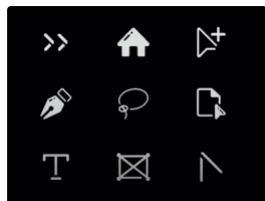


Transfer List

A Transfer List (or "shuttle") enables the user to move one or more list items between lists.



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Basic transfer list



For completeness, this example includes buttons for "move all", but not every transfer list needs these.

☐ List item 1☐ List item 2☐ List item 3☐ List item 4

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☐ List item 5☐ List item 6☐ List item 7☐ List item 8[Edit in Chat](#)

JS

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```
import * as React from 'react';
import Grid from '@mui/material/Grid';
import List from '@mui/material/List';
import ListItemButton from '@mui/material/ListItemButton';
import ListItemIcon from '@mui/material/ListItemIcon';
import ListItemText from '@mui/material/ListItemText';
import Checkbox from '@mui/material/Checkbox';
import Button from '@mui/material/Button';
import Paper from '@mui/material/Paper';

function not(a: readonly number[], b: readonly number[]) {
  return a.filter((value) => !b.includes(value));
}
```

```
function intersection(a: readonly number[], b: readonly number[]) {
  return a.filter((value) => b.includes(value));
}

export default function TransferList() {
  const [checked, setChecked] = React.useState<readonly number[]>([]);
  const [left, setLeft] = React.useState<readonly number[]>([0, 1, 2, 3]);
  const [right, setRight] = React.useState<readonly number[]>([4, 5, 6, 7]);

  const leftChecked = intersection(checked, left);
  const rightChecked = intersection(checked, right);

  const handleToggle = (value: number) => () => {
    const currentIndex = checked.indexOf(value);
    const newChecked = [...checked];

    if (currentIndex === -1) {
      newChecked.push(value);
    } else {
      newChecked.splice(currentIndex, 1);
    }

    setChecked(newChecked);
  };
};
```

Enhanced transfer list



This example exchanges the "move all" buttons for a "select all / select none" checkbox and adds a counter.

☐ Choices
0/4 selected

☐ List item 1
☐ List item 2
☐ List item 3
☐ List item 4

☐ Chosen
0/4 selected
☐ List item 5
☐ List item 6
☐ List item 7
☐ List item 8

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```
import * as React from 'react';
import Grid from '@mui/material/Grid';
```

```

import List from '@mui/material/List';
import Card from '@mui/material/Card';
import CardHeader from '@mui/material/CardHeader';
import ListItemButton from '@mui/material/ListItemButton';
import ListItemText from '@mui/material/ListItemText';
import ListItemIcon from '@mui/material/ListItemIcon';
import Checkbox from '@mui/material/Checkbox';
import Button from '@mui/material/Button';
import Divider from '@mui/material/Divider';

function not(a: readonly number[], b: readonly number[]) {
  return a.filter((value) => !b.includes(value));
}

function intersection(a: readonly number[], b: readonly number[]) {
  return a.filter((value) => b.includes(value));
}

function union(a: readonly number[], b: readonly number[]) {
  return [...a, ...not(b, a)];
}

export default function SelectAllTransferList() {
  const [checked, setChecked] = React.useState<readonly number[]>([]);
  const [left, setLeft] = React.useState<readonly number[]>([0, 1, 2, 3]);
  const [right, setRight] = React.useState<readonly number[]>([4, 5, 6, 7]);

  const leftChecked = intersection(checked, left);
  const rightChecked = intersection(checked, right);

  const handleToggle = (value: number) => () => {
    const currentIndex = checked.indexOf(value);
    const newChecked = [...checked];

    if (currentIndex === -1) {
      newChecked.push(value);
    }
  };
}

```

Limitations


The component comes with a couple of limitations:



- It only works on desktop. If you have a limited amount of options to select, prefer the [Autocomplete](#) component. If mobile support is important for you, have a look at [#27579](#).
- There are no high-level components exported from npm. The demos are based on composition. If this is important for you, have a look at [#27579](#).

API

See the documentation below for a complete reference to all of the props and classes available to the components mentioned here.

- [<Checkbox />](#)
- [<List />](#)
- [<ListItem />](#)
- [<Switch />](#)

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