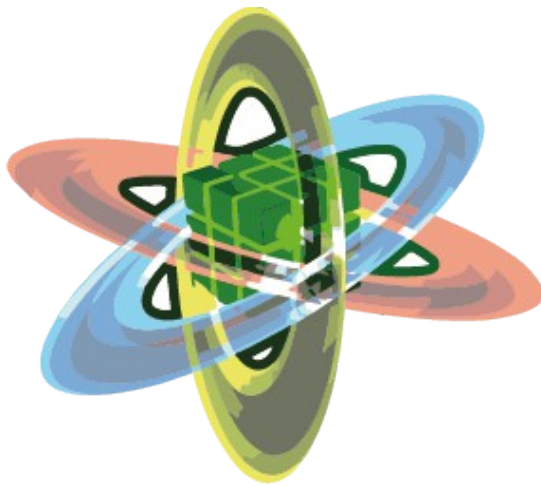




Matrix WebEngine By Jerome 'PsYkhAzE aka The_Architekt' KASPER



MATRIX WebEngine

MATRIX WEB ENGINE V 1.0

Release Date : 11/5/2014

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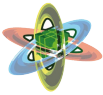




Summary

<i>1.General Description.....</i>	<i>3</i>
<i>2.Logical Organisation.....</i>	<i>4</i>
<i>3.Technologies And Pre-Requisites.....</i>	<i>5</i>
<i>4. File Tree and Description.....</i>	<i>7</i>
<i>5. Data Model.....</i>	<i>10</i>
<i>6. PHP Functions List and Description.</i>	<i>12</i>
<i>7. Compatibility.....</i>	<i>14</i>
<i>8. Tutorial & Examples.....</i>	<i>15</i>





1.GENERAL DESCRIPTION

Matrix WebEngine is a Web Application Creation Framework using in a secure way as possible Web 2.0 Technologies to make easier the Applications Process Creation.

Matrix WebEngine is organised around **MVC Pattern** (Model View Controller) separating Data recorded in a DataBase, Layout and Graphic Ressources , Generic Data Treatment (Authentication etc...) and Application-Specific Data Treatment. Application Data Treatment Modules would be separated into a logical way.

The **Model Part** include Source Code dealing with the **Data Model** in order to make abstract as possible Access to the Data and the DataBase.

The **View Part** Manages The Layout of The Application trough **Theming, Templating** and a WYSIWYG Editor; It's Possible to Modify Entirely the Application Look with the Associated Graphic Files Associated.

The **Controller Part** is in Charge of Dynamic Data Treatments. We could subdivide Controller Part into 3 parts :

- The "Generic" Part (Authentication etc...)
- The Application-Specific Part.
- The Plugins



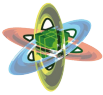


2.LOGICAL ORGANISATION

Matrix Web Engine Handles following Logical Concepts:

- CMS
- User
- Internationalisation
- Routing
- Theming, Templating
- Dynamic UI Creation Made Easier
- Evolutive Specifications
- Authentification
- Chopping,Salting,Crypting, Security Token
- Actions
- Errors
- Events
- States
- Log
- Modularisation
- WYSIWYG Layout Edition
- Graphic Edition Backend





3. TECHNOLOGIES AND PRE-REQUISITES

3.1 Pre-Requisites

In Order to get an effective understanding of **Matrix WebEngine** you may have the following pre requisites:

- **MVC Pattern** (<https://en.wikipedia.org/wiki/Model-view-controller>)
- **HTML5 Marking** (http://www.w3schools.com/html/html5_intro.asp)
- **CSS3 Cascading Styles** (http://www.w3schools.com/css/css3_intro.asp)
- **PHP5 Programming Language** (<http://www.php.net/manual/fr/>)
- **MySQL DataBase Language** (<http://dev.mysql.com/doc/refman/5.0/fr/>)
- **JavaScript Programming Language** (<http://www.w3schools.com/js/default.asp>)
- **JQuery Library** (<http://www.w3schools.com/jquery/default.asp>)
- **JqueryUI Interfaces** (<https://jqueryui.com/>)

3.2 Technologies

Matrix WebEngine is based around the following Free Technologies:

- PHP

- MySQL

- HTML5+CSS3

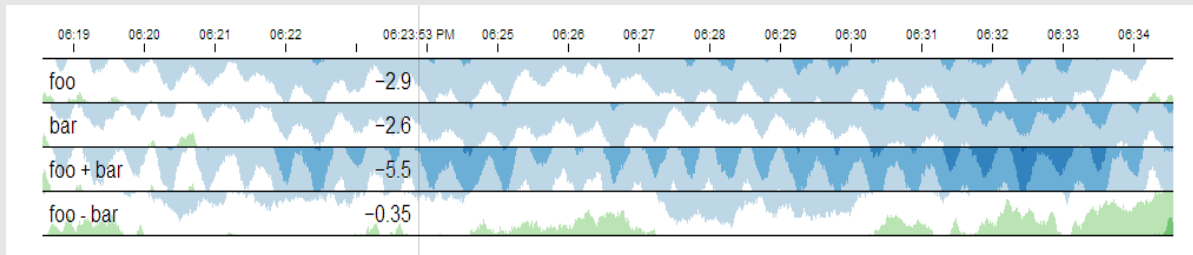
- JQuery + JQueryUI



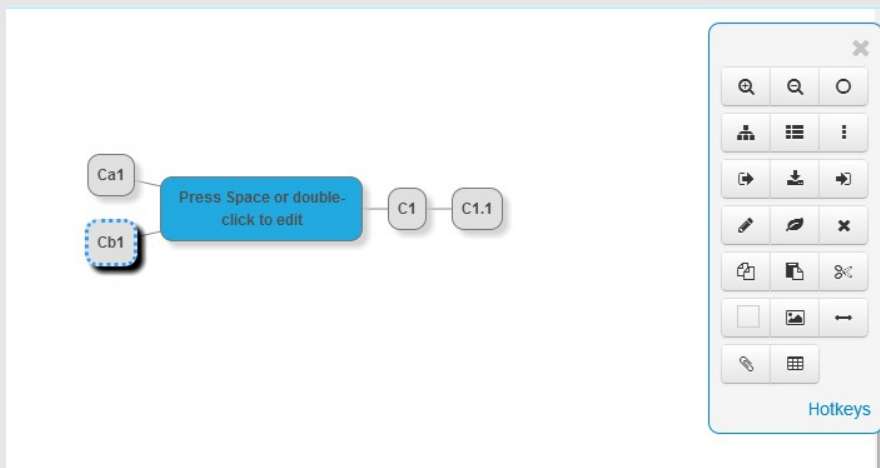


3.3 Third Part Librairies

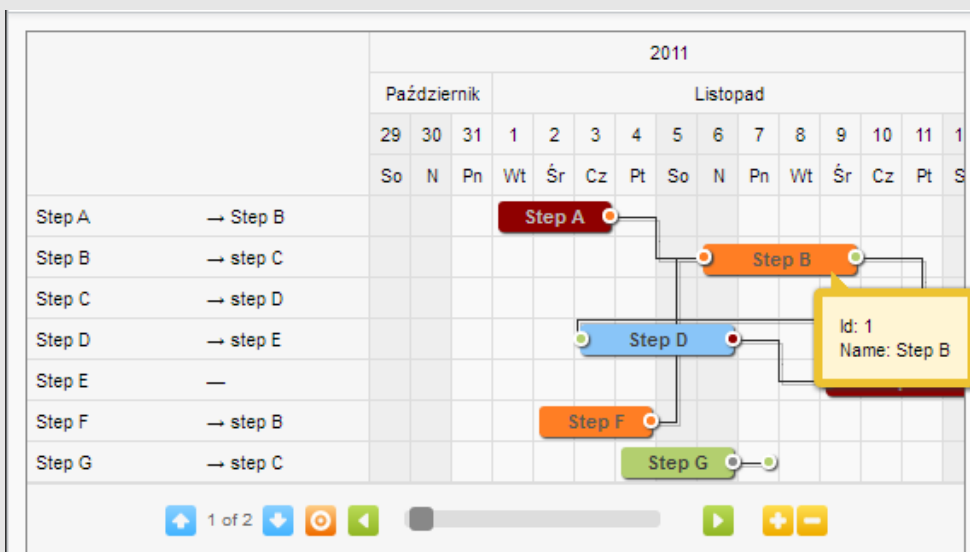
- D3js (<http://d3js.org/>)



- Jq.MapJS (<https://github.com/mindmup/mapjs>)



- Jq.Gantt (<http://mbielanczuk.com/jquery-gantt/>)





- Jq.ColorPicker (<http://www.eyecon.ro/colorpicker/>)



- Jq.GradientGen

- Jq.CalendarGantt

- Jq.CountDown

- Jq.NiceEdit

- Jq.SlickGrid

- Jq.JsTree





4. FILE TREE AND DESCRIPTION

Lower Case is used in order to maximize Compatibility.

4.1 Directories

- **css/**: Cascading Style Sheets Files for Application Layout
 - **js/** : Librairies Specific CSS Styles Sheets Files

- **doc/**: Technical Doc (This File) and general purposes tutorials

- **files/**: Edit files, Upload Jail
 - **editable_2d/** : 2D Edition Files
 - **editable_3d/** : 3D Edition Files
 - **json/** : Place for *.json Files
 - **pdf/** : Place for *.pdf files
 - **pics/** : Place for plugins Pictures handling
 - **upload_jail/** : As its name says

- **imgs/**: Pictures File
 - **logos/** : Place for Logo Pictures
 - **118n/** : Flags Pictures
 - **technos/** : Technologies Pictures





- **includes/**: Matrix WebEngine Framework
 - **db /** : Database Connexion CFG Files
 - **system/** : Matrix Engine Framework Core Modules
- **js/**: *.js JavaScript and JQuery/JqueryUI files
 - **libs /** : Contain JavaScript Librairies and Thir Part Modules
 - **modules/** : Contains Modules Specific *.js files
 - **system/** : Contains System Specific *.js files
- **modules/**: Data Treatment *.php files
 - **backend/** : Specific to Backend
 - **plugins /** : Specific to plugins
 - **system/** : System Specific
- **sql/**: MySQL DataBase Structure and Base Data
- **templates/**: Views Templates
 - **backend/** : Specific to Backend
 - **system /** : System Specific





4.2 Files

- **index.php** : General Client FrontEnd
- **MatrixEngine.Licence** : GPL V3 Licence (En Version)
- **MatrixEngine.README.fr** : French README
- **MatrixEngine.README.en** : English README





5.DATA MODEL

Matrix WebEngine uses "NameSpaces" in MySQL tables naming in order to organise Concepts and Data:

- 'sys.*' System Name Space

- *sys.text_articles* : Texts Table
- *sys.css_styles* : CSS Styles Table
- *sys.sitemap_elements* : SiteMap Elements Table
- *sys.global_application_settings* : Global Applications Settings Table
- *sys.imgs* : Pictures Table
- *sys.js_libs* : Javascript Modules Table
- *sys.param_files* : Parameters Files Table
- *sys.php_modules* : PHP Modules Table

- 'ev.*' Events Name Space

- *ev.actions* : Actions Table
- *ev.errors* : Errors Table
- *ev.events* : Events Table
- *ev.states* : States Table





- 'i18n.*' Internationalisation Name Space

- 'ud.*' User Data Name Space

- 'plugin.*' Plugins Name Space

- 'logger.*' Logging Name Space





6.PHP FUNCTIONS LIST AND DESCRIPTION

6.0 Db Function

mapped_db_query(

```
$RequestType='s' , // Request Type ('s'>SELECT,'i'>INSERT,'u'>UPDATE)
$DbEnv , // NameSpace
$Table , // Table
$fields=array() , // Target Fields Array
$values=array() , // Values Array for Target Fields
$ConditionFields=array() , // Confiton Fields Array
$ConditionVals=array() , // Values Array to match for Condition Fields
$mysqli=null ) // Connexion Handler
```

6.1 System Functions

6.1.1

function

6.2 Internationalisation Functions

6.2.1

function





6.3 UI (Interface) Functions

6.3.1

function





7.COMPATIBILITY

- Google Chrome Last Version
- Windows Iexplorer 10>
- Android Browser





8.TUTORIALS AND EXAMPLES

8.1

