

expandIPv6

August 17, 2026

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Kind: Function**Source:** `src/utils/ipaddr.ts`**Part of:** `Utils`

Expand IPv6 Address

`expandIPv6` expands an IPv6 address that uses compressed notation into its expanded colon-separated form. It is used by IP address handling code when later operations need each address segment represented explicitly.

Signature

```
function expandIPv6(ipV6: string): string
```

Parameters

Name	Type
<code>ipV6</code>	<code>string</code>

Returns: `string`

Diagram

```
graph LR
  A[Compressed IPv6 address] --> B[expandIPv6]
  B --> C[Split address segments]
  C --> D[Expand omitted segments]
  D --> E[Expanded IPv6 address]
```

Usage

```
import { expandIPv6 } from './utils/ipaddr';

const address = 'a::b';
const expandedAddress = expandIPv6(address);

console.log(expandedAddress);
```

AI Coding Instructions

- Pass IPv6 address strings to `expandIPv6` before code that requires explicit address segments.
- Keep compressed-address handling inside this utility rather than duplicating expansion logic in callers.
- Preserve colon-separated IPv6 formatting when changing this function.
- Check how callers handle invalid or already-expanded addresses before changing return behavior.