

Convert array to the type of Observable<T[]>

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I want to convert an array to type `Observable<T[]>` and have used the rxjs method "from". But it returns `Observable<T>`, Is there a way to convert an array to `Observable<T[]>` ?

```
Player: Observable<T[]>;

convert(){
  let tempArr:T[] = Object.values(data) as T[];
  let Obsobj = from(tempArr);
  this.Player = Obsobj;
}
```

This is the error message I got, `Observable<T>` is not assignable to type `Observable<T[]>`

EDIT

Even though using following code snippet return type isn't as expected.

```
let $sub = new Subject<Array<T>>();
$sub.next(tempArr);
this.Player$ = $sub.asObservable();
```

Since I want the return observable type to be as follows.

```
Observable { _isScalar: false, source: Observable, operator: MapOperator}
```

but returned the following.

```
Observable { _isScalar: false, source: Subject}
```

EDIT #2

complete code snippet.

```
Player: Observable<B[]>;

convert(data: Dictionary<B>){
  let tempArr:B[] = Object.values(data) as B[];
  let $sub = new Subject<Array<B>>();
  $sub.next(tempArr);
  this.Player$ = $sub.asObservable();
}
```

What is the issue here? Any help?

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edited Jul 17 at 6:40

asked Jul 15 at 2:58



Ramzan Dieze
21 • 2

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▲ **Observable.from Documentation: For arrays and iterables, all contained values will be emitted as a sequence! So your items will always be emitted as T and not T[]**

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For `observable<T[]>` do either of the following:

```
$sub = new Subject<Array<T>>();
this.Player = $sub.asObservable();
```

OR

```
this.Player = of(array);
```

OR

```
Observable.create((observer) => {observer.next(array)})
```

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edited Jul 15 at 3:29

answered Jul 15 at 3:17



Ruraloville
136 • 2

In the first suggestion where do I pass my array? Or in the second one where can I assign the value to my variable `Player`? – [Ramzan Dieze](#) Jul 15 at 3:35

Take array as param for convert function and add `$sub.next(array)` for first and nothing for second. It should work. Also use return and types for your function instead of assigning to var as described in Sidd's answer below. That would make it much more cleaner – [Ruraloville](#) Jul 15 at 3:39 ✓

Can I ask why you have used type `Subject` in the first suggestion? – [Ramzan Dieze](#) Jul 15 at 3:49

I thought you would want to reemit the array at same later stage also so then you could just use the same subject ref and call next. But if you want to use a converter func then of would make more sense – [Ruraloville](#) Jul 15 at 4:04

Are you importing it from the rxjs library? – [Ruraloville](#) Jul 15 at 5:40

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▲ Use `of` operator instead of `from`.

1



```
import { of } from 'rxjs';
...
```

```
player: Observable<T[]>;
```

```
convert(){
  let tempArr:T[] = Object.values(data) as T[];
  let Obsobj = of(tempArr);
  this.Player = Obsobj;
}
```

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answered Jul 15 at 3:08



zmag
4,332 • 8 • 17 • 28

I tried but it didn't have the source inside the object, which is needed to display. – [Ramzan Dieze](#) Jul 15 at 3:36

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What's this?

▲ This isn't how [generics](#) work.

1

You will have to refactor your code in order to make it work.

▼ Ideally your `convert` method should expect a generic type `T`

Something like this:

```
convert<T>(array: Array<T>): Observable<Array<T>> {
  return of(array);
}
```

And when you call `convert`, you call it like this:

```
this.convert<User>([{ firstName: `John`, lastName: `Doe` }])
  .subscribe((userArray: Array<User>) => console.log(userArray));
```

When you do this, you are telling your `convert` function that you want the Type `T` to be a `User` type.

Here's a Complete working Example:

```
import { Component } from '@angular/core';
import { Observable, of } from 'rxjs';

interface User {
  firstName: string;
  lastName: string;
}

@Component({
  selector: 'my-app',
  templateUrl: './app.component.html',
  styleUrls: ['./app.component.css']
})
export class AppComponent {
  player: Observable<Array<User>>;

  ngOnInit() {
    this.convert<User>([{ firstName: `John`, lastName: `Doe` }])
      .subscribe((userArray: Array<User>) => console.log(userArray));
  }

  convert<T>(array: Array<T>): Observable<Array<T>> {
    return of(array);
  }
}
```

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answered Jul 15 at 3:15



SiddAjmera

22.8k • 4 • 17 • 52

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
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
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