DigDash Enterprise Customization

This document presents some additional technical information to help customizing DigDash Enterprise.

DigDash Enterprise can be customized in an advanced way by modifying or using the following elements:

Customizable elements in visualizations:

- Additional maps

Customizable elements in the dashboard:

- Javascript functions (Dashboard API)

Annexes:

- Example: Supporting swipe gestures to change the dashboard page (Touch devices)

I. CUSTOMIZABLE ELEMENTS IN VISUALIZATIONS

I.1 Additional Maps

To add new maps, read the **mapguide_en.pdf** document.

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II. CUSTOMIZABLE ELEMENTS IN THE DASHBOARD

II.1 Javascript Functions (Dashboard API)

There are two main ways to add custom behavior in Dashboards. One is by using the global custom Javascript editor in the dashboard editor settings menu. The other one is the text editor. This component allows you to add a text block (and/or HTML block) to a dashboard page. The capabilities are extended thanks to a programming interface (API) used to add Javascript calls to dashboard functions, by using hyperlinks in the text editor.

With these functions we can change the page, filter a specified dimension, change a variable, etc..

Each function is called on a an implicit object **ddCtrl** created by the dashboard engine. Here is the list of the available functions:

Unless specified, all the parameters are object IDs, not their formatted or translated names. For other non-ID parameters their type is specified by a lower case prefix character: 'b' is for boolean, 'o' for object, 'l' for list (array) and 'i' for integer.

A parameter between brackets [ ] is optional and can be omitted if not important in the context.

Variable functions (DDVariables)

void ddCtrl.changeVariable (name, value)

Description: Changes the value of the variable <name>.

Example: EuroDollar: 1.30

(Number) ddCtrl.getDDVar (name)

Description: Returns the value of the variable <name>.

Example: Increase EuroDollar

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Data Filter and Navigation functions

FilterOperand (dimension, member, hierarchy, level, memberFormated, bAddFilter, bExcludeFilter)

Description : Objet to specify the filter to apply.

Example : Filtre France

Note : The boolean parameter bAddFilter set to true adds the filter to the existing filter on this dimension. The boolean parameter bExcludeFilter set to true activate the exclusion mode (instead of filtering on the member, it filters on all other members except the specified one).

FilterOperandContinuous (dimension, min, max, bExcludeFilter)

Description : Objet to specify the range filter to apply on continuous dimension.

Example : Filtre Année 2018

Note : The boolean parameter bExcludeFilter set to true activate the exclusion mode (instead of filtering on the member, it filters on all other members except the specified one).

void ddCtrl.filter (dimension, member)

Description: filters on a dimension on a member.

Example: Filter France

Note: The specified member is selected on the current hierarchy and level selected in the viewer or dashboard for this dimension. See ddCtrl.filter(oFilterOperand) to specify more parameters.

void ddCtrl.filter (oFilterOperand)

Description: filters on a dimension with specified hierarchy and level.

Example: Details For France
Place is the dimension, *FR* is the selected member ID, *Geography* is the hierarchy and *Country* is the level.

void ddCtrl.filterAndChangePage (page, dimension, member)

Description: filters on a dimension and change page.

Example: Production Details For France

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void ddCtrl.setFilterMinMax (dimension, min, max)

Description: filters on a continuous dimension with specified min and max values. Note: A DigDash date is a timestamp in seconds.

Example: 2014 to date

(String Array) ddCtrl.getDimensionFilter (dimension [, bContinuous])

Description: Returns the list of filtered elements on the (continuous or discrete) dimension.

Example: Filters On Country

void ddCtrl.isDimensionFiltered (dimension [, bContinuous])

Description: Returns true if the (continue or discrete) dimension is filtered. Returns false otherwise.

Example: Country Filtered?

void ddCtrl.removeAllFilters ()

Description: Removes all filters in dashboard.

Example: Reset

void ddCtrl.removeAllFiltersCurrentPage ()

Description: Removes current filters from the current page.

Example: Reset

void ddCtrl.removeFilters (dimension [, bContinuous])

Description: Removes current filters on the (continue or discrete) dimension.

Example: All Countries

void ddCtrl.beginSelection ()

void ddCtrl.commitSelection ()

Description: Used with filter function ddCtrl.filter. Allows to combine several filters without refreshing the charts for each one (optimization).

Example: France In 2013

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void ddCtrl.setDimensionNavigation (flow, dimension, bNavigation)

Description: Change navigation setting for the specifed dimension and chart.

Example: Allow navigation on Area

(Array of Strings) ddCtrl.getCurrentDrill (portlet, dimension[, hierarchy])

Description: Returns the dimension, hierarchy and level currently explored on a chart, as an array.

Note : This function can only be called on a chart with an interaction of type "Navigate on hierarchy" or "Change dimension".

Example : ddCtrl.addChartRefreshListener(function(doc, dm, dmsel, chart)
{
  if (chart.title == 'My Chart')
  {
    var curDrill = ddCtrl.getCurrentDrill(doc.frameId, 'Area', 'Geography');
    var dim = curDrill[0];
    var hier = curDrill[1];
    var lvl = curDrill[2];
    alert("The exploration is " + hier + " / " +lvl + " on dimension " + dim);
  }
});

(BreadPath) ddCtrl.getBreadPath (portlet, dimension)

Description: Returns the current navigated path (BreadPath) on a dimension in the chart. The object can be used by drillTo (see below).

Example: Details Current Place (Chart 2)

void ddCtrl.drillTo (portlet, dimension, oBreadPath)

Description: Navigates in the chart, on a hierarchy of the dimension, using the navigation path defined by the BreadPath object.

Example: See example above (getBreadPath)

void ddCtrl.drillDown (portlet, dimension, hierarchy, member, memberFormated)

Description: Navigates in the chart, on the dimension's hierarchy to a lower level member.

Note: The action is done on all charts that share the same drill interaction ("synchronized drill").

Example: Details For France

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void ddCtrl.resetDrill (portlet, dimension [, hierarchy])

Description: Reset the drill level on the specified dimension and hierarchy.

Note: The action is done on all charts that share the same drill interaction ("synchronized drill").

Example: Return to the world map

(Number | String) ddCtrl.getDataModelDate (dmId, bFormat)

Description: Returns the synchronization date for the specified cube. Parameters are the cube's identifier and a boolean to format the date (true) or returns the corresponding timestamp (false).

Note: The timestamp is the number of milliseconds since the 1st of January 1970.

Example: Show date of data

(Number | String) ddCtrl.getFlowDate (flow, bFormat)

Description: Returns the synchronization date for the specified flow. Parameters are the flow's identifier and a boolean to format the date (true) or returns the corresponding timestamp (false).

Note: The timestamp is the number of milliseconds since the 1st of January 1970.

Example: Show date of the flow

Data Query functions

(Number | String) ddCtrl.getResultCubeValue (flow, measure, lAxisMembers, bFormated)

Description: Returns the measure's value for the specified axis members from an existing and visible flow. Returns the value as a number or a formatted string.

Note: The list of the axis members must specify *one and only one* member for *each used* axis in the chart, and in the natural order of the chart's axis. The measure parameter is the measure ID.

Example: To retrieve a value from a column chart defined as follows: Margin measure on stacking axis, Year dimension on Column axis and Country on grouping axis:
Show margin for France in 2013

Notice: It is important to ensure that the chart is loaded befroe calling this function. The simplest way to be sure is to call this function in a listener attached using addChartRefreshListener.

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(Array of Arrays) ddCtrl.getResultCubeRowSet (flow, oAxisMembersQuery [, bFormated])

Description: Returns the rows from a result cube for specified axis members from an exiting and visible flow. Returns the result as an array of rows, each row being an arrays of cells. The cells are the dimensions/axis of the chart then the measures values.

Note: the query of the axis members to search is a Javascript Object conforming to the following form (JSON): {"Axis/Dim title 1": "member 1", "Axis/Dim title 2": "member 2", etc.}.

Example: To retrieve the rows corresponding to year 2014 for the person 'John' from a result cube of a chart 'chart1':
Show the first value for John in 2014

Notice: It is important to ensure that the chart is loaded befroe calling this function. The simplest way to be sure is to call this function in a listener attached using addChartRefreshListener.

(Nombre) ddCtrl.getResultCubeLinesCount (flux)

Description : Retours the number of rows from a result cube.

Exemple : Number of rows

Dashboard functions

void ddCtrl.loadJS (urlJS)

Description: Load a Javascript file from a URL.

Example (in Javascript editor):

ddCtrl.loadJS('http://crypto-js.googlecode.com/svn/tags/3.1.2/build/rollups/md5.js');
var hash = CryptoJS.MD5("The message");

void ddCtrl.includeJS (nameJS)

Description: Load a Javascript file from DigDash Enteprise's configuration folder. the file must have been previously created with the Javascript editor in the Dashboard editor.

Example (in Javascript editor) :

ddCtrl.includeJS('date_functions.js');

void ddCtrl.changePage (page)

void ddCtrl.switchPage (page)

Description: Changes the current page to <page>.

Example: Return To Index

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void ddCtrl.nextPage ()

Description: Change the current page to the next page (same role).

Example: Next Page

void ddCtrl.prevPage ()

Description: Change the current page to the previous page (same role).

Example: Previous Page

(Boolean) ddCtrl.isCurrentPage (pageId)

Description: Returns true or false if the specified pageId parameter is the current selected page's id.

Note: This function replaces deprecated function ddCtrl.getCurrentPage ().

(String) ddCtrl.getCurrentPage ()

Description: Returns the name of the current page using the following format: *<Name of the role>.<Name of the page>.*

Deprecated: This function is deprecated as of November 2014 due to a change in page Id format. Please use ddCtrl.isCurrentPage (pageId) as a replacement.

(Boolean) canChangeCurrentPage (page)

Description: Returns true if we can change the current page to <page>. Returns false otherwise.

void ddCtrl.hidePage (page)

Description: Hides the tab of the page <page> when its visible, without changing the current page.

Example: Exit Details

void ddCtrl.showPage (page)

Description: Shows the tab of page <page> when its hidden, without changing the current page.

Example: Show Details

void ddCtrl.openFlowInWindow (flow, iWidth, iHeight)

Description: Opens a flow in a popup window of specified width and height.

Example: Show Product Breakdown

void ddCtrl.openPorletInWindow (portlet, iWidth, iHeight)

Description: Opens a portlet in a popup window of specified width and height.

Example: Show Product Breakdown

void ddCtrl.openFlowInWindowWithFilter (flow, iWidth, iHeight, dimension, member [, dimension, member, ...])

Description: Opens a flow in a popup window of specified width and height and filter it on the specified dimension(s) and member(s) (list of dimension / member pairs).

Note: The filter is only applied to the new window.

Example: Details for France 2014

void ddCtrl.openPortletInWindowWithFilter (portlet, iWidth, iHeight, dimension, member [, dimension, member, ...])

Description: Opens a portlet in a popup window of specified width and height and filter it on the specified dimension(s) and member(s) (list of dimension / member pairs).

Note: The filter is only applied to the new window.

Example: Details for France 2014

void ddCtrl.openFlowInElement (div, flow, iWidth, iHeight)

Description: Opens a flow in an existing DIV element.

Example: Show Product Breakdown

void ddCtrl.openDocument (serverName, fileName)

Description: Opens a document in a new window.

Example: Show Product Catalog

void ddCtrl.uploadDocument (serverName, fileName)

Description: Uploads a document to a document server. Open a window to prompt for the file to upload from the desktop.

Example: Upload Product Catalog

void ddCtrl.refreshDashboard ()

Description: Refresh the dashboard (same as Refresh button in the dashboard header).

Example: Refresh

void ddCtrl.refreshFlow (flow [, event])

Description: Refresh the specified flow with an optional event name.

Example: Refresh Flow

void ddCtrl.refreshFlows ([event])

Description: Refresh all flows from the dashboard with an optional event name.

Example: Refresh All

(String) ddCtrl.getCurrentRole ()

Description: Returns the identifier for the role of the current page or the name of the user for a user page.

(String) ddCtrl.getRole (page)

Description: Returns the identifier for the role of the specified page (eg: as returned by ddCtrl.getCurrentPage()) or the name of the user if this page is a user page.

void ddCtrl.hidePortlet (portlet)

void ddCtrl.showPortlet (portlet)

Description: Hides or shows the portlet. The portlet parameter value can be retrieved in the Dashboard Editor via the Information menu item of the portlet.

Example: Show Details

void ddCtrl.setPortletPos (portlet, x, y)

void ddCtrl.setPortletSize (portlet, width, height)

Description: Position / resize the portlet to sthe specified coordinates / dimensions. The portlet parameter value can be retrieved in the Dashboard Editor via the Information menu item of the portlet.

Example: Maximize Details

void ddCtrl.setPortletMargins (portlet, marginTop, marginRight, marginBottom, marginLeft)

Description: Specify the margins to set on the portlet. The portlet parameter value can be retrieved in the Dashboard Editor via the Information menu item of the portlet.

Example: Set Margins to Details

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(Boolean) ddCtrl.chartIsHidden (portlet)

Description: Return true if the portlet is hidden (see hideChart), false otherwise.

void ddCtrl.genTemplatePPT (flow)

Description: Executes the specified PowerPoint Document Factory Flow (PPT document generation based on a template), using the current selection from the dashboard. The download of the generated PPT is proposed to the user.

Example: Load PPT

void ddCtrl.exportCurrentPageAsPPT ()

Description: Saves the current dashboard page as a PPT. The download of the generated PPT is proposed to the user.

Example: Save this page as PPT

void ddCtrl.exportPageAsPPT (role, page)

Description: Saves the dashboard page specified by the role name and page identifier in parameters. The download of the generated PPT is proposed to the user. The page identifier can be retrieved in the dashboard editor (right-click on a page tab).

Example: Save telecom Sales page as PPT

void ddCtrl.genTemplatePDF (flow)

Description: Executes the specified PDF Document Factory Flow (PDF document generation based on a template), using the current selection from the dashboard. The download of the generated PDF is proposed to the user.

Example: Load PDF

void ddCtrl.exportCurrentPageAsPDF ()

Description: Saves the current dashboard page as a PDF. The download of the generated PDF is proposed to the user.

Example: Save this page as PDF

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void ddCtrl.exportPageAsPDF (role, page)

Description: Saves the dashboard page specified by the role name and page identifier in parameters. The download of the generated PDF is proposed to the user. The page identifier can be retrieved in the dashboard editor (right-click on a page tab).

Example: Save telecom Sales page as PDF

void ddCtrl.genTemplateXLS (flow)

Description: Executes the specified Excel Document Factory Flow (XLS document generation based on a template), using the current selection from the dashboard. The download of the generated XLS is proposed to the user.

Example: Load XLS

void ddCtrl.exportAsPDF (flow)

Description: saves the flow as PDF. The download of the generated PDF is proposed to the user.

void ddCtrl.exportAsPPT (flow)

Description: saves the flow as PPT. The download of the generated PPT is proposed to the user.

void ddCtrl.exportAsXLS (flow)

Description: saves the flow as XLS. The download of the generated XLS is proposed to the user.

void ddCtrl.exportAsXLSWithoutStyles (flux)

Description : saves the flow as XLS without applying the styles of the table for better performance. The download of the generated XLS is proposed to the user.

void ddCtrl.exportAsCSV (flow)

Description: saves the flow as CSV (Comma Separated Values). The download of the generated CSV is proposed to the user.

void ddCtrl.saveDashboardState (name, bDefault)

Description: save the current state of dashboard (page, filters, drill, variables). This is exactly the same action as the save selection button in the dashboard tool bar. The name parameter is the name of the selection, the bDefault parameter activate the loading of the selection when starting the dashboard.

(String) ddCtrl.getCurrentPortletInGroupOfTabs (portletTabId)

Description : Returns the current portlet identifier displayed on the group of tabs. The porletTabId parameter is the identifier of the group of tabs.

void ddCtrl.changePortletInGroupOfTabs (portletTabId)

Description : Change the current portlet displayed on the group of tabs. The porletTabId parameter is the identifier of the group of tabs, the porletId parameter is the identifier of the portlet to select.

(Array) ddCtrl.getCurrentPagePath ()

Description : Return the path of the current page (Role / Page / Sub-Page) as array of objects. Each object has the following attributes : id, title, name, type (role/container/page).

Chart Event Handling

These listener functions are called by the system when specific events occur in the dashboard. So you can add your own behaviors for various situations: chart is refreshed or drawn, page is changed, dimension is filtered, etc. The best place to implement these behaviors is in the global custom Javascript editor available in the Dashboard Editor, settings menu.

The events diagram is available in Annex III.2

void ddCtrl.addChartBeforeRefreshListener (Function)

Description: Adds a listener to the event fired before a chart is refreshed.

Example: ddCtrl.addChartBeforeRefreshListener(function(doc, dm, dmsel, chart, errorMsg) { alert("The chart " + chart.title + " will be refreshed"); });

void ddCtrl.addChartRefreshListener (Function)

Description: Adds a listener to the event fired after a chart is refreshed.

Example: ddCtrl.addChartRefreshListener(function(doc, dm, dmsel, chart, errorMsg) { alert("The chart " + chart.title + " is refreshed"); });

void ddCtrl.addChartDrawnListener (Function)

Description: Adds a listener to the event fired when the chart has been drawn (for the first time).

Example: ddCtrl.addChartDrawnListener(function(doc, dm, dmsel, chart, errorMsg) { alert("The chart " + chart.title + " is drawn"); });

void ddCtrl.addChartModelReadyListener (Function)

Description: Adds a listener to the event fired before the chart is drawn (for the first time).

Example: ddCtrl.addChartModelReadyListener(function(doc, dm, dmsel, chart, errorMsg) { alert("The chart " + chart.title + " will be drawn"); });

void ddCtrl.addDimensionFilterListener (Function)

Description: Adds a listener to the event fired after a dimension has been filtered.

Example: ddCtrl.addDimensionFilterListener(function(dimension, hierarchy, level, members, membersFormated, bExclude, min, max) { alert("The dimension " + dimension + " is filtered on " + membersFormated); });

void ddCtrl.addVariableChangeListener (Function)

Description: Adds a listener to the event fired after a variable has been changed.

Example: ddCtrl.addVariableChangeListener(function(variable, value) { alert("The variable " + variable + " has changed, new value is " + value); });

Dashboard Event Handling

The events diagram is available in Annex III.2

void ddCtrl.addCurrentPageLoadListener (Function)

Description: Adds a listener to the event fired when the current page of the dashboard has been fully loaded.

Example: ddCtrl.addCurrentPageLoadListener(function(currentPage) { alert("The page " + currentPage + " is loaded"); });

void ddCtrl.addCurrentPageChangeListener (Function)

Description: Adds a listener to the event fired after changing current page.

Example: ddCtrl.addCurrentPageChangeListener(function(currentPage, bFirstTime) { alert("The current page is now " + currentPage); });

void ddCtrl.addUserLoggedListener (Function)

Description: Adds a listener to the event fired when the user has been authentified. May be used to retrieve user attributes with the function ddCtrl.getUserAttribute.

Example: ddCtrl.addUserLoggedListener(function() { alert("You are logged in"); });

void ddCtrl.addPortletHiddenListener (Fonction)

Description : Adds a listener to the event fired when the status of a portlet has changed from visible to hidden.

Example : ddCtrl.addPortletHiddenListener(function(portletId) { alert("The portlet is hidden"); });

void ddCtrl.addPortletVisibleListener (Fonction)

Description : Adds a listener to the event fired when the status of a portlet has changed from hidden to visible.

Example : ddCtrl.addPortletVisibleListener(function(portletId) { alert("The portlet is visible"); });

void ddCtrl.addPortletCollapseListener (Fonction)

Description : Adds a listener to the event fired when the user clicks on the icon to collapse a collapsible portlet.

Example : ddCtrl.addPortletCollapseListener(function(portletId) { alert("The portlet will be collapsed"); });

void ddCtrl.addPortletCollapsedListener (Fonction)

Description : Adds a listener to the event fired when the collapsible portlet is collapsed.

Example : ddCtrl.addPortletCollapsedListener(function(portletId) { alert("The portlet is collapsed"); });

void ddCtrl.addPortletExpandListener (Fonction)

Description : Adds a listener to the event fired when the user clicks on the icon to expand a collapsible portlet.

Example : ddCtrl.addPortletExpandListener(function(portletId) { alert("The portlet will be expanded"); });

void ddCtrl.addPortletExpandedListener (Fonction)

Description : Adds a listener to the event fired when the collapsible portlet is expanded.

Exemple : ddCtrl.addPortletExpandedListener(function(portletId) { alert("The portlet is expanded"); });

void ddCtrl.addGroupOfTabsChangeListener (Fonction)

Description : Adds a listener to the event fired when the user change the current chart in a group of tabs. The first parameter is the identifier of group of tabs, the second is the identifier of the current chart displayed.

Exemple : ddCtrl.addGroupOfTabsChangeListener(function(portletTabId, curPortletId) { alert("The current portlet is : " + curPortletId); });

void ddCtrl.addDocumentUploadListener (Fonction)

Description : Adds a listener to the event fired when the user upload a document by the dashboard.

Exemple : ddCtrl.addDocumentUploadListener(function(serverName, filesName) { alert("The document " + filesName[0] + " has been uploaded"); });

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Various functions

(String Array) ddCtrl.getUserRoles ()

Description: Returns the list of role identifiers for the connected user.

(Map of Strings / Booleans) ddCtrl.getUserACLs ()

Description: Returns an associative array of user rights identifiers (ACL) for the connected user. The returned map associates an ACL to a boolean (true) if the ACL is assigned to the user.

Example: if (ddCtrl.getUserACLs()['SaveAsPPT']) alert('You can save as PPT');

List of all possible user rights:

AccessContentManagement, AccessDBE, AccessDBV, AccessLicenseSettings, AccessServerSettings, AccessUserSettings, AddFlow, AddRoleFlow, ChartNavigation, EditDashboardForGroup, EditDataSourceForGroup, EditDataSource, LoadWalletForGroup, RefreshFlow, RefreshRoleFlow, RefreshDatasource, SaveWalletForGroup, SaveAsPDF, SaveAsPPT, SaveAsXLS, SaveAsCSV, Scheduler, SendSMS, UploadDocument, UpdateDocument, ViewComments, AddCommentDataModel, RemoveCommentDataModel, AddCommentFlow, RemoveCommentFlow, AllowIgnoreDMResivion, DashboardCustomization, EditProtectedDashboardPages

(String) ddCtrl.getUserAttribute (attr)

Description: Returns the value of the user's LDAP attribute <attr>.

Example: alert(ddCtrl.getUserAttribute('displayName');

void ddCtrl.getUserAttribute (attr, Function)

Description: Returns the value of the user's LDAP attribute <attr> via an asynchronous callback function.

Example: ddCtrl.getUserAttribute('displayName', function (attrVal) {alert(attrVal)});

void ddCtrl.loadCSS (cssFile)

Description: Load a CSS file.

void ddCtrl.loadTheme (cssTheme)

Description: Load a CSS theme on the dashboard.

Example: ddCtrl.loadTheme(‘digdash’);

void ddCtrl.logout ()

Description: Disconnect the current user.

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II.2 Styles CSS

This is a non-exhaustive list of CSS classes to customize dashboards.

Notice: The CSS selectors **#dashboard_editor** and **#dashboard_viewer** can be used to differentiate dashboard in editing mode and dashboard in viewing mode.

Bannière

.topPanel

Description: Change style of the top banner (borders, background).

Example: .topPanel { background-color: #f1f1f1; border: 1px solid black; }

.logoTopPanel

Description: Change banner's logo.

Example: .logoTopPanel { background: url (my_logo.png) no-repeat; }

.userLabel

Description: Change user name text style (color, police).

Example: .userLabel { font-family: 'Open Sans'; color: black; }

.topPanelIconLabelPanel_Label

Description: Change the menu on the right side of the top banner.

Exemple: .topPanelIconLabelPanel_Label { font-family: 'Open Sans'; color: black; }

Barre de filtres

#interactBar

Description: Change the style of the div that contains filter boxes.

Example: .interactBar { background-color: #f1f1f1; }

.selHierTitleDiv

Description: Change the style of the title of the the filter boxes.

Example: .selHierTitleDiv { background-color: #d5d7da; border-radius: 4px; }

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.selHierTitleDivWhite

Description: Change the style of the title of the the filter boxes (when the mouse is hovering it).

Example: .selHierTitleDivWhite { background-color: #009fa6; color: white; }

Onglets

.dd-tab-bar

Description: Change the aspect of the tab bar.

Example: .dd-tab-bar { background-color: #f1f1f1; border-bottom: 1px solid #f1f1f1; }

.dd-tab-header

Description: Change the style of the tabs.

Example: .dd-tab-header { background-color: #f1f1f1 !important; border-right: 1px solid #cccccc; }

.dd-tab-header-selected

Description: Change the style of the selected tab.

Example: .dd-tab-header-selected { background-color: #009fa6 !important; color: white !important; }

.dd-tab-header-text

Description: Change the style of the title of the tabs.

Example: .dd-tab-header-text { font-family: 'Open Sans' !important; font-size: 13px !important; }

Portlets

.portlet

Description: Change portlet style.

Exemple: .portlet { border: 1px solid #d0d0d0 !important; }

.portlet-header

Description: Change portlet header style.

Exemple: .portlet-header { background-color: #eeeeee !important; border-bottom: 1px solid #d0d0d0 !important; }

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.portlet-header-text

Description: Change portlet header title style.

Example: .portlet-header-text { color: #6d6d6d !important; font-size: 16px !important; font-family: ‘Open Sans’ !important; }

.portlet-content

Description: Change portlet content style.

Example: .portlet-content { background-color: white !important; }

.x-tool-maximize, .x-tool-gear, .x-tool-help, .x-tool-restore, .x-tool-alert, .x-tool-comment

Description: Change icons in the portlet’s header.

Example: .x-tool-maximize { background-image: url(mon_icone.png) !important; }

Breadcrumb

.breadcrumbImg

Description: Change reset image in the breadcrumb.

Example: .breadcrumnImg { background-image: url(my_reset.png !important; }

.unclickablebreadcrumb, .clickablebreadcrumb

Description: Change breadcrumb text style.

Example: .unclickablebreadcrumb, .clickablebreadcrumb { color: #6d6d6d !important; }

Vertical and horizontal dimension slicers

.tdMemberActive, .spanMemberActive

Description: Change the style of available members.

Example: .tdMemberActive { background-color: #d5d7da !important; border-radius: 5px !important; color: black !important; }

.tdMemberInactive, .spanMemberInactive

Description: Change the style of un-available members.

Example: .tdMemberInactive { background-color: white !important; color: gray !important; }

.tdMemberSelected, .spanMemberSelected

Description: Change the style of the selected member.

Example: .tdMembeSelected { background-color: #009fa6 !important; border-radius: 3px !important; color: white !important; }

Filters

.trHeaderFilter

Description: Change the style of the header of a filter object.

Example: .trHeaderFilter { background-color: #d5d7da !important; }

.tdFilter

Description: Change the style of the content of a filter object.

Example: .tdFilter { background-color: #f1f1f1 !important; }

.tdFilterImage

Description: Change the remove filter icon.

Example: .tdFilterImage { background: url(my_remove.png) no-repeat #009fa6 !important; }

Comments

.comments

Description: Change style of the comments object.

Example: .comments { background-color: #f1f1f1 !important; }

.commentsDisplayAll

Description: Change the style of the button to show all comments.

Example: .commentsDisplayAll { color: #ffffff !important; background-color: #009fa6 !important; }

.commentsFilter

Description: Change the icon used to apply the filters selection of a comment.

Example: .commentsFilter { background: url(my_apply.png) !important; }

.commentsEdit

Description: Change the icon used to edit a comment.

Example: .commentsEdit { background: url(my_edit.png) !important; }

.commentsRemove

Description: Change the icon used to delete a comment.

Example: .commentsRemove { background: url(my_delete.png) !important; }

.commentsDate

Description: Change the style of the comment's date.

Example: .commentsDate { font-family: 'Open Sans' !important; color: black !important; }

.commentsUser

Description: Change the style of the comment's user name.

Example: .commentsUser { font-family: 'Open Sans' !important; color: black !important; }

.commentsContent

Description: Change the style of the content of the comment.

Example: .commentsContent { font-family: 'Open Sans' !important; color: black !important; }

Cursors (slicers and variables)

.ui-widget-header

Description: Change the style of the cursor bar in interval mode.

Example: .ui-widget-header { background: #009fa6 50% 50% repeat-x !important; }

.ui-widget-content

Description: Change the style of the cursor bar.

Example: .ui-widget-content { background: #009fa6 50% 50% repeat-x !important; }

Loading

.loading

Description: Change the style of the "loading" panel.

Example: .loading { border: 1px solid #d4d4d4 !important; }

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.loadingImg

Description: Change the icon of the “loading” messages.

Example: .loadingImg { background: url(mon_image.png) no-repeat !important; }

.loadingTxt

Description: Change the style of the text of the “loading” panel.

Example: .loadingTxt { font-family: ‘Open Sans’ !important; }

II.3 Migrating CSS styles (all versions to 2017R2, 2018R1, new dashboard)

DigDash Enterprise dashboard styling technology has changed in 2017R2. Some CSS classes are not compatible, here is the list of Id CSS classes and their equivalent in the new dashboard:

- **#viewportPanel** must be replaced by **#dashboard_viewer**
- **.x-tab-strip-inner, .x-tab-left, .x-tab-right** must be replaced by **.dd-tab-header**
- **.x-tab-strip-active .x-tab-strip-inner, .x-tab-strip-active .x-tab-left, .x-tab-strip-active .x-tab-right** must be replaced by **.dd-tab-header-selected**
- **.x-tab-strip span.x-tab-strip-text** must be replaced by **.dd-tab-header-text**
- **.x-panel** must be replaced by **.portlet**
- **.x-panel-header** must be replaced by **.portlet-header**
- **.x-panel-bwrap, .x-abs-layout-item, .x-panel-body** must be replaced by **.portlet-content**

III. ANNEXES

III.1 Example: Supporting swipe gesture to change the dashboard page (Touch devices)

This example demonstrates how to add support for finger swipe left or right gestures to change the current page of the dashboard on touch devices (iPad, Android...).

It shows how to add new CSS styles as well as custom javascript.

In the first time we will set up the slide left or right animations between two pages using CSS animations supported by recent touch devices, combined with javascript code.

Then we will implement basic gesture detection to react when the user will swipe his finger to the right or to the left. This will change the current page.

Important :

> As explained in the previous chapters, it is strongly advised to keep a backup copy of all your custom modification to DigDash files contained in the deployed WAR applications. At the next software update you will loose these modifications, and will have to re-insert them into the updated deployed files.

Notes :

> You can test the modifications in a recent browser. We recommend using Chrome for its set of development tools (no plugin required). Of course this choice greatly depends on your users base.
>
> The modification of some files could lead to errors in the application. It is better to keep a backup copy of the original application before modifications to help to come back to a stable state in case.
>
> If the test browser does not display the result of your modification, think about cleaning its cache.

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Page change animation (CSS)

Open the file **<DDE install>/apache-tomcat/digdash_dashboard/dashboard.css** in a text editor. Add the following CSS at the end of the file:

```
.in, .out {
	-webkit-animation-timing-function: ease-in-out;
	-webkit-animation-duration: 350ms;
}
.slide.in.right {
	-webkit-transform: translateX(0);
	-webkit-animation-name: slideinfromright;
}

.slide.out.right {
	-webkit-transform: translateX(100%);
	-webkit-animation-name: slideouttoright;
}
.slide.in.left {
	-webkit-transform: translateX(0);
	-webkit-animation-name: slideinfromleft;
}
.slide.out.left {
	-webkit-transform: translateX(100%);
	-webkit-animation-name: slideouttoleft;
}
@-webkit-keyframes slideinfromright {
	from { -webkit-transform: translateX(100%); }
	to { -webkit-transform: translateX(0); }
}
@-webkit-keyframes slideinfromleft {
	from { -webkit-transform: translateX(-100%); }
	to { -webkit-transform: translateX(0); }
}
@-webkit-keyframes slideouttoleft {
	from { -webkit-transform: translateX(0); }
	to { -webkit-transform: translateX(-100%); }
}
@-webkit-keyframes slideouttoright {
	from { -webkit-transform: translateX(0); }
	to { -webkit-transform: translateX(100%); }
}
.x-hide-display.slide.out {
	position: absolute;
	left:0px;
	height: 0px !important;
	background-color: red;
	display: block !important;
}
```

These classes define the different CSS animations we will use for switching the dashboard pages.

Save the file **dashboard.css**.

Page change animation (Javascript)

Open the file **<DDE install>/apache-tomcat/digdash_dashboard/js-dashboard.js** in a text editor. Add the following javascript at the end of the file:

```
function canChangeCurrentPage(nextPage)
{
	var currentPage = getCurrentPage();
	var slideDir = -1;	//slide to left
	if (currentPage && nextPage
	 && ddCtrl.pageList[currentPage] && ddCtrl.pageList[nextPage])
	{
		if (ddCtrl.pageList[currentPage].role
		 != ddCtrl.pageList[nextPage].role)
		{	//role change
			return true;		//no slide
		}
		//check direction to slide
		if (ddCtrl.pageList[currentPage].pos
		  > ddCtrl.pageList[nextPage].pos)
		{	//slide to right
			slideDir = 1;		//slide to right
		}
	}
	if (currentPage)
	{
		var pageDiv = document.getElementById(currentPage);
		if (pageDiv && pageDiv.slideable)
		{
			pageDiv.className += " slide out "
				+ (slideDir == -1 ? "left" : "right");
			pageDiv.style.top = pageDiv.parentNode.offsetTop
				+ "px";//fix a shift issue
		}
	}
	if (nextPage)
	{
		var pageDiv = document.getElementById(nextPage);
		if (pageDiv && pageDiv.slideable)
		{
			pageDiv.className += " slide in "
				+ (slideDir == -1 ? "right" : "left");
		}
	}
	return true;
}

function animEndListener(ev)
{	//remove animation styles classes at the end of animation
	var pObj = ev.target;
	pObj.className = pObj.className.replace(/\sslide/g, "");
	pObj.className = pObj.className.replace(/\sin/g, "");
	pObj.className = pObj.className.replace(/\sout/g, "");
	pObj.className = pObj.className.replace(/\sright/g, "");
	pObj.className = pObj.className.replace(/\sleft/g, "");
}

function currentPageChanged(page, firstChange)
{
	if (firstChange && touch
		/* comment touch condition to debug on chrome */)
	{
		var pageDiv = document.getElementById(page);
		if (pageDiv)
		{
			pageDiv.slideable = true;
			pageDiv.addEventListener("webkitAnimationEnd",
				animEndListener, false);
			addSwipeEventListener(pageDiv);
			pageDiv.style.backgroundColor = "white";
		}
	}
}
```

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These javascript functions alters the behavior of the page change in the dashboard by animating the transition between two pages.

The functions **currentPageChanged(page)** and **canChangeCurrentPage(page, firstChange)** are called by the dashboard engine. By default they are not implemented:

- **canChangeCurrenPage(page)** is called just before a page change in the dashboard. We use this function to start the transition between the outgoing page and the ingoing page. The animation is started simply by adding the CSS animation classes on the DOM objects (DIV) representing the pages.
- **currentPageChanged(page, firstChange)** is called just after the page has been changed. We use this function to initialize an event listener for the animation end (only if firstChange is true). The event listener allows us to remove CSS animation from the DIV DOM objects. This is also in this initialization function that we attach the detection of the swipe gesture **addSwipeEventListener** (see next paragraph).

Swipe gesture detection (Javascript)

In the same file js-dashboard.js, add the following javascript to implement the swipe gesture detection on the touch device:

```
var maxTime = 150, //allow movement if < 150 ms
  maxDistance = 100,  //swipe movement of 100 pixels min to trigger
  startX = 0,
  startTime = 0,
  touch = "ontouchend" in document,
  startEvent = (touch) ? 'touchstart' : 'mousedown',
  moveEvent = (touch) ? 'touchmove' : 'mousemove',
  endEvent = (touch) ? 'touchend' : 'mouseup';

function addSwipeEventListener(target)
{
	target.addEventListener(startEvent, function(e)
	{
		if (startTime != 0)
		{ //already started (multitouch gesture) => cancel
			startTime = 0;
			startX = 0;
		}
		else
		{
			startTime = e.timeStamp;
			startX = touch ? e.touches[0].pageX : e.pageX;
		}
	}, false);
	target.addEventListener(endEvent, function(e)
	{
		startTime = 0;
		startX = 0;
	}, false);
	target.addEventListener(moveEvent, function(e)
	{
		if (startTime == 0)
		{
			return;
		}
		var currentX = touch ? e.touches[0].pageX : e.pageX,
		currentDistance =
			(startX === 0) ? 0 : Math.abs(currentX - startX),
		currentTime = e.timeStamp;
		if (currentTime - startTime < 50)
		{	//prevent default at the begining of the swipe
			e.preventDefault();
		}
		if (currentTime - startTime < maxTime
		 && currentDistance > maxDistance)
		{
			if (currentX < startX)
			{	//swipe left code here
				e.preventDefault();
				nextPage();
			}
			else if (currentX > startX)
			{	//swipe right code here
				e.preventDefault();
				prevPage();
			}
			startTime = 0;
			startX = 0;
		}
	}, false);
}

function onChartDrawn(doc, dm, dmsel, chart)
{
	//also add the swipe event listener on each chart content
	addSwipeEventListener(doc);
}
```

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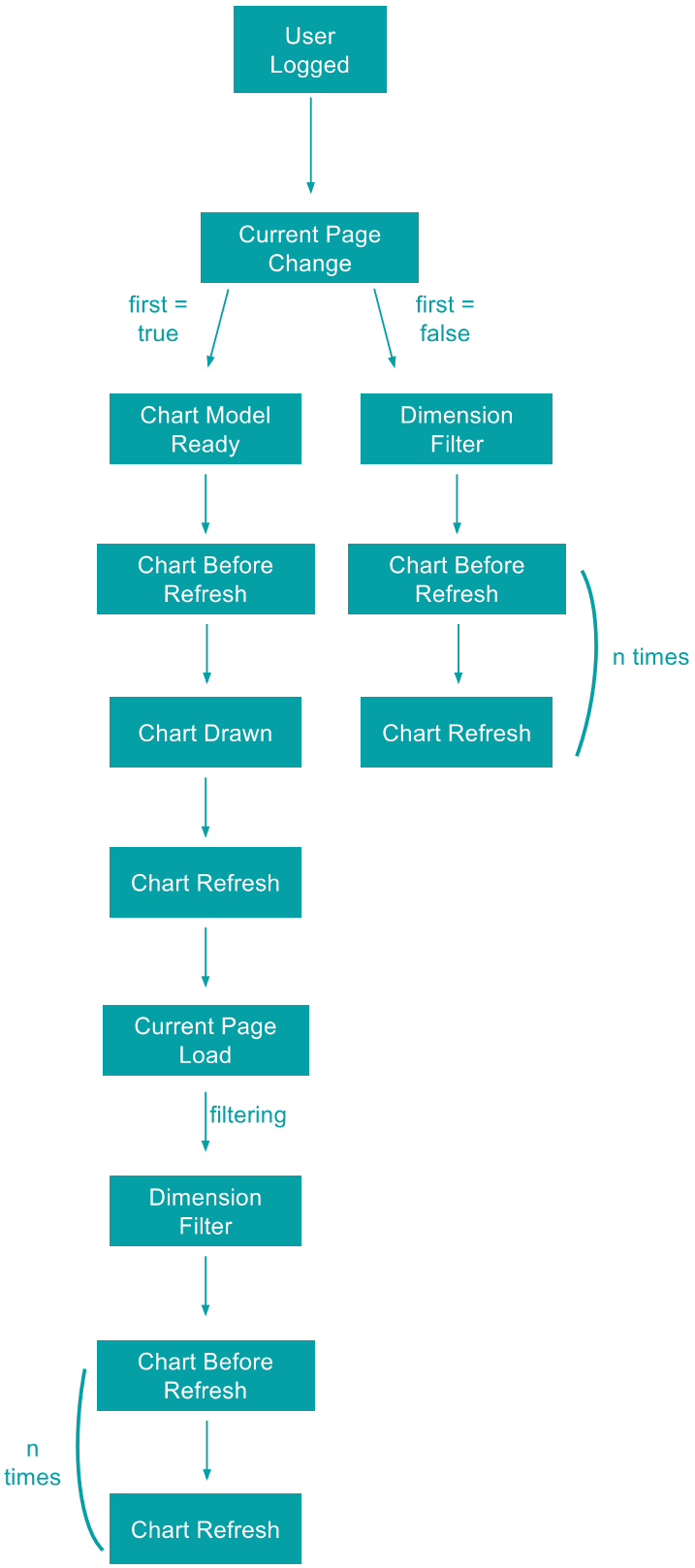
The swipe gesture detection is done on the page's DIV with the event listener added by the function **currentPageChanged(page, firstChange)**, as well as on each flow portlet because the same event listener is also added to each portlet document with the function **onChartDrawn(doc, dm, dmsel, chart)**. This function is called by the dashboard engine when a flow portlet is drawn. By default it is not implemented.

Save the file **js-dashboard.js**.

III.2 Dashboard And Chart Events Diagram



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III.3 Filtering on dates : Use of keywords

It is possible to use keywords to filter on a date dimension, here is the list of key words :

Date calculated from the current date :

- Current year : **${filter.current.year}**
- Current semester : **${filter.current.semester}**
- Current quarter : **${filter.current.quarter}**
- Current month : **${filter.current.month}**
- Current week : **${filter.current.week}**
- Current day : **${filter.current.day}**
- First day of current year to current day : **${filter.current.yearToDay}**
- First day of current month to current day : **${filter.current.monthToDay}**
- Previous year : **${filter.current.previousYear}**
- Previous semester : **${filter.current.previousSemester}**
- Previous quarter : **${filter.current.previousQuarter}**
- Previous month : **${filter.current.previousMonth}**
- Previous week : **${filter.current.previousWeek}**
- Previous day : **${filter.current.previousDay}**
- Sliding year : **${filter.current.slidingYear}**
- Sliding semester : **${filter.current.slidingSemester}**
- Sliding quarter : **${filter.current.slidingQuarter}**
- Sliding month : **${filter.current.slidingMonth}**
- Sliding week : **${filter.current.slidingWeek}**

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Date calculée à partir de la dernière date des données :

- Current year : **${filter.data.year}**
- Current semester : **${filter.data.semester}**
- Current quarter : **${filter.data.quarter}**
- Current month : **${filter.data.month}**
- Current week : **${filter.data.week}**
- Current day : **${filter.data.day}**
- First day of current year to current day : **${filter.data.yearToDay}**
- First day of current month to current day : **${filter.data.monthToDay}**
- Previous year : **${filter.data.previousYear}**
- Previous semester : **${filter.data.previousSemester}**
- Previous quarter : **${filter.data.previousQuarter}**
- Previous month : **${filter.data.previousMonth}**
- Previous week : **${filter.data.previousWeek}**
- Previous day : **${filter.data.previousDay}**
- Sliding year : **${filter.data.slidingYear}**
- Sliding semester : **${filter.data.slidingSemester}**
- Sliding quarter : **${filter.data.slidingQuarter}**
- Sliding month : **${filter.data.slidingMonth}**
- Sliding week : **${filter.data.slidingWeek}**

Examples :

- Current date : 05/02/2019
- Example 1 :

ddCtrl.filter(new FilterOperand('Date', '${filter.current.year}')) ;

→ if 'Year' level found, filter on year 2019

→ else use range filter : 01/01/2019 – 31/12/2019

- Example 2 :

ddCtrl.filter(new FilterOperand('Date', '${filter.current.year}', "Date', 'Year')) ;

→ if hierarchy and level found, filter on this

→ else use range filter : 01/01/2019 – 31/12/2019

- Example 3 :

ddCtrl.filter(new FilterOperand('Date', '${filter.current.year}', '-1', '-1')) ;

→ range filter : 01/01/2019 – 31/12/2019

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