

What is the difference between ActivatedRoute and ActivatedRouteSnapshot in Angular4

▲ What is the difference between `ActivatedRouteSnapshot` and `ActivatedRoute` in Angular 4? It's my understanding that `ActivatedRouteSnapshot` is a child of `ActivatedRoute`, meaning that `ActivatedRoute` contains `ActivatedRouteSnapshot`.

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▼ Incidentally, I tried running a Google search for an answer to this question, but I didn't find any of the search results to be understandable.



Thank you!

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edited Dec 26 '17 at 20:22



user2245766

121 9

asked Sep 5 '17 at 8:54



RajnishCoder

705 3 8 28

2 Answers

▲ Since `ActivatedRoute` [can be reused](#), `ActivatedRouteSnapshot` is an immutable object representing **a particular version** of `ActivatedRoute`. It exposes all the same properties as `ActivatedRoute` as plain values, while `ActivatedRoute` exposes them as observables.

57

▼ Here is the comment in the implementation:

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It a router reuses a component and doesn't create a new activated route, you will have two versions of `ActivatedRouteSnapshot` for the same `ActivatedRoute` . Suppose you have the following routing configuration:

```
path: /segment1/:id,  
component: AComponent
```

Now you navigate to:

```
/segment1/1
```

You will have the param in the `activatedRoute.snapshot.params.id` as `1` .

Now you navigate to:

```
/segment1/2
```

You will have the param in the `activatedRoute.snapshot.params.id` as `2` .

You can see it by implementing the following:

```
export class AComponent {  
  constructor(r: ActivatedRoute) {  
    r.url.subscribe((u) => {  
      console.log(r.snapshot.params.id);  
    });  
  }  
}
```

edited Jan 12 '18 at 9:11

answered Sep 5 '17 at 8:56



Max Koretskyi aka
Wizard

55.1k 23 164 285

-
- 1 Are you sure about the middle section? If you navigate to the same component with different param, then snapshot should not be updated..... –
Royi Namir Mar 26 '18 at 19:46
-

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2 @RoyiNamir, yes, you're right with both statements – [Max Koretskyi aka Wizard](#) Apr 5 '18 at 10:41

There are 2 ways to get the parameter from the route.

13 1. Snapshot (`route.snapshot.paramMap.get`). Read it during init.

Use the Snapshot if you only need the initial value of the parameter once during the component's initialization, and don't expect the URL to change while the user is still on that same component.

- I.e. if on a product/2 route, and the only way they'd get to product/3 is by going back to the product search screen and then clicking a product detail (leaving the detail component, then re-opening it with a new route param)

2. Observable (`route.paramMap.subscribe`). Subscribe to it during init.

Use the Observable if it's possible for the route to change while the user is still on the same component, and hence the Component's initialization would not be called again, but the observable would call your subscribed logic when the URL changed.

- I.e. if on your product detail page you have a "next" button to go to the next id, hence the user did not leave/re-open the component but the URL did receive a new param.

Generally speaking, subscribing is the safest route if you're unsure.

edited Mar 20 at 14:34

answered Nov 10 '18 at 19:24



[Don Cheadle](#)

2,661 2 18 40

Would subscribing to an observable count as "real work" that should be done in `ngOnInit` instead of the constructor? – [Charles Wood](#) Jan 7 at 15:55

1 @CharlesWood I think I'm using "constructor" and "ngOnInit" a little interchangeably (sorry) ... pretty sure I just mean "ngOnInit". If I remember, I'll come back and edit it later – [Don Cheadle](#) Jan 7 at 21:32

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