



# Speeding up React SSR with ESX, Secrets Edition

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[github.com/esxjs](https://github.com/esxjs)

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Demo

75% lower latency

325% more req/s

330% higher throughput

# HOW

# How React SSR Works

Understanding the Algorithm

# How ESX SSR Works

Improving the Algorithm

```
import 'tmpl' from 'esx'

const Button = (props) => {
  const { kind, ...other } = props;
  const className = kind === "primary" ?
    "PrimaryButton" :
    "SecondaryButton";
  return esx `<button className=${className} ...${other} />`;
};

const App = () => {
  return esx `<div>
    <Button
      kind="primary"
      onClick={() => console.log("clicked!")}
    >
      Hello World!
    </Button>
  </div>
`;
};

export default App;

const esx = tmpl({ Button });
```

# Tagged Template Literals

# The callSite Parameter

esx`<html/>`

```
{ get children () {} }
```



`node -r esx/optimize app.js*`

\*EXPERIMENTAL



**babel-plugin-esx-ssr\***

**\*EXPERIMENTAL**

# React SSR:

As HTML nodes increase,  
performance decreases

# ESX SSR:

As HTML nodes increase,  
relative effect increases

**ESX**

**Optimizes**

**SSR**

# Why

**BREAKING  
THE  
FRAME**

**ESX**  
**Optimizes**  
**Workflow**

Well.. it will when we can:

```
import foo from 'foo'
```



**babel-plugin-esx-browser**

# SSR Stateful Hooks

```
esx.ssr.option(  
  'hooks-mode',  
  'stateful'  
)
```



[github.com/esxjs/esx-starter-app](https://github.com/esxjs/esx-starter-app)



# Plugin System

FIN



[github.com/esxjs](https://github.com/esxjs)

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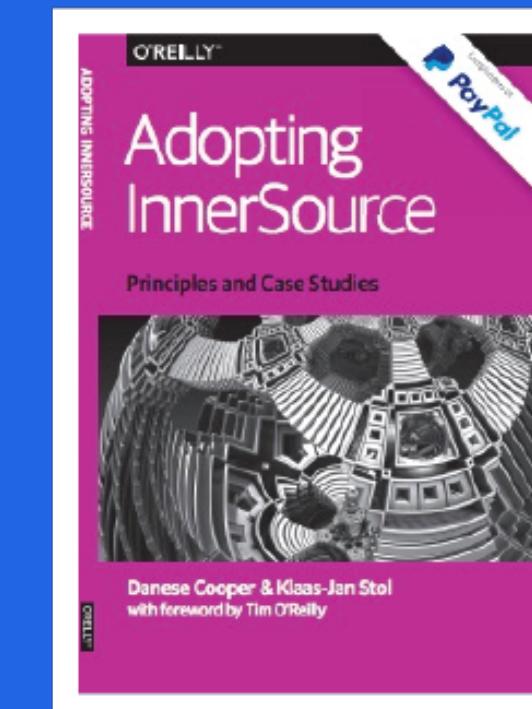
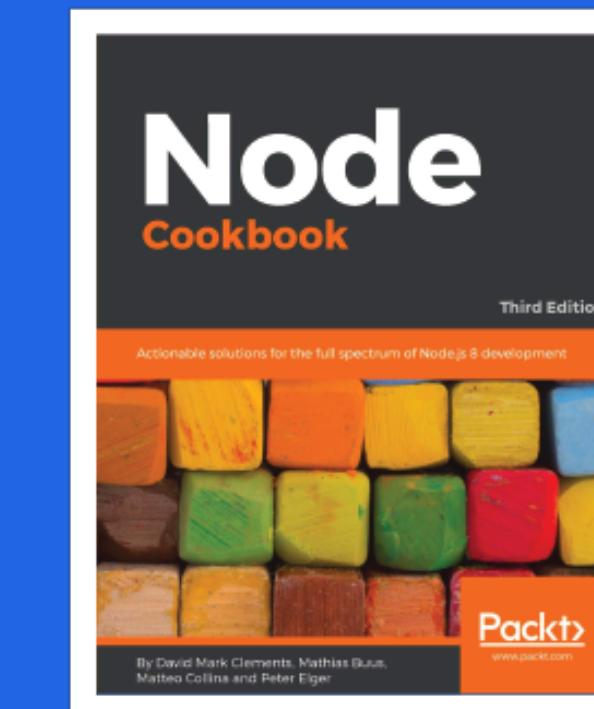
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David Sanger (The New York Times)  
9:55am-10:10am Wednesday, March 27, 2019  
Location: Ballroom  
Secondary topics: Security and Privacy

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We're living in a new era of constant sabotage, misinformation, and fear, in which everyone is a target, and you're often the collateral damage in a growing conflict among states. From crippling infrastructure to sowing discord and doubt, cyber is now the weapon of choice for democracies, dictators, and terrorists.

David Sanger explains how the rise of cyberweapons has transformed geopolitics like nothing since the invention of the atomic bomb. Moving from the White House Situation Room to the dens of Chinese, Russian, North Korean, and Iranian hackers to the boardrooms of Silicon Valley, David reveals a world coming face-to-face with the perils of technological revolution—a conflict that the United States helped start when it began using cyberweapons against Iranian nuclear plants and North Korean missile launches. But now we find ourselves in a conflict we're uncertain how to control, as our adversaries exploit vulnerabilities in our hyperconnected nation and we struggle to figure out how to deter these complex, short-of-war attacks.

**David Sanger**  
**The New York Times**

David E. Sanger is the national security correspondent for the *New York Times* as well as a national security and political contributor for CNN and a frequent guest on *CBS This Morning*, *Face the Nation*, and many PBS shows.



Session page on conference website

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9:55 AM - 10:10 AM, Wed, Mar 27, 2019

**Speakers**

 **David Sanger**  
National Security Correspondent  
The New York Times

**Ballroom**

**Keynotes**

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