



Introduction to **Vue Macros**

Explore and extend more macros and syntax sugar to Vue.

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What's **Vue Macros**?

What is Vue Macros?



It is a series of proposals or ideas that have not been officially implemented by Vue.

- ✨ More syntax sugar and macros
 - Explore and extend more macros and syntax sugar to Vue.
- ❤️ Out-of-the-box and good compatibility
 - Supports both Vue 2.7+ and Vue 3 out-of-the-box.
- 🦾 Type Safe
 - Full  TypeScript and  Volar support.
- ⚡ Multiple bundlers are supported
 - Supports  Vite,  Webpack,  Vue CLI,  Rollup,  esbuild and more, powered by  unplugin.

Talk is cheap...

Show me the code!

defineOptions

Avoiding two `<script>` tags in the one SFC. [RFC](#)

```
<script>
// index.vue
import { defineComponent, ref } from 'vue'

export default defineComponent({
  name: 'Counter',
  inheritAttrs: false,
})
</script>

<script setup>
const count = ref(0)
</script>
```



```
<script setup>
// index.vue
import { ref } from 'vue'

defineOptions({
  name: 'Counter',
  inheritAttrs: false,
})

const count = ref(0)
</script>
```

defineModel

Simplify verbose declaration of props and emits. Thanks to [VueUse](#).

```
<script setup lang="ts">
const props = defineProps<{
  modelValue: string
  count: number
}>()

const emit = defineEmits<{
  (evt: 'update:modelValue', value: string): void
  (evt: 'update:count', value: number): void
}>()

emit('update:modelValue', 'newValue')
emit('update:count', props.count + 1)
</script>
```



```
<script setup lang="ts">
const { modelValue, count } = defineModel<{
  modelValue: string
  count: number
}>()

modelValue.value = 'newValue'
count.value++
</script>
```

defineModel on Vue 2

With unified mode, it will transform prop and event names for Vue 2.

```
prop:  modelValue → value  
event: update:modelValue → input
```

✨ Write once, run on both Vue 2 and 3!

defineModel | with Reactivity Transform

With Reactivity Transform, it can even be simplified further.

```
<script setup lang="ts">
const { modelValue, count } = defineModel<{
  modelValue: string
  count: number
}>()
```

```
modelValue.value = 'newValue'
count.value++
</script>
```



```
<script setup lang="ts">
let { modelValue, count } = $defineModel<{
  modelValue: string
  count: number
}>()
```

```
modelValue = 'newValue'
count++
</script>
```

betterDefine

Support imported types in `<script setup>` type-based macros.

Official support is expected in Vue 3.3.

Intersections

```
<script setup lang="ts">
import { FooProps } from './types'

defineProps<FooProps & {
  title?: string
}>()
</script>
```

Extends

```
<script setup lang="ts">
import { FooProps } from './types'

interface Props extends FooProps {
  title?: string
}

defineProps<Props>()
</script>
```

defineEmits

```
<script setup lang="ts">
import { FooEmits } from './types'

interface Emits extends FooEmits {
  (evt: 'change', val: string): void
}

defineEmits<Emits>()
</script>
```

Let's have a try!

Contributors

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Thank You!

Slides can be found on  github.com/sxzz/talks