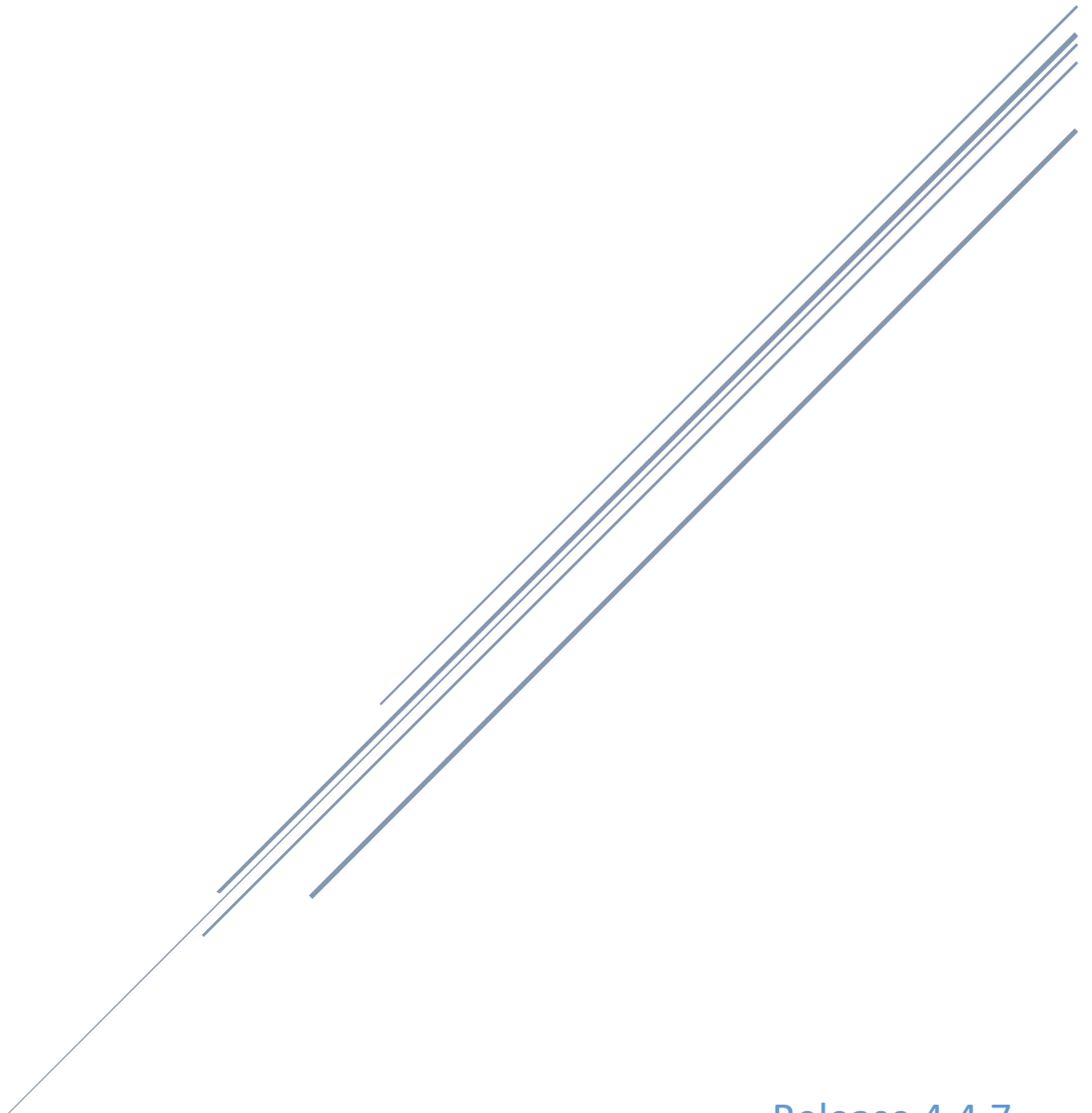


SPARK UI TOOLKIT

For IBM Business Process Manager



Release 4.4.7
January 2017

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Open Source Libraries

SPARK UI Toolkit makes use of open source software for various technologies and interfaces. Therefore, Salient Process would like to acknowledge the following open source projects:

- Resize Detection - <http://www.backalleycoder.com/2013/03/18/cross-browser-event-based-element-resize-detection>
- C3 - <http://c3js.org>
- D3 - <http://d3js.org>
- DatePicker - <https://github.com/eternicode/bootstrap-datepicker>
- DropZone - <https://github.com/enyo/dropzone>
- FastClick - <https://github.com/ftlabs/fastclick>
- FileSaver - <https://github.com/eligrey/FileSaver.js>
- JSZip - <https://stuk.github.io/jszip>
- MaskedInput - <http://digitalbush.com/projects/masked-input-plugin>
- QRCode - <https://github.com/mickeyckm/ti-qrcode>
- Signature - https://github.com/szimek/signature_pad
- SheetJS - <http://sheetjs.com>
- TinyMCE - <http://www.tinymce.com>
- Typeahead - <http://xsokev.github.io/Dojo-Bootstrap/typeahead.html>
- Videojs - <http://www.videojs.com>

For licensing information, please refer to the terms included with the version of the toolkit you received from Salient Process.

Documentation and Forums

Documentation for the SPARK UI Toolkit can be found here:

<https://salientprocess.zendesk.com/hc/en-us/articles/205657058-What-documentation-is-available-for-the-SPARK-UI-Toolkit>

There is also a growing forum community where users can ask questions:

<https://support.salientprocess.com/forums>

Contact Salient Process Support

For additional support see the Salient Process Web site: <http://support.salientprocess.com>.

If you would like to submit a bug or feature request, email us at support@salientprocess.com

Note that only Standard and Enterprise customers will receive follow up responses from our Support team. If you are interested in getting an increased level of support from Salient, please inquire here: <https://support.salientprocess.com/learn-more/>

SPARK UI TOOLKIT Release Notes

v4.4.7

January 2017

SPARK User Interface (UI) Toolkit improves both the End-user and UI Authoring experience in IBM BPM with the aid of a more efficient UI development model. The SPARK UI Toolkit is faster, control rich, simple, powerful, modern, flexible, and responsive. It provides developers UI controls with:

- methods, events and properties,
- attachable logic,
- simplified addressability,
- full consistency between views and pages,
- formula based computations in fields and tables
- high-performance for large tabular data sets
- heightened “build & use” experience throughout
- consistent 3X to 4X efficiency gains

SPARK UI TOOLKIT 4.0 features:

- suitable for both production and fast-build demo scenarios
- high-performance tabular data controls
- electronic signature
- full BPM content management support
- standard and advanced form controls
- multi-function sections and layouts
- analytics-ready drill-down charts
- media, mobile and system & service integration
- menus, popups, tooltips, alerts, timers, on-page AJAX, publish-subscribe, modal dialogues, etc.

For more information on the controls available in your version of the toolkit, visit the [Controls](#) page of [Salient Support](#).

There are 90+ ready to use UI controls with full cross-device capabilities.

Prerequisites

The SPARK UI Toolkit requires at least IBM Business Process Manager 8.5.0.1. Any version of IBM Business Process Manager (Express, Standard, or Advanced) will work with the SPARK UI Toolkit.

System Requirements

Since the SPARK UI Toolkit comes as a .twx file that is used for IBM Business Process Manager development, IBM Business Process Manager's Process Designer client is required for use.*

Browser Support:

- IE 10+
- Firefox (25+)
- Chrome (30+)
- Safari in iOS 6+

* IBM Business Process Manager 8.5.5+ includes a web based Process Designer. However, Salient recommends using the traditional, eclipse-based Process Designer due to some shortcomings of the web based Process Designer. Our toolkit is compatible with the web based Process Designer, however some development features are not fully functional with the web based version.

Installation and Update

Before you begin:

- [Obtain the SPARK UI Toolkit](#) from Salient Process for your version of IBM BPM
- You must have access to your environment's process center repository to be able to import the SPARK UI Toolkit.

Installation Procedure:

1. Copy the SPARK toolkit on a drive that is accessible from the IBM BPM server.
2. Log in to the IBM BPM Process Designer or Process Center
3. Click the **Toolkits tab**.
4. Click the **Import Toolkit** link on the right side of the Toolkits view and locate the file to import from step 1.
5. Click **Import**.
6. To verify the import of the toolkit, click on the **Process Apps tab** and then back to **Toolkits tab**. The toolkit should be listed.

Update Procedure:

Because every version of the SPARK UI Toolkit is just a new snapshot, simply import a new snapshot of the toolkit to complete your update. For more information on installing the toolkit, visit:

<https://salientprocess.zendesk.com/hc/en-us/articles/206337357-Installing-SPARK-V4-in-IBM-BPM-v8-5-x>

Important note on using SPARK in IBM BPM 8.5.7:

Using this SPARK UI toolkit version into your IBM BPM 8.5.7 environment can cause a temporary error regarding missing or undefined Less variables which you must manually fix!

Symptoms:

- 1) Error messages regarding missing Less variables are displayed in Web Process Designer when opening a Coach. For example:

```
org.mozilla.javascript.JavaScriptException Error: NameError: variable @bpm-input-height-base is undefined in /tmp/bpmCoachThemeCompilation/982ca93d-39ce-4bb3-88b9-90ccd9e1b022/26865295-8511-4538-b8f1-4cb99c203a92/spark.less on line 5149, column 13:
```

```
5148 form-control {  
5149 height: @bpm-input-height-base;  
5150 padding: @bpm-padding-base-vertical @bpm-padding-base-horizontal;  
      (less-rhino-1.7.5.js#9443)
```

- 2) Coach pages render without any styling at design time (in Web Process Designer) or when a Coach is run/played back.

Explanation:

The SPARK UI Theme is a superset of the BPM Theme in the System Data toolkit. As such it contains more variables than what is currently defined in the BPM UI Theme (or a in derivative you may have created from the BPM UI Theme). Without all the new variables defined in the SPARK UI Theme, the SPARK less file doesn't find all the variables it expects to compile properly, which causes the error.

Temporary Solution:

Open the Process Application(s) or Toolkit(s) that use the SPARK UI toolkit and specifically select the SPARK UI Theme (or a theme you derived from the SPARK UI Theme) as the theme for the toolkit or process app:

- Process App Settings or Toolkit Settings > Overview Tab > Coach Designer Settings > Theme > Select...
- Select the SPARK UI Theme (or a theme you have created that derives from the SPARK UI Theme)
- Save the settings

The problem should be resolved for your Process Application or Toolkit. Repeat for all your Process Application(s) or Toolkit(s) that use the SPARK UI toolkit.

Permanent Solution:

This problem will be permanently resolved once the BPM UI Theme in the System Data toolkit defines all supplementary SPARK UI variables. This will be addressed in a future IBM BPM product update.

Enhancements

4.4.7

- WYSIWYG enabled for the following controls:
 - Caption Box
 - Date Picker
 - Horizontal Layout
 - Image
 - Modal Alert
 - Vertical Layout
 - Video
- Accessibility enhancements for the following controls:
 - Alerts
 - Caption Box
 - Input Group
 - Modal Alert
 - Note
 - Status Box
 - Tooltip

4.4.6

- Table now allows setAllRecordsSelected(false) in Single Select mode
- Single Select support for leading spaces to facilitate indentation

4.4.5

- Community Edition now contains all controls (Obfuscated and not for Production)
- Added Update button to the File List control
- Added Document Version support to the File List control
- WYSIWYG enabled for the following controls:
 - Alerts
 - Checkbox
 - Checkbox Group
 - Collapsible Panel
 - Data Export
 - Decimal
 - Input Group
 - Integer
 - Line
 - Link
 - Masked Text
 - Multi Select
 - Note
 - Notification
 - Output Text
 - Panel

- Password
- Progress Bar
- Radio Button
- Radio Button Group
- Single Select
- Text
- Text Area
- Tooltip
- Type Ahead

4.4.4

- Added Radio Button Group control
- BPM File List now works with BPM 8.5.0.1 and above
- Added default local support for dates
- Accessibility enhancements for the following controls:
 - Checkbox Group
 - Radio Button
 - Single Select
 - Type Ahead Text
- WYSIWYG enabled for the following controls:
 - Badge
 - Button
 - Icon
 - Switch
 - Radio Button

4.4.3

- IBM BPM Web Process Designer-based theming through the Less-based “SPARK UI Theme” now shipped with the SPARK UI toolkit
- Tab Section control supports specific color styles (Default, Primary, Info, Success, Warning, Danger/Alert)
- Accessibility enhancements for the following controls:
 - Text Reader
 - Text Area
 - Text
 - Password
 - Output Text
 - Masked Text

4.4.2

- Trial Edition toolkits (TE) now say TRIAL instead of TE
- Enabled the use of functions of searching tables. Functions can be passed to a table through the search() method
- Various accessibility enhancements added to the following:

- Button
- Data Export
- Decimal
- Icon
- Image
- Integer
- Link
- Notification
- Progress Bar
- Slider
- Added the following methods to Popup Menu
 - getMenuItems()
 - getMenuIndex()
 - getMenuitem()

4.4.1

- Deferred Section enhancements
 - lazyLoad method now takes a Boolean as the second parameter, which can be used to trigger the “On Lazy Loaded” event even if view is already loaded
 - added getDeferredView() method, which provides reference to child view
- Reduced size of OpenLayersAPI file

4.4.0

- Added Breadcrumbs control
- Removed Google dependency from all location sensitive controls and replaced with OpenLayers dependency. Includes the following changes:
 - Added config options to Map
 - Map Source
 - Disable Panning
 - Removed config options from Map
 - Hide Street View Control
 - Hide Overview Map Control
 - Hide Pan Control
 - API Key
 - API Version
 - Changes to Places control
 - Search radius now has a max of 15km
 - Properties of places context variable in On Place Resolved event has changed to the following:
 - address_components
 - formatted_address
 - geometry
 - icon
 - id

- name
- opening_hours
- type
- vicinity
- website
- Added getSelectedDataPoint method to charts

Fixes

4.4.7

- Fixed issue with Date Picker setting the date today on tab out
- Fixed issue with Date Picker End Date not showing bound date of today
- Fixed issue with Date Picker showing invalid format for yyyyymmdd
- Fixed issue with Table style when Height is setting
- Fixed setSelectedItem() and setSelectedItemAt() for Single Select
- Fixed issue with Single Select returning the selected index
- Fixed setSelectedItems() and setSelectedItemsAt() for Multi Select
- Fixed setSelectedItems() for Checkbox Group
- Fixed issue with Data Export Table referencing
- Fixed issue with Radio Button Group after Setting Invalid
- Fixed issue with control previews for Client Side Human Services in version 8.5.6
- Fixed issue with clearItems() for Single Select
- Fixed issue with getItemCount() for Single Select
- Fixed issue with Service Call is null is returned
- Fixed issue with Caption Box display when set to right alignment
- Fixed issue with clearItems() for Radio Button Group
- Fixed issue with Image control not saving default option of Web
- Fixed issue with uncaught error on Donut Chart refresh
- Fixed Date Picker text height to match other controls
- Fixed issue with Table / Service Data Table clearSort()
- Fixed issue with Validation icon for Right-to-Left display
- Fixed issue with Caption Box horizontal label alignment
- Fixed issue with ui.getIndex() to prevent duplication on boundary event
- Fixed issue with getItemText() for Checkbox Group
- Fixed issue with Link control opening javascript:void() in Internet Explorer
- Fixed issue with Table index when backing list variable is altered
- Fixed issue with Date Picker Right-to-Left orientation
- Fixed issue with setting invalid text color for Checkbox Group
- Fixed issue with setting invalid text color for Radio Button Group

4.4.6

- Minor formatting of Table header options
- Fixed BPM File List issues in Firefox
- Fixed issue setting the current pane on the initial display of the Stack control

- Fixed issue with the Tab control not hiding responsive layouts
- Fixed issue with Pop-Up Menu addItem()
- Fixed issue with Service Data Table logging errors
- Fixed issue with validation of Decimal control maximum value
- Fixed issue with Text Editor loading controls for IE11
- Fixed issue with Theme modifying color of disabled controls
- Fixed issue with Checkbox Group maintaining Read Only for items Loaded from a Service

4.4.5

- Fixed issue with setItem() method to update the correct item in the Single Select control
- Fixed error log output to use correct log.warn() method
- Fixed Input Group to ignore error when no label is specified
- Fixed issue with Link control responding to visibility changes
- Fixed Checkbox Group control label Visibility property
- Fixed issue with Output Text honoring Label hidden when set to Left and Centered
- Fixed issue with Single Select clearItems() method for the Start Empty configuration
- Fixed issue with Multi Select clearItems() method for the Start Empty configuration
- Fixed issue with Checkbox Group clearItems() method for the Start Empty configuration
- Fixed issue with Service Call busy icon not responding to empty return

4.4.4

- Fixed issue with the Row Reference (=) for Table Formulas in the Trial and Community Editions
- Fixed issue with Refresh Method of the Table control to clear the table if the query returns 0 records
- Fixed issue with AJAX service in the Multi Select control
- Fixed issue with SPARK loading Theme in 8.5.7
- Fixed issue with Type Ahead Text control to use the Start Empty configuration option
- Fixed issue with Map Control loading the API
- Fixed issue with Map Control On Click context variable
- Fixed issue with Modal Section behavior on Window resize
- Fixed issue with Styler applying default color
- Fixed issue with File Uploader and Dropzone updating the File Name
- Fixed issue with Data Export control and table data
- Fixed issue with File Uploader control visibility behavior in Modal Section
- Fixed minor CSS issues with the following controls:
 - Button
 - Badge
 - Area Chart SDS
 - Bar Chart SDS
 - Donut Char SDS
 - Line Chart SDS
 - Multi Purpose Chart

- Pie Chart SDS
- Step Chart SDS
- Responsive Sensor
- Spacer
- Text Area

4.4.2

- Fixed issue with select all checkbox in Service Data Table where selecting the checkbox did not select all records
- Fixed issue in Service Data Table with Highlight Selection configuration option not working
- Added error to console when delete method is invoked on a Service Data Table
- Fixed issue with image radius not working
- Fixed an issue with file uploading for BPM File List and BPM File Dropzone in BPM on Cloud environments
- Fixed an issue where an Image inside of a Modal Section would not display when the Modal Section's visibility was changed from false to true

4.4.1

- Fixed an issue with passing complex objects to AJAX services that were backing the following
 - Single Select
 - Checkbox Group
 - Multi Select
- Fixed an issue with bound data in Data Export when used in Internet Explorer, Opera, or Safari
- Fixed a visibility issue in Table when visibility was set to "Same as Parent" while nested inside a Modal Section
- Fixed an issue with BPM File List in 8.5.0.1 where incorrect usernames were shown for Created By and Modified By columns
 - Customers using the 8.5.0.1 release of SPARK that wish to have the 'Modified By' or 'Created By' show the correct user name should use the 'BPM File List 8501' control instead of the 'BPM File List' control. A work around was applied to replicate the fix applied by IBM for JR48637 see the following for additional info <http://www-01.ibm.com/support/docview.wss?uid=swg1JR48637>
- Fixed an indexing issue which occurred in Table and Service Data Table after using the clear() method for either control
- Fixed an issue with Input Group where the set width was not being honored
- Fixed an issue with the getServiceInputData method of Checkbox Group
- getType() method of Password control no longer returns "text.3"
- added getType() method to Variant
- BPM File Uploader and BPM File Dropzone now set file name properly when uploading
- newValue in the On Change event of Integer and Decimal controls is now a Number, and not a String
- BPM File Uploader now allows setting the document title before selecting the file

- Fixed an issue where data bound to the Slider control was not being set as a Decimal
- Fixed an issue where Signature Pad wouldn't draw signatures if previously hidden
- Fixed several issues regarding updating formatting options for Integer and Decimal controls on the fly, including Prefix, Postfix, Thousands Separator, Decimal Separator, and Decimal Places

4.4.0.3

- Removed validation errors from community edition

4.4.0.2

- Fixed an issue with the way the Community Edition displays controls in Web based Process Designer

4.4.0.1

- Removed Responsive Coaches Dependency

4.4.0

- Using backspace to clear the Date Picker and then tabbing off now properly updates the binding
- Automatic uploads through Dropzone and file uploader no longer happen if file does not match an allowed type
- Single selects that are populated through an AJAX service will now be emptied if the service returns no items after having previously returned a non-empty list

Deprecations

4.4.0

- Page Layout Cell
- Page Layout Row
- Page Layout Col

Known Issues

- Tables cannot be populated through lists of simple types
 - Workaround: wrap simple types in complex types and use a list of these instead
 - Workaround 2: use repeating layout capabilities in vertical layouts
- Date Picker does not update values when clicking "Clear" button
 - Workaround: Hit enter in the Date Picker box after hitting the clear button to update data
- Single/Multi Select - On Service Items and On Service Error do not fire when using reloadServiceItems method
- Documentation missing for various configuration options in showcase
- Intermittent issue with tabbed sections not always displaying tab names
 - Workaround: close and reopen task

- Display issues when table width exceeds that of containing section
- Incorrectly colored line in panels when placed inside collapsible panels of a differing color
- All resource bundles currently exist only in English. Non-English translations are planned for future releases
- Setting Link control as Boundary type causes IE11 to open a new blank window. Workaround: Check the Open in Same Window option.
- Due to an Internet Explorer defect acknowledged by Microsoft (see <https://connect.microsoft.com/IE/feedbackdetail/view/992569/font-face-not-working-with-internet-explorer-and-http-header-pragma-no-cache>), Internet Explorer may fail to display font faces over an https connection in rare circumstances. Since glyph font faces are used to display icons and render checkboxes in the SPARK UI toolkit, customers using IE10, or IE11 in IE10 compatibility mode, may notice that icons and checked checkboxes don't display properly. The workaround is to use another browser such as Google Chrome, Firefox or Microsoft Edge

Other Notes

- The **ServiceDataTable** control is not supposed to be bound to a list variable.
- Due to a limitation in Coach NG framework, one will not be able to bind a simple type list to **Table** control. As a work-around please wrap the simple type into a Business Object and bind that complex object list to the Table control.
- The **Table** refresh() method is not supposed to be called programmatically. Please see the documentation of the control.
- Bi directional support is not currently enabled for controls other than those listed above

Feedback

Please send an email to support@salientprocess.com, in order to submit bugs and suggestions for the SPARK UI Toolkit that Salient Process will consider for future releases.