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interApps – websites & internet solutions

# jQuery in DotNetNuke



# Agenda

- What is jQuery?
- jQuery and DotNetNuke
- jQuery in skins
- jQuery in DotNetNuke modules

# Wat is jQuery?

## jQuery is a new kind of JavaScript Library.

jQuery is a fast and concise JavaScript Library that simplifies HTML document traversing, event handling, animating, and Ajax interactions for rapid web development. **jQuery is designed to change the way that you write JavaScript.**

✓ [Lightweight Footprint](#)

✓ [CSS3 Compliant](#)

✓ [Cross-browser](#)

## GRAB THE LATEST VERSION!

CHOOSE YOUR COMPRESSION LEVEL:

- PRODUCTION (15kb, Minified and Gzipped)
- DEVELOPMENT (94kb, Uncompressed Code)

Download **jQuery**;

Current Release: **v.1.2.6**

WHO'S USING JQUERY?

Google

DELL



## LEARN JQUERY NOW!

What does jQuery code look like? Here's the quick and dirty:

```
$("#p.next").addClass("ohmy").show("slow");
```

RUN CODE

## JQUERY RESOURCES

Getting Started With jQuery

- ◆ [How jQuery Works](#)
- ◆ [Tutorials](#)
- ◆ [Using jQuery with other libraries](#)
- ◆ [jQuery Documentation](#)
- ◆ [Developer Resources](#)
- ◆ [Mailing List](#)
- ◆ [Source code / SVN](#)
- ◆ [Plugin Authoring](#)
- ◆ [Submit a New Bug Report](#)

# Why to use jQuery?

- Change look & feel / animations
- Change content of a page
- Unser interaction
- Add events
- Ajax
- Browser quirks

## But also for ...

- Efficient JS programming
- Task separation between front & back end developers
- More fun during your work and on your site
- modern & web 2.0
- And jQuery is open source (MIT & GPL)



# Many plugins!

- Compare DotNetNuke modules
- No guarantee w.r.t. quality

Categories

- [Ajax \(97\)](#)
- [Animation and Effects \(111\)](#)
- [Browser Tweaks \(39\)](#)
- [Data \(57\)](#)
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# Using jQuery (I)

## 1. Register scripts

## 2. Use:

- ```
jQuery(document).ready(function() {  
    // DOM geladen ...  
    jQuery('p').addClass('myclass');  
});
```
- ```
jQuery(document).load(function() {  
    // alle pagina elementen zijn geladen  
    jQuery("#myspecialdiv>img").hide();  
});
```

# Cross browser example

```
61 /* dit werkt niet in IE6 */
62 div.vraag:hover
63 {
64     text-decoration: underline;
65 }
```

```
46 // dit werkt wel...
47 jQuery("div.vraag").hover(
48     function () {
49         jQuery(this).addClass("underlined");
50     },
51     function () {
52         jQuery(this).removeClass("underlined");
53     }
54 );
```

```
14 /* bijbehorende css */
15 .underlined
16 {
17     text-decoration: underline;
18     cursor: pointer;
19 }
```

- Of course only if JS is turned on...



# Example animation

- `jQuery("p").animate({  
width: "70%",  
opacity: 0.4,  
marginLeft: "0.6in",  
fontSize: "3em",  
borderWidth: "10px"  
}, 2500)`

# Using jQuery (II)

- `$()` or `jQuery("someSelector")`
  - `$('#myidentifier > its-child').dosomething().next()...`
- + 100 methods: `.addClass()`, `.next()`,  
`.parent()`, `.find()`, `.each()`, `.end()`,  
`.attr({key, val})`, etc.
- Custom selectors:
  - `:eq(n)`, `tr:odd`, `a[@title]`, `div[ol]`, `td:contains("tekst")`
- ...

# Using jQuery (III)

- Implicit iteration
  - `jQuery("p").addClass("green");`
- Chaining
  - `jQuery("p").addClass("green").not(":first").css("padding-top", "50px")`
- Css, Xpath
  - `.find("a[@title]").css("text-decoration", "overline");`

# Loading the jQuery scripts

- What is the use case? Skin / module?
- Conflicts are possible
  - jQuery versions
  - Plugin versions
  - Loading multiple times
- Timing
- DotNetNuke version

# DotNetNuke 4.9

- Simple but not good:

```
<script type="text/javascript" src="<%=skinpath %>/scroll/jquery-1.2.1.min.js"></script>
<script type="text/javascript" src="<%=skinpath %>/scroll/jquery.dimensions.js"></script>
<script type="text/javascript" src="<%=skinpath %>/scroll/jquery.mousewheel.min.js"></script>
<script type="text/javascript" src="<%=skinpath %>/scroll/jScrollPane.min.js"></script>
<link rel="stylesheet" type="text/css" media="all" href="<%=skinpath %>/scroll/jScrollPane.css" />

<div class="main" >
  rest van de skin definitie
</div>

<script type="text/javascript">
$(function() { $(':contContent').jScrollPane({showArrows:true}); });
</script>
```

- Results in conflicts with DotNetNuke JS

# DotNetNuke 4.9

- Better: server side code in skin

```
20 <script runat="server">
21     Protected Sub addScript(ByVal script As String)
22         Dim scriptFormat As String = "<script type="text/javascript" src="{0}" ></" + "script>"
23         Dim headscript As New LiteralControl(String.Format(scriptFormat, SkinPath + "scroll/" + script))
24         Page.Header.Controls.Add(headscript)
25     End Sub
26
27     Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load
28         addScript("jquery-1.2.6.js")
29         addScript("jquery.tablesorter.js")
30         addScript("jquery.tablesorter.pager.js")
31         addScript("jquery-ui-accordion.js")
32     End Sub
33 </script>
34
35 <script type="text/javascript" >
36     jQuery(document).ready(function() {
37         jQuery("#accordionDemo").accordion({ event: "mouseover" });
38     });
39 </script>
```

- \$ functie does not work anymore
- Script manager?



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# DotNetNuke 5.0

[-] **jQuery Settings**

Installed jQuery Version:	1.2.6
Use jQuery Debug Version?	<input type="checkbox"/>
Use Hosted jQuery Version?	<input type="checkbox"/>
Hosted jQuery URL:	<a href="http://ajax.googleapis.com/ajax/libs/jquery/1/jquery.n">http://ajax.googleapis.com/ajax/libs/jquery/1/jquery.n</a>

- DotNetNuke 5 has jQuery build in, but...
- Does not solve potential version conflicts with 3<sup>rd</sup> party modules
- Does not cover plugins

# Part 2

## jQuery in skins



# jQuery in skins

- Realize cross browser compatible look & feel
- Examples
  - Rounded corners
    - Of target element
  - In page scroll bar
    - Sites with a fixed height content pane



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## Nieuws

### Colimbra neemt Timbras over

Met deze overname versterkt Colimbra zijn positie als voorloper in proces- en ketenintegratie. [Lees verder](#)



## Colimbra

Maatwerksoftware voor verzekeraars, ICT-oplossingen voor distributievraagstukken, detachering van financiële ICT-specialisten. [Lees verder](#)



## Vacatures

Colimbra groeit en breidt haar team uit. Wil je mee bouwen aan Colimbra? Neem contact met ons op.

**C# Ontwikkelaar**  
**Projectleider/manager**



## Video

Bekijk onze video's voor een eerste indruk.

[Ga naar onze video's](#)



# Rounded corners skin

```
<script type="text/javascript" src="%=skinPath %>/js/jquery-1.2.6.min.js"></script>
<script type="text/javascript" src="%=skinPath %>/js/jquery.curvycorners.min.js"></script>
<div class="main home">
  <div class="pagemaster">
    <div class="toppane"></div>
    <div class="contentrow">
      <div class="contentrowwrapper">
        <table class="contenttable" width="100%" cellspacing="0" cellpadding="0" border="0">
          <tr>
            <td class="toprow">
              <div class="contentpane" id="RightPane" runat="server"></div>
              <div class="contentpane" id="ContentPane" runat="server"></div>
            </td>
          </tr>
          <tr>
            <td class="bottomrow">
              <div class="contentpane" id="BottomLeft" runat="server"></div>
              <div class="contentpane" id="BottomCenter" runat="server"></div>
              <div class="homerightpane" id="BottomRight" runat="server"></div>
            </td>
          </tr>
        </table>
      </div>
    </div>
  </div>
</div>
```

```
$('.contentrowwrapper').corner({
  tl: false,
  tr: false,
  bl: { radius: 16 },
  br: { radius: 16 },
  antiAlias: true,
  autopad: false,
  validTags: ["div"] });
```



SOFTWARE DEVELOPMENT NETWORK

# Container styling

```
<div class="contMain left bspace">
<div class="border">
  <div class="iconpane" style="background-image:url(<%=DotNetNuke.Common.Globals.GetPortalSettings.HomeDirectory +
DotNetNuke.UI.Containers.Container.GetPortalModuleBase(dnnTitle).ModuleConfiguration.IconFile%>)"></div>
  <div class="contHeader"><dnn:TITLE runat="server" id="dnnTITLE" /></div>
  <div class="contContent" id="ContentPane" runat="server" ></div>
  <div class="floatClearer"></div>
</div>
</div>
```

```
$( '.border' ).corner( {
$( '.iconpane' ).corner( {
  tl: { radius: 6 },
  tr: { radius: 6 },
  bl: { radius: 6 },
  br: { radius: 6 },
  antiAlias: true,
  autopad: false,
  validTags: [ "div" ] } });
```

```
.border
{
  padding: 6px 0 6px 0; margin: 10px 0 0px 0px;
  border: solid 1px #66CCFF;
  background-color: #ffffff;
}

.left .border .contHeader
{
  display: none;
}

.border .contContent
{
  padding: 0px 5px 0px 5px;
}

.iconpane
{
  padding: 0px 0px 0px 0px; margin: 0px 0 0px 0px;
  border: solid 0px #66CCFF;
  width: 90px;
  height: 127px;
  overflow: hidden;
  background-color: #ffffff;
  background-repeat: no-repeat;
  background-position: 0px 0px;
}

.left .iconpane
{
  float: left;
}

.left .contContent
{
  padding-left: 95px;
}
```



## Welkom bij Bril29



U bezoekt onze winkel voor een modieuze bril of comfortabele contactlenzen. Natuurlijk wilt u goed zien, maar u wilt er ook goed uitzien.

Voor u is dat misschien een lastige keuze: 'Welke lenzen dan? En welke bril staat me? En welk type glazen moet ik dan hebben? En wat betekent dat voor het sporten? Kan ik dan beter lezen? En autorijden? En wat kost dat dan allemaal?' Deze, en honderd-en-een

andere vragen stellen klanten ons elke dag. Wij zien het als een uitdaging op al deze vragen samen met u een goed antwoord te bedenken.

Kiezen voor een bril of contactlenzen doe je niet elke dag, het is een proces waar heel wat bij komt kijken. Vanzelfsprekend bieden wij u de

## Nieuws

### Bril nog aftrekbaar in 2008

Een modale Nederlander die dit jaar een bril koopt van tenminste 303 euro, krijgt die gratis van de Belastingdienst. Plus 100 euro toe. Hoe werkt dat?

[Download voorbeeldberekening \(pdf\)](#)

[Lees meer >>](#)

# Skin with custom scrollbars

```
<script type="text/javascript" src="<%=skinPath %>/scroll/jquery-1.2.1.min.js"></script>
<script type="text/javascript" src="<%=skinPath %>/scroll/jquery.dimensions.js"></script>
<script type="text/javascript" src="<%=skinPath %>/scroll/jquery.mousewheel.min.js"></script>
<script type="text/javascript" src="<%=skinPath %>/scroll/jscrollpane.min.js"></script>
<link rel="stylesheet" type="text/css" media="all" href="<%=skinPath %>/scroll/jscrollpane.css" />

<div class="main" >
    rest van de skin definitie
</div>

<script type="text/javascript">
    $(function() { $( '.contContent' ).jscrollPane({showArrows:true}); });
</script>
```

```
<div class="contMain">
  <div class="contHeader"><dnn:Actions runat="server" id="dnnActions" />
  <h2><dnn:Title runat="server" id="dnnTitle" /></h2></div>

  <div class="contContent" id="ContentPane" runat="server" ></div>

  <div class="contFooter" >
    <dnn:ActionButton1 runat="server" id="dnnActionButton1"
      CommandName="AddContent.Action" DisplayIcon="True" DisplayLink="True" />
    <dnn:ActionButton4 runat="server" id="dnnActionButton4"
      CommandName="ModuleSettings.Action" DisplayIcon="True"
      DisplayLink="True" /></div>
</div>
```

# Menu's

- Tree's
- Accordion
- Dock's
- Scrollers
- Roll your own...

Categories

- [Ajax \(97\)](#)
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# Example accordion menu

- Basic Snapsis menu
- Mouse over event
- Works with two levels
- Doesn't stay open on naviagation
- Documentatie: --
- Alternatief: tree



# Tree view

- Plug-in injects classes
- Plug-in realizes persistence
- Menu control skinobject must serve a UL

# Outline menu

- Turns a link into a menu
- Very web 2.0
- Ventrian's Child Links on steroids

# Part 3

## jQuery in modules

# jQuery in modules

- FAQ with clueTip
- Table sorting

Conclusion:

You need substantial CSS knowledge to really take advantage of jQuery

# Simple FAQ module

- Question - answer
- Animation of the answer in various ways

# Table sorter

- Sortable listview
- Knows about datatypes!
- Paging
- Extendable with AJAX (Client API)

```
<csp:ListView DataSourceID="srcMovies" runat="server">
<LayoutTemplate>
<table>
<thead>
<th>Id</th>
<th>Title</th>
<th>Director</th>
<th>Date Released</th>
</thead>
<tbody>
<asp:PlaceHolder id="itemPlaceholder" runat="server" />
</tbody>
</table>
</LayoutTemplate>
</ItemTemplate>
<tr>
<td><%= Eval("Id") %></td>
<td><%= Eval("Title") %></td>
<td><%= Eval("Director") %></td>
<td><%= Eval("DateReleased") %></td>

```

```
<!--
tablesorter can be downloaded from:
http://tablesorter.com
(MIT or GPL License)
-->
<script type="text/javascript">
function pageLoad()
{
    $("table").tablesorter();
}
</script>
```

# Demo announcement module

- Using jQuery.UI script



The screenshot shows the jQuery User Interface website homepage. At the top is a navigation menu with links for Download, Documentation, Demos, Themes, Tutorials, Development, and Support. The main content area features the jQuery logo and the text "User Interface". Below this is a section titled "What is jQuery UI?" which describes the library as providing abstractions for low-level interaction and high-level, themeable widgets, built on top of the jQuery JavaScript Library. It lists various interactions like drag and drop, sorting, and resizing, and mentions reusable widgets like accordions and date pickers. A call to action at the bottom encourages users to download or check out demos. A large, semi-transparent box on the right side of the page contains the text "expression through code" and a list of key features: High- and low-level components, Specifically designed for jQuery, and Cross-Browser support.

**jQuery**  
User Interface

## What is jQuery UI?

jQuery UI provides abstractions for low-level interaction and high-level, themeable widgets, built on top of the jQuery JavaScript Library, that you can use to build highly interactive web applications.

The core of the library revolves around different mouse interactions, namely drag and dropping, sorting, selecting, and resizing, as well as a powerful set of effects.

On top of the core interactions are built a number of reusable widgets, including accordions, date pickers, dialogs, sliders and tabs.

Feel free to directly download a [configured download](#), download the [development bundle](#), or check out some of [our demos](#) first.

### expression through code

- **High- and low-level components**  
Features low-level effect and interaction APIs as well as full-featured themeable and ready-to-use widgets.
- **Specifically designed for jQuery**  
jQuery UI makes internal use of all the power of jQuery and adapts and extends its API, making it easy for jQuery users to start right away.
- **Cross-Browser**  
Supports IE 6.0+, FF 2+, Safari 3.1+, Opera 9.0+.

# Part 4

# jQuery and AJAX



# jQuery and AJAX

- Sources
  - Stephen Walther PDC2008
    - <http://channel9.msdn.com/pdc2008/PC31/>
  - Rick Stahl DevConnections2008
    - <http://www.west-wind.com/Weblog/default.aspx>
  - Jon Henning
    - <http://www.codeendeavors.com/Blog.aspx>
  - Joe Brinkman
    - <http://blog.theaccidentalgeek.com>

# jQuery AJAX

Various options:

- `$.ajax(opt)`,
- `$(sel).load(url, callback)`,
- `$.getJSON(url, data, callback)`
- ...

# Example standard jQuery Ajax

Stock Symbol:

```
<div class="containercontent">
  Stock Symbol:
  <asp:TextBox runat="server" ID="txtSymbol" Text="MSFT" />
  <input type="button" id="btnSubmit" value="Get Quote"
    onclick="showStockQuote();" />
  
  <hr />
  <div id="divResult" style="width:420px"></div>
</div>
```

```
<script type="text/javascript">
  function showStockQuote () {
    $("#divResult").load("StockDisplay.aspx",
      { symbol: $("#txtSymbol" ).val() });
  }
</script>
```

```
public partial class StockDisplay : System.Web.UI.Page
{
  protected void Page_Load(object sender, EventArgs e)
  {
    string action = Request.Params["Action"];
    if (action == "Chart")
      this.GetStockChart();
  }
  this.GetStockQuote();
}
```

# Adding jQuery interactivity

```
function showStockQuote() {  
    $("#divResult").load("StockDisplay.aspx",  
        { symbol: $("#txtSymbol" ).val() });  
}  
  
function showStockQuote() {  
    var div = $("#divResult");  
    showProgress();  
    div.slideUp(function() {  
        div.load("StockDisplay.aspx",  
            { symbol: $("#txtSymbol").val() },  
            function() {  
                $(this).slideDown();  
                showProgress(true);  
            });  
    });  
}  
function showProgress(hide) {  
    var img = $("#imgLoading");  
    if (hide)  
        img.hide();  
    else  
        img.show();  
}
```

# Use case

## jQuery and AJAX / DNN

Master – detail:

- Getting more information on the basis of record selection

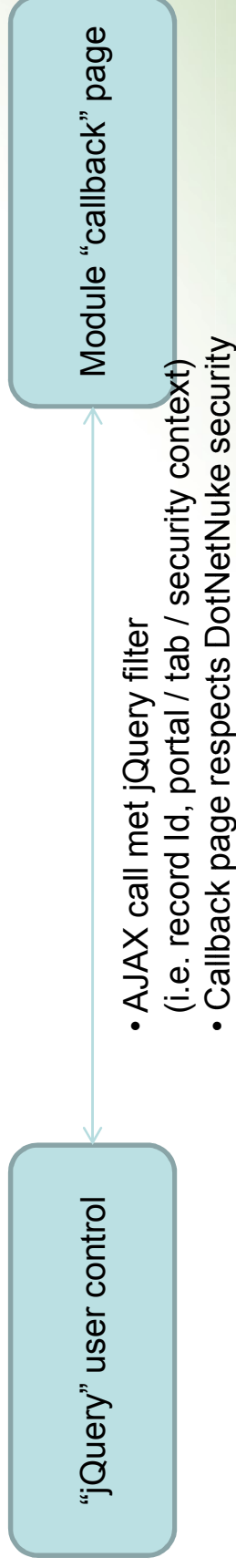
Updates to DotNetNuke database by means of an update form

# Requirements jQuery / DNN

- DotNetNuke security (view / edit permissions)
- Updates in the context of the module (user control) and not be means of a webservice

# jQuery / DotNetNuke

- “standard” jQuery AJAX methode



but how???

- Client API to the rescue!

# jQuery and the Client API

- Client API for exchanging values between client and server
- Possible steps:
  - Setting values (setVar: function(sKey, sVal))
  - AJAX postback + server processing + getting data into the user control
  - `jQuery("#myusercontrol").show() ...`

???



# Closing remarks

# Wrap up

- Fun, powerful and simple
- Easy spice up your site / module
- But also:
  - Compatibility between 3<sup>rd</sup> party modules uncertain
  - Documentation and quality plugins
  - *How about true Ajax???*

**jQuery and the Client API: examples are needed**

# Contact info

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