



## 12-6 如何移动 DOM 节点

TypeScript

```
function FunctionComponent() {
  const [count1, setCount1] = useReducer((x) => x + 1, 1);
  // const arr = count1 % 2 === 0 ? [0, 1, 2, 3, 4] : [0, 1, 2, 3];
  const arr = count1 % 2 === 0 ? [0, 1, 2, 3, 4] : [0, 1, 2, 4];

  // const arr = count1 % 2 === 0 ? [0, 1, 2, 3, 4] : [3, 2, 0, 4, 1];

  // old 0, 1, 2, 4
  // new 0, 1, 2, 3, 4
  // 1个before 4

  // old 3, 2, 0, 4, 1
  // new 0, 1, 2, 3, 4
  // 3个before null

  // 0 删除
  return (
    <div className="border">
      <h3>函数组件</h3>
      <button
        onClick={() => {
          setCount1();
        }}
      />
    </div>
  );
}
```

```

    }}
  >
    {count1}
  </button>
  <ul>
    {arr.map((item) => (
      <li key={"li" + item}>{item}</li>
    ))}
  </ul>

  {/* {count1 % 2 === 0 ? (
    <button
      onClick={() => {
        setCount1();
      }}
    >
      {count1}
    </button>
  ) : (
    <span
      onClick={() => {
        setCount1();
      }}
    >
      react
    </span>
  )} */}
</div>
);
}

```

## commit 阶段

packages/react-reconciler/src/ReactFiberCommitWork.ts

TypeScript

```

function commitPlacement(finishedWork: Fiber) {
  if (finishedWork.stateNode && isHost(finishedWork)) {
    // finishedWork是有dom节点
  }
}

```

```

// 找domNode的父DOM节点对应的fiber
const parentFiber = getHostParentFiber(finishedWork);

let parentDom = parentFiber.stateNode;

if (parentDom.containerInfo) {
  // HostRoot
  parentDom = parentDom.containerInfo;
}

// 1. 遍历fiber结构，检查在老的DOM页面上，finishedWork是否有下一个兄弟DOM
const before = getHostSibling(finishedWork);
// 2. 如果有，那么finishedWork对应的的DOM要通过insertBefore放到兄弟DOM的
// 否则的话，依然通过appendChild存放到parentDom的子节点最后
insertOrAppendPlacementNode(finishedWork, before, parentDom);
} else {
  // Fragment
  let kid = finishedWork.child;
  while (kid !== null) {
    commitPlacement(kid);
    kid = kid.sibling;
  }
}
}
}

```

## 返回 fiber 的下一个兄弟 dom 节点

HostComponent 或 HostText

packages/react-reconciler/src/ReactFiberCommitWork.ts

```

function getHostSibling(fiber: Fiber) {
  let node = fiber;

  sibling: while (1) {
    while (node.sibling === null) {

```

TypeScript

```

    // 如果检查
    if (node.return === null || isHostParent(node.return)) {
        return null;
    }
    node = node.return;
}

node = node.sibling;

while (!isHost(node)) {
    if (node.flags & Placement) {
        // Placement表示节点是新增插入或者移动位置。而要寻找的是老的稳定位置的DOM
        continue sibling;
    }

    if (node.child === null) {
        // 找到最后了。继续下一轮查询
        continue sibling;
    } else {
        // 否则的话，继续查找子节点
        node = node.child;
    }
}
if (!(node.flags & Placement)) {
    return node.stateNode;
}
}
}

```

## 新增插入 | 位置移动

packages/react-reconciler/src/ReactFiberCommitWork.ts

```

// 新增插入 | 位置移动
// insertBefore | appendChild
function insertOrAppendPlacementNode(
    node: Fiber,
    before: Element,
    parent: Element

```

TypeScript

```
) {  
  if (before) {  
    parent.insertBefore(getStateNode(node), before);  
  } else {  
    parent.appendChild(getStateNode(node));  
  }  
}
```