external** (Grade n/a)
 - A Reduce DNS lookups** (Grade A)
 - A Minify JavaScript and CSS** (Grade A)
 - A Avoid URL redirects** (Grade A)
 - A Remove duplicate JavaScript and CSS** (Grade A)
 - A Configure entity tags (ETags)** (Grade A)
 - A Make AJAX cacheable** (Grade A)



Bild: Public Domain, public-domain-image.com

Alternativen

Ant Build Script

HTML5 ★ BOILERPLATE

Combines and minifies javascript (via yui compressor)

Inlines stylesheets specified using @import in your CSS

Combines and minifies CSS

Optimizes JPGs and PNGs (with jpegtran & optiPNG)

Removes development only code (any remaining console.log files, profiling, test suite)

Revises the file names of your assets so that you can use heavy caching (1 year expires).

Upgrades the .htaccess to use heavier caching

Updates your HTML to reference the new files (CSS & JS)

Runs your JavaScript through a code quality tool (JSHint)

-- <http://html5boilerplate.com/>

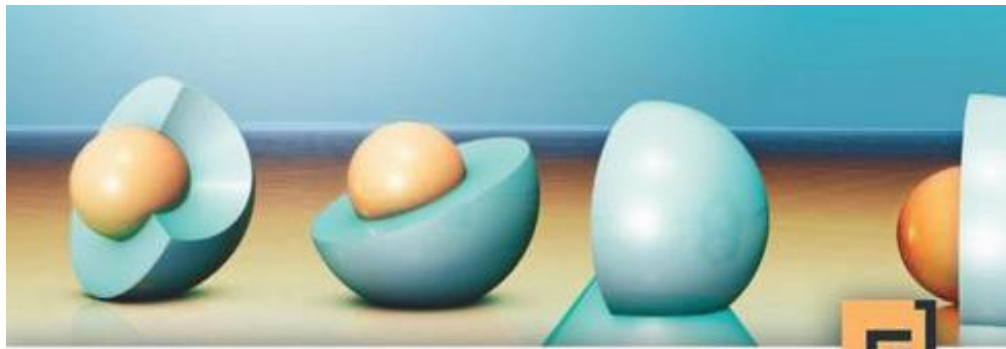
Grunt

Command Line Build Tool

JavaScript

Node.js & NPM

-- <https://github.com/cowboy/grunt>



Oliver Ochs

JavaScript

für Enterprise- Entwickler

Professionell programmieren
im Browser und auf dem Server

dpunkt.verlag



Meetup-Gruppe
suchen

Meetup-Gruppe
gründen

Hamburg Web Performance Group

Unser Zuhause

Mitglieder

Sponsoren

Fotos

Seiten

Diskussionen

Mehr ^v

Gruppenverwaltung ^v

Mein Profil ^v



Foto ändern

Hamburg,
Deutschland

Gegründet 11.11.2011

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- Web Speeder 160
 - Gruppenreview 4
 - Anstehende Meetups 1
 - Vergangene Meetups 5
 - Unser Kalender
 - Verfolge uns
- [Links hinzufügen/ändern](#)

Es geht bei uns um:
Load Testing and Performance ·
Web Standards · Web
Development · Website
Optimization · Testing Web Site
Performance · Web Performance

Organizer:

Oliver Ochs, Bjoern
K., Markus Leptien



Welcome Web Speeders!

+ PLANE EIN NEUES MEETUP

Anstehend 1

Vorgeschlagen 0

Vergangen

Kalender

Sechstes Hamburg Web Performance Meetup

Needs a location
Got one?



Hosted by: Oliver Ochs (Organizer)

Mi Sep 19
19:00

I'M ATTENDING

25 attending

17 waiting

2 comments

Recent Meetups

15.08.2012 19:00:00, 30 Web Speeder attended

Fünftes Hamburg Web Performance Meetup

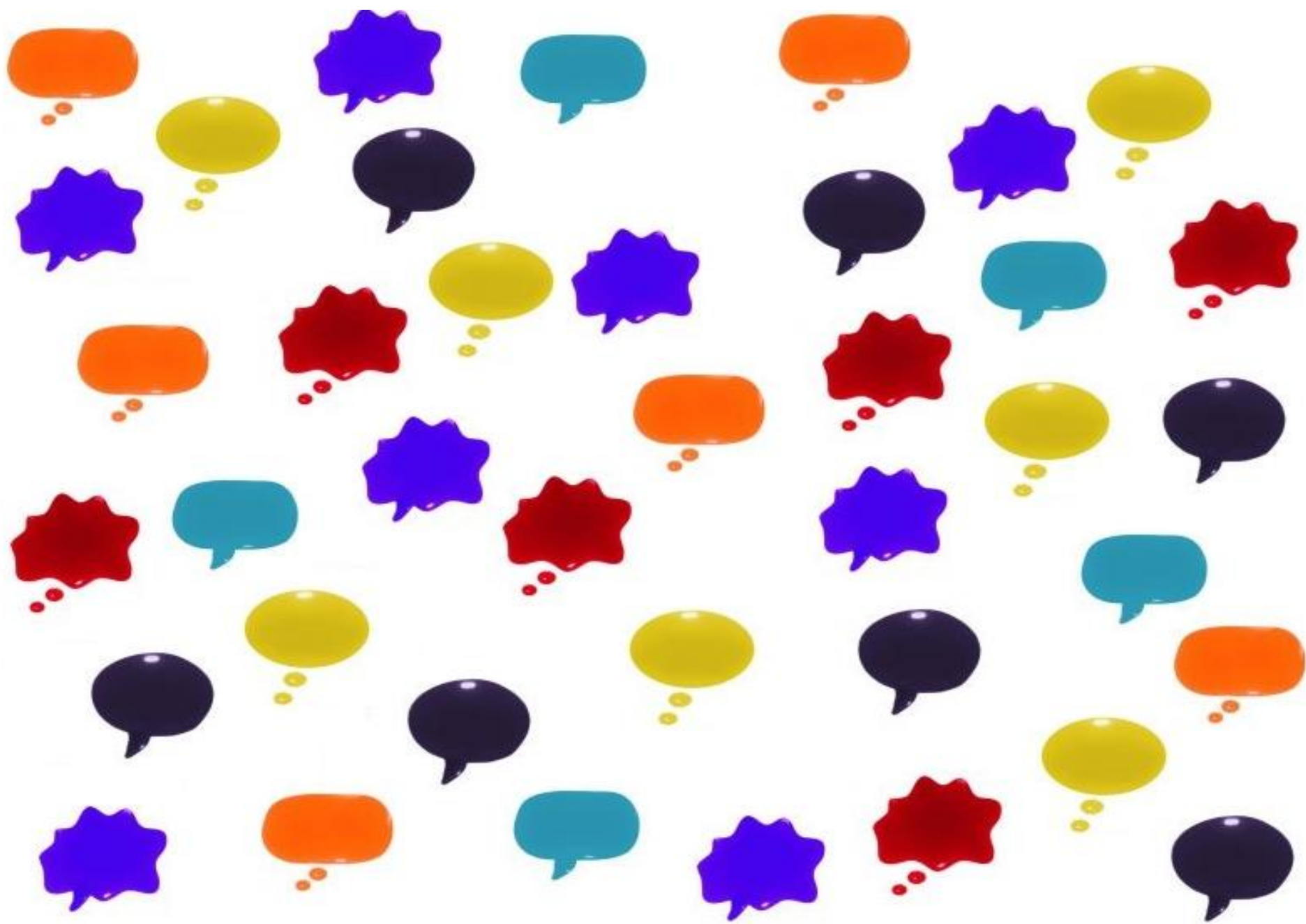
They rated it (3 Bewertungen) and uploaded 10 photos

This time we will meet at parship and again with two great talks. We will keep you

Was gibt es Neues



[ZEIGE ALLE FOTOS](#)



Vielen Dank!



<http://blog.holisticon.de>