

@push.rocks/smartb rowser

A simplified Puppeteer wrapper for easy automation and testing tasks.

- [readme.md for @push.rocks/smartbrowser](#)
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readme.md for

@push.rocks/smartbrowser

A simplified Puppeteer wrapper for easy browser automation, PDF generation, screenshots, and page evaluation.

Install

To install `@push.rocks/smartbrowser`, use the following command with your preferred package manager:

```
npm install @push.rocks/smartbrowser
# or
pnpm install @push.rocks/smartbrowser
```

This module works with Node.js and requires a Chromium-compatible browser available in the environment. It uses `@push.rocks/smartpuppeteer` under the hood, which automatically detects your environment and configures the browser accordingly (including CI/Docker scenarios).

Usage

`@push.rocks/smartbrowser` provides a high-level `SmartBrowser` class that wraps Puppeteer for common browser automation tasks: generating PDFs, capturing screenshots, and evaluating JavaScript on web pages.

Getting Started

Import and initialize a `SmartBrowser` instance:

```
import { SmartBrowser } from '@push.rocks/smartbrowser';

const smartBrowser = new SmartBrowser();
```

```
await smartBrowser.start();
```

Generating a PDF from a Webpage

Generate a full-page PDF from any URL. The result includes a `Buffer` with the PDF contents:

```
const pdfResult = await smartBrowser.pdfFromPage('https://example.com');
console.log(pdfResult.buffer); // PDF file buffer
console.log(pdfResult.name); // Generated name identifier
```

The PDF generation is powered by `@push.rocks/smartpdf`, which is lazily initialized on first use. This means the SmartPdf server is only started when you actually call `pdfFromPage()`, keeping resource usage minimal.

Capturing a Screenshot of a Webpage

Capture a PNG screenshot of any webpage:

```
const screenshotResult = await smartBrowser.screenshotFromPage('https://example.com');
console.log(screenshotResult.buffer); // Screenshot buffer (PNG)
console.log(screenshotResult.name); // Short unique identifier
console.log(screenshotResult.id); // Identifier with extension
```

Evaluating JavaScript on a Webpage

Run arbitrary JavaScript inside a page context and retrieve the result:

```
const pageTitle = await smartBrowser.evaluateOnPage('https://example.com', async () => {
  return document.title;
});
console.log(pageTitle); // "Example Domain"
```

The `evaluateOnPage` method supports generic return types:

```
const metrics = await smartBrowser.evaluateOnPage<{ width: number; height: number }>(
  'https://example.com',
  async () => {
    return {
      width: window.innerWidth,
```

```
        height: window.innerHeight,
    };
}
);
console.log(metrics.width, metrics.height);
```

Pages are automatically closed after evaluation, even if an error occurs.

Accessing the Underlying Puppeteer Browser

For advanced use cases, you can access the Puppeteer browser instance directly:

```
const page = await smartBrowser.headlessBrowser.newPage();
await page.goto('https://example.com');
// ... custom Puppeteer operations
await page.close();
```

You can also import the `smartpuppeteer` module directly for lower-level browser management:

```
import { smartpuppeteer } from '@push.rocks/smartbrowser';

const browser = await smartpuppeteer.getEnvAwareBrowserInstance();
```

Shutting Down

Always stop the browser instance when done to free resources:

```
await smartBrowser.stop();
```

This cleanly shuts down the SmartPdf server (if it was initialized) and closes the browser.

Full Example

```
import { SmartBrowser } from '@push.rocks/smartbrowser';

async function main() {
```

```
const smartBrowser = new SmartBrowser();
await smartBrowser.start();

// Generate a PDF
const pdfResult = await smartBrowser.pdfFromPage('https://example.com');
console.log('PDF size:', pdfResult.buffer.length, 'bytes');

// Take a screenshot
const screenshot = await smartBrowser.screenshotFromPage('https://example.com');
console.log('Screenshot size:', screenshot.buffer.length, 'bytes');

// Evaluate JavaScript
const title = await smartBrowser.evaluateOnPage('https://example.com', async () => {
  return document.title;
});
console.log('Page title:', title);

await smartBrowser.stop();
}

main();
```

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changelog.md for @push.rocks/smartbrowser

2026-03-09 - 2.0.11 - fix(deps)

upgrade dependencies and adapt code, tests, and docs for new upstream versions

- Bump runtime deps: @push.rocks/smarty-pdf -> ^4.2.0, @push.rocks/smarty-puppeteer -> ^2.0.5
- Bump devDependencies to modern majors: @git.zone/tsbuild ^4.3.0, @git.zone/tsrun ^2.0.1, @git.zone/tstest ^3.3.1, @push.rocks/tapbundle ^6.0.3, @types/node ^25.3.5
- Remove --allow-implicitany from build script to match tsbuild v4 behavior
- Fix Puppeteer screenshot handling: convert returned Uint8Array to Buffer via Buffer.from()
- Update tests to match tapbundle v6 API (remove expectAsync) and export tap.start()
- Add/expand documentation (readme.md and readme.hints.md) with dependency notes and usage examples

2026-03-09 - 2.0.10 - fix(config(npmextra))

normalize npmextra.json keys to namespaced entries and add release registries

- Replaced top-level "npmci" and "gitzone" entries with namespaced keys (@git.zone/cli)
- Moved tsdoc/legal content under @git.zone/tsdoc
- Added a release configuration for @git.zone/cli with registries (verdaccio + npm) and accessLevel: public
- Added a new empty @ship.zone/szci entry

2026-03-09 - 2.0.9 - fix(smarty-pdf)

lazily initialize SmartPdf, stop it only when present, and make evaluateOnPage reliably close pages

- Add private `ensureSmartPdf()` to lazily initialize and start SmartPdf only when PDF methods are called
- Call `ensureSmartPdf()` in `pdfFromPage()` before using `smartpdf`
- Stop SmartPdf in `stop()` only if it was initialized and clear the reference
- Wrap `evaluateOnPage()` page operations in `try/finally` and safely ignore errors from `page.close()` to avoid resource leaks or uncaught exceptions

2025-01-03 - 2.0.8 - fix(core)

Ensure consistent browser automation functionality

- Verified browser initialization and shutdown
- Tested PDF generation from web pages
- Validated screenshot capturing

2025-01-02 - 2.0.7 - fix(dependencies)

Update dependencies to latest versions.

- Updated `@push.rocks/smartpdf` dependency to version `^3.1.8`
- Updated `@push.rocks/smartunique` dependency to version `^3.0.9`
- Updated `devDependencies` to the latest versions

2024-05-29 - 2.0.6 - Project Maintenance

Minor project maintenance updates.

- Updated project description
- Revised `tsconfig` settings
- Made repeated updates to `npmextra.json` focusing on 'github' configuration

2023-07-11 - 2.0.5 - Organizational Updates

Switch to new organizational scheme and internal updates.

- Transitioned project to new organizational scheme

2022-10-26 - 2.0.4 to 2.0.2 - Core Fixes

A series of core fixes were applied to ensure better stability and performance.

2022-03-24 - 2.0.1 to 2.0.0 - Core Improvements

Significant updates made to the core functionality.

- Updated core components to enhance performance and reliability

2021-11-07 - 1.0.22 to 1.0.21 - Core Fixes

Minor fixes to core components for improved stability.

2021-04-29 - 1.0.20 to 1.0.18 - Core Fixes

Routine updates and fixes for core stability.

2020-06-01 - 1.0.16 to 1.0.14 - Bug Fixes

Multiple bug fixes and enhancements to the core.

2019-06-04 - 1.0.13 to 1.0.11 - Bug Fixes

Addressed several core issues to improve functionality.

2019-05-29 - 1.0.10 to 1.0.6 - Core Updates

Numerous updates and fixes were applied to core functionalities.

2017-04-09 - 1.0.5 to 1.0.3 - Feature Enhancements

Introduced new features and enhancements.

- Added `.reload()` method
- Included `npmextra.json` for better configuration management

2016-09-20 - 1.0.1 to 1.0.0 - Initial Release and Improvements

Launched the project with several improvements and setup configurations.

- Initial project setup and configuration
- Enhanced README for better documentation
- Integrated GitLab CI for continuous integration