Oracle® JavaScript Extension Toolkit (Oracle JET)

New Features Described in Oracle JET's Documentation for Release 18.0.0

Here are updates to the documentation for Oracle JET to describe new features and enhancements added to Release 18.0.0.

For other changes in this release, see the product Release Notes.

Oracle JET

Documentation updates for this release of Oracle JET.

- Oracle JET CLI `migrate` command

  This new command (`ojet migrate`) automates the migration of Oracle JET apps created using release 13.0.0 and later of Oracle JET to a later release. See Migrate an App Using the Oracle JET CLI.

- Generate API Documentation for VComponent-based Web Components

  A new `enableDocGen` property in an Oracle JET app's `oraclejetconfig.json` file controls whether you generate API doc for VComponent-based web components. When `true`, the `npx ojet build component` command generates API doc for the component if you previously used `npx ojet add docgen` to add the necessary packages and templates for API doc generation. If `false`, no API doc is generated. See Generate API Documentation for VComponent-based Web Components.

- Dart Sass replaces `node-sass`

  Oracle JET replaced its dependency on `node-sass` with Dart Sass (`sass`) in this release. The third-party author of `node-sass` no longer supports it. If you continue to use Alta or a custom theme based on Alta when you migrate an app to this release, you need to install `node-sass`. See Migrate Alta-themed Apps to Release 18.0.0.

Migration Information

Note the following change that affect JET apps that you migrate to Release 18.0.0:

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See the following sections for step-by-step information about migrating your app to this release of Oracle JET.

- Migrate Alta-themed Applications from Releases Prior to 8.3.0 to Release 18.0.0 describes migration steps from releases prior to release 8.3.0 that allow migrating apps to the latest release.

- Migrate to the Redwood Theme CSS updated to describe how to migrate an Alta-themed app to the Redwood theme. As the topic describes, starting in release 9.0.0 it is possible to migrate to the Redwood theme.

- Migrate Redwood-themed Apps from Releases 9.x.0 or Later to Release 18.0.0 describes migration steps for Oracle JET app sources from version 9.x.0 or newer to the latest release.

Oracle JET Audit Framework

Using and Extending the Oracle JET Audit Framework has been updated in the following ways.

New and changed JAF audit features:

- Oracle JET releases supported by Oracle JAF

  Oracle JAF has discontinued audit support for Oracle JET versions lower than release `13.0.0` with the exception of `8.3.0`. You can no longer specify `12.0.0`, `11.0.0`, and so on as values for the `jetVer` property in the `oraclejafconfig.json` file. Use the `ojaf --jetlist` command to retrieve the list of Oracle JET versions that you can audit with Oracle JAF. See Audit with Specific JET and ECMA Script Versions.

  A side effect of this change is that the `oj-html-ojattr-520` rule has been removed from this release as it was only invoked when the `jetVer` property was set to `5.2`. The associated message ID (`JET-0040`) has also been removed.

- JAF includes changes to existing rules:

  - `csp-html-unsafe-expr`

    Arrow functions are now supported by the CSP expression validator and JAF no longer emits diagnostics when parsing an expression that contains the `=>` syntax.

  - `oj-css-style-override`

    A JET tag selector in a CSS rule is no longer considered an override if the rule body updates only CSS variables. However, if the rule body modifies real properties, the use of a JET tag selector is still considered an override and will be flagged.

  - `oj-html-prop-anti-pattern` and `oj-html-wctag-anti-pattern` Rules

    These rules are now enabled in AMD mode.

  - `jetwco-component-api-controlled-changes`

The `jetwco-component-api-controlled-changes` rule now has a more flexible lower bound for API changes that involve additions, such as adding a property to a component.

Previously, the lower bound for additions followed semantic versioning rules, requiring at least a minor version change. This remains the default. However, you now have the option to allow such changes at a patch version level if needed.

This behavior is configurable using existing rule configuration capabilities. To allow new property additions in a patch release, use the following configuration:

```
"ruleMods": {
  "JETWCO": {
    "jetwco-component-api-controlled-changes": {
      "enabled": true,
      "customOpts": {
        "exchangeURL": "https://component-exchange-url/api/
0.2.0",
        "controls": {
          "properties": {
            "add": "patch"
          }
        }
      }
    }
  }
}
```

- JAF includes new rules:

  - `oj-acc-aria-accessible` and `oj-tsx-acc-aria-accessible`

    ```
    Rule: oj-acc-aria-accessible  Severity: blocker  Message ID:
    jet-8025
    Rule: oj-tsx-acc-aria-accessible  Severity: blocker  Message ID:
    jet-7265
    For components <oj-c-rating-gauge>, <oj-c-meter-bar>, or <oj-c-
    meter-circle> to be accessible, one
    of the following WAI-ARIA attributes:
    1) 'aria-label', 'aria-labelledby', or 'aria-describedby'
    or one of these attributes:
    2) 'labelled-by', or 'described-by'
    is required.
    ```

  - `oj-html-btn-display-icon`

    ```
    Severity: blocker  Message ID: jet-8020
    If a legacy <oj-button> does not specify a 'label' attribute,
    and its default slot is not used, it
    should specify attribute 'display="icons"'.
    ```

– `oj-html-form-layout-colspan-wrap` **and** `oj-tsx-form-layout-colspan-wrap`

```
Rule: oj-html-form-layout-colspan-wrap  Severity: blocker
Message ID: jet-8030
Rule: oj-tsx-form-layout-colspan-wrap  Severity: blocker
Message ID: jet-7270
When an <oj-form-layout> has <oj-label-value> children that
specify a 'colspan' property,
oj-form-layout's 'colspanWrap' property specifies the column
spanning behavior. The 'nowrap'
behavior has been deprecated as it is not specified by the
Redwood Design System. In these cases,
colspanWrap="wrap" needs to be specified on the <oj-form-layout>
so that it will produce the
correct layout as specified by the Redwood Design System.
```

– `oj-html-ojoption-text` **and** `oj-tsx-ojoption-text`

```
Rule: oj-html-ojoption-text  Severity: major  Message ID:
jet-8005
Rule: oj-tsx-ojoption-text  Severity: major  Message ID: jet-7255

<oj-option> components cannot contain other custom elements that
might render something other than
the expected text node that is used to define the label of the
option
```

– `oj-html-redwood-bp-btn-avatar` **and** `oj-tsx-redwood-bp-btn-avatar`

```
Rule: oj-html-redwood-bp-btn-avatar  Severity: minor  Message
ID: jet-8010
Rule: oj-tsx-redwood-bp-btn-avatar  Severity: minor  Message ID:
jet-7260

Buttons should not contain avatars, they may not correctly align
within the button
```

The `redwood-strict` profile has been updated for these rules with an increased severity of major (from minor) when the JAF configuration extends `redwood-strict`.

– `oj-html-tabbar-progressive-popup`

```
Severity: minor  Message ID: jet-8035
For JET 18.0.0 and later, <oj-tab-bar> truncation="progressive"
should always be used with
overflow="popup" for handling overflow properly. If
truncation="progressive" is used alone, for
long labels it is possible that all items may not fit within oj-
tab-bar despite being truncated.
```

       — `oj-tsx-ojtag-datacmd`

          `Severity: major¹  Message ID's: jet-7240, 7241, 7242, 7243`

          `Attribute 'data-oj-command' should not be used on JET web component elements if the component does`
          `not have a list of values defined for it - refer to the JET API documentation for the component.`

          `¹ Possibility of more than 1 severity since there are 4 message ID's`

       — `oj-tsx-slot-item-minmax`

          `Severity: minor¹  Message ID's: jet-7250, 7251`
          `Components can include a 'minItems' or 'maxItems' property in a slot defintion in the component`
          `metadata, to describe how many child elements can be assigned to that slot. This rule applies to`
          `components that are directly allocated to a slot, or which are direct children of a template`
          `allocated to that slot.`

          `¹ Possibility of more than 1 severity since there are 2 message ID's`

Changes for rule writers:

- Removal of deprecated DomUtils APIs

  This release removes the `getAttrIndex()`, `getAttrPosition()`, and `getAttrValuePosition()` APIs that were deprecated in JAF's release 4.0.8 (February 2022). Use the replacement APIs (`getAttribIndex()`, `getAttribPosition()`, and `getAttribValuePosition()`) that are functionally equivalent. See DomUtils: Node Object Functions.

- `isCoreTag()` deprecated

  The `isCoreTag()` method is deprecated and replaced by the functionally equivalent `isJetCoreTag()` method. Support for `isCoreTag()` will be removed in a future major release of JAF. See Oracle JET Audit Metadata Interface Library Tag Methods.

- Requirement to define custom configuration properties under the `customOpts` rule property

  The requirement to declare any custom configuration properties that you define for your audits under the `customOpts` rule property in the `rules.json` file (described in JAF 10.0.0 / Oracle JET 17.0.0) is now treated more leniently if you audit your app in AMD or API modes. The behavior is now the following:

  - If a custom rule property is not declared under the `customOpts` rule property and does not have the `$required` property, the rule is disabled and the audit

emits a warning with the `JAF-2005` message ID. Unlike previously, the audit continues.

- If a custom rule property is not declared under the `customOpts` rule property and does have the `$required` property, the associated rule pack is disabled and the audit continues.

In CLI mode there is no change. That is, the audit emits an error with the JAF-2005 message ID and terminates.

- Updated CSS parser now supports `@container` and generates an AST `prelude.type` property of `AtrulePrelude` rather than the previous value of `Raw`.

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