

Spectrum Tokens

Component API progress

The problem

Current Spectrum Tokens pain points

- Human error
- Predictability
- Truth in too many places
 - Spectrum Tokens
 - Excel
 - Spec files

Proposed Solutions

What could be changed in Spectrum Tokens to address current shortcomings?

- Component Token relationships
- Token Structure (typing, schema, validation)
- Component Options API
- Deprecation

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- Token Structure (typing, schema, validation)✅
- Component Options API✅
- Deprecation⚠️

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What could be changed in Spectrum Tokens to address current shortcomings?

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- Deprecation🚧

Token Name Structure

Proposed Solutions

What could be changed in Spectrum Tokens to address current shortcomings?

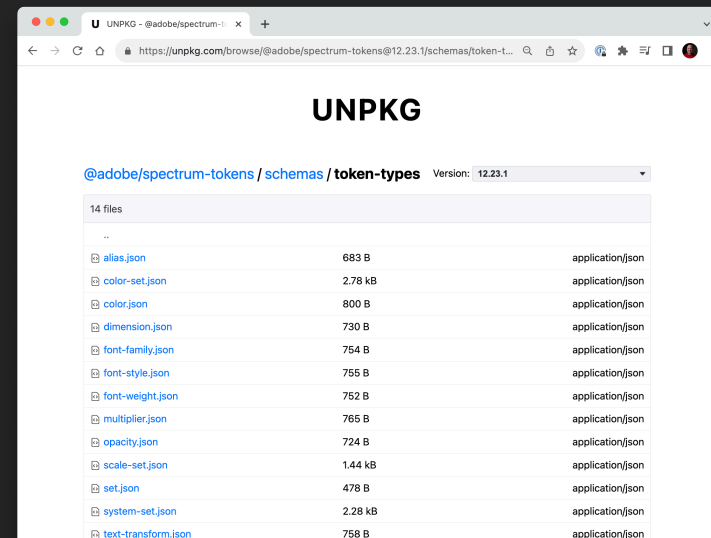
- Component Token relationship🚧
- Token Structure (typing, schema, validation)✅
- Component Options AF✅
- Deprecation🚧

Token Name Structure🚧

Token Structure

Token Structure

Schema

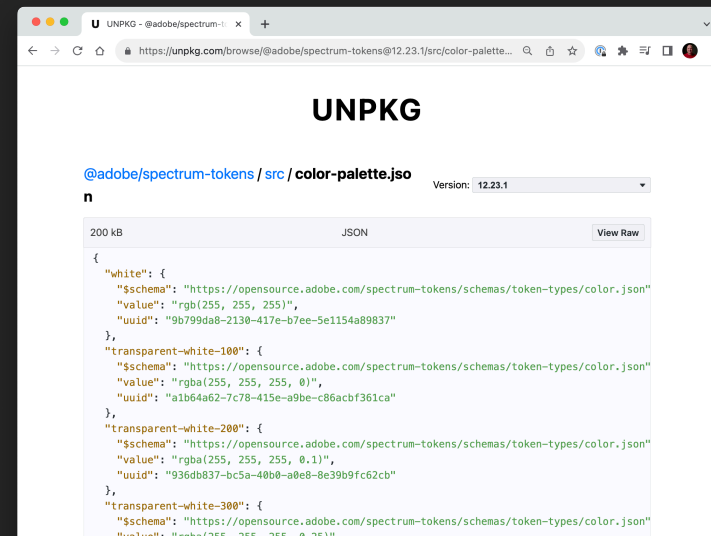


The screenshot shows a web browser window with the UNPKG website. The page title is "UNPKG". Below the title, there is a breadcrumb navigation path: "@adobe/spectrum-tokens / schemas / token-types". To the right of the path, it says "Version: 12.23.1". Below the navigation path, there is a table listing 14 files. The table has three columns: file name, size, and type. The file names are all JSON files related to token types. The sizes range from 478 B to 2.28 kB. The type for all files is "application/json".

14 files		
..		
alias.json	683 B	application/json
color-set.json	2.78 kB	application/json
color.json	800 B	application/json
dimension.json	730 B	application/json
font-family.json	754 B	application/json
font-style.json	755 B	application/json
font-weight.json	752 B	application/json
multiplier.json	765 B	application/json
opacity.json	724 B	application/json
scale-set.json	1.44 kB	application/json
set.json	478 B	application/json
system-set.json	2.28 kB	application/json
text-transform.json	758 B	application/json

Token Structure

Schema



Token Structure

Schema

- Now
 - Schema added
 - Found some structural issues
 - Automated testing
 - Some alignment with Tokens Studio for Figma data
- Next
 - Further alignment with Tokens Studio types

Token Name Structure

Token Name Structure

Current

component-top-to-workflow-icon-300

Token Name Structure

Current

`component-top-to-workflow-icon-300`

- Pros
 - Quick to write
- Cons
 - Consistency
 - Onboarding

Token Name Structure

Current

component-top-to-workflow-icon-300

component	top	workflow-icon	300
Group	Start	End	Index
	Relative		

Allow us to validate
And reorder

Token Name Structure

Current

- Now
 - Excel document splitting the token names into parts
- Next
 - Test
- Eventually
 - Find a way for designers/all to author name parts

Component Options API

Component Options API

Schema

UNPKG

@adobe/spectrum-tokens / schemas / component

Version: 12.23.1

53 files

..		
action-bar.json	683 B	application/json
action-button.json	1.77 kB	application/json
action-group.json	1.68 kB	application/json
alert-banner.json	894 B	application/json
alert-dialog.json	1.2 kB	application/json
avatar.json	840 B	application/json
badge.json	1.35 kB	application/json
body.json	882 B	application/json
bottom-navigation-android.json	1.04 kB	application/json
breadcrumbs.json	629 B	application/json
button-group.json	807 B	application/json
button.json	1.69 kB	application/json

Component Options API

Schema

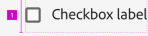



- Now
 - All component options have been codified
 - Static website with the tables of options generated from schema
- Next
 - Verify against spec files
- Eventually
 - Authoring workflow

Component Token Relationship

Component Token Relationship

Current definition of tokens in components

- Stored in spec files

Title	
Checkbox	
Visual	Copy
 Checkbox label	Minimum height <ul style="list-style-type: none"><code>component-height-75</code> Small<code>component-height-100</code> Medium<code>component-height-200</code> Large<code>component-height-300</code> Extra-large <small>Note: the component height represents the minimum height since the text can wrap on multiple lines.</small>
Visual	Copy
 Checkbox label	Control (size) <ul style="list-style-type: none"><code>checkbox-control-size-small</code> Small<code>checkbox-control-size-medium</code> Medium<code>checkbox-control-size-large</code> Large<code>checkbox-control-size-extra-large</code> Extra-large
Visual	Copy
 Checkbox label	Control (border) <ul style="list-style-type: none"><code>border-width-200</code>
Visual	Copy
 Checkbox label	Control (rounding) <ul style="list-style-type: none"><code>corner-radius-75</code>

Component Token Relationship

Component Token schema

- Human readable
- Codified, consumable
- Validation
- Reduced repetition
- Expandable
 - States

```
{  
  component: "button",  
  tokenId: "accent-background-color-default",  
  property: "background-color",  
  componentOptions: {  
    variant: "accent"  
  }  
}
```


Component Token Relationship

Component Token schema

```
{
  component: "button",
  tokenId: "accent-background-color-default",
  property: "background-color",
  componentOptions: {
    state: "default",
    variant: "accent",
    staticColor: null,
    style: "fill",
    size: "m",
    justified: false,
    isPending: false,
    isDisabled: false
  }
}
```

Component Token Relationship

Component Token schema

- Potential shortcomings
 - Harder to author
 - tech-specific requirements

```
{
  component: "button",
  tokenId: "accent-background-color-default",
  property: "background-color",
  componentOptions: {
    variant: "accent"
  }
}
```

Component Token Relationship

Component Token schema

- Now
 - Foundations in progress
- Next
 - Work on this last piece
- Eventually
 - Build Figma workflow to find all tokens used in each component