Pw auto waits internally for every action or step.

For example, for locator.click(), Playwright will ensure that:

- locator resolves to an exactly one element
- element is Visible
- element is Stable, as in not animating or completed animation
- element Receives Events, as in not obscured by other elements
- element is Enabled

Default timeout is 30000 ms.

Auto-waiting

Introduction

Playwright performs a range of actionability checks on the elements before making actions to ensure these actions behave as expected. It auto-waits for all the relevant checks to pass and only then performs the requested action. If the required checks do not pass within the given `timeout`, action fails with the `TimeoutError`.

For example, for locator.click(), Playwright will ensure that:

Click on checkbox - working code –

```
mytest > autowait.spec.ts > test('auto wait checks ') callback
1  import {test, expect, Browser, Page, Locator, FrameLocator} from '@playwright/test'
2  import { log} from 'console';
3  import path from 'path';
4  import { webkit, chromium, firefox } from 'playwright'
5
6  test('auto wait checks ', async()=>{
7      const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
8      const page: Page = await browser.newPage();
9
10     await page.goto("https://classic.freecrm.com/register/");
11
12     //wait for the locator and click on checkbox of i agree.
13     await page.locator('input[name="agreeTerms"]').check();
14
15 });
16
```

Fail the locator to see if waiting for 30 seconds is the default timeout -

```
      autowait2.spec.ts 1  ✕     autowait3.spec.ts 1      autowait4.spec.ts 1      autowait5.spec.ts 1      autowait7.spec.ts 1      aut
mytest >  autowait2.spec.ts >  test('auto wait checks ') callback
  1   import {test, expect, Browser, Page, Locator, FrameLocator} from '@playwright/test'
  2   import { log} from 'console';
  3   import path from 'path';
  4   import { webkit, chromium, firefox } from 'playwright'
  5
  6   test('auto wait checks ', async()=>{
  7       const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
  8       const page: Page = await browser.newPage();
  9
 10       await page.goto("https://classic.freecrm.com/register/");
 11
 12       //fail the locator to see if we get 30000 ms as default timeout.
 13       //click i agree checkbox.
 14       await page.locator('input[name="agreeTerm1212"]').check();
 15
 16   });
 17
```

Time out error comes after 30 seconds -

```
TERMINAL    PROBLEMS    OUTPUT    DEBUG CONSOLE

Running 1 test using 1 worker
  1) autowait.spec.ts:11:5 > auto wait checks  —

    Test timeout of 30000ms exceeded.

  1 failed
    autowait.spec.ts:11:5 > auto wait checks  —
```

Change default time out of playwright –

```
      autowait3.spec.ts 1  ✕        autowait4.spec.ts 1        autowait5.spec.ts 1        autowait7.spec.ts 1        autowait6.spec.ts 1

mytest >    autowait3.spec.ts >    test('auto wait checks ') callback
  1    import {test, expect, Browser, Page, Locator, FrameLocator} from '@playwright/test'
  2    import { log} from 'console';
  3    import path from 'path';
  4    import { webkit, chromium, firefox } from 'playwright'
  5
▷ 6    test('auto wait checks ', async()=>{
  7        const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
  8        const page: Page = await browser.newPage();
  9
  10       //change default timeout from 30000 to 15000 ms.
  11       page.setDefaultTimeout(15000)
  12
  13       await page.goto("https://classic.freecrm.com/register/");
  14
  15       //click i agree checkbox.
  16        await page.locator('input[name="agreeTerm1212"]').check();
  17
  18   });
  19
```

Default time out overridden in output–

```
TERMINAL    PROBLEMS    OUTPUT    DEBUG CONSOLE    TEST RESULTS    PORTS

Running 1 test using 1 worker
  1) autowait.spec.ts:11:5 › auto wait checks  ─────────────────

    TimeoutError: locator.check: Timeout 15000ms exceeded.
    Call log:
      - waiting for locator('input[name=\'agreeTerms11\']')
```

Give timeout to individual elements–

```
autowait4.spec.ts 1  ✕    autowait5.spec.ts 1    autowait7.spec.ts 1    autowait6.spec.ts 1

mytest  >  autowait4.spec.ts  >  test('auto wait checks ') callback
   1   import {test, expect, Browser, Page, Locator, FrameLocator} from '@playwright/test'
   2   import { log} from 'console';
   3   import path from 'path';
   4   import { webkit, chromium, firefox } from 'playwright'
   5
   6   test('auto wait checks ', async()=>{
   7       const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
   8       const page: Page = await browser.newPage();
   9
  10       //change default timeout from 30000 to 15000 ms.
  11       page.setDefaultTimeout(15000)
  12       |
  13       await page.goto("https://classic.freecrm.com/register/");
  14
  15       //give your own time out for specific action.
  16       //click i agree checkbox.
  17        await page.locator('input[name="agreeTerm1212"]').check({timeout:5000});
  18
  19   });
  20
```

Timeout message–

```
TERMINAL    PROBLEMS    OUTPUT    DEBUG CONSOLE    TEST RESULTS    PORTS    POSTMAN CONSOLE    ROBOT DOCUMENTAT

Call log:
  - waiting for locator('input[name=\'agreeTerms11\']')

  17 |        await page.goto("https://classic.freecrm.com/register/");
  18 |
> 19 |        await page.locator("input[name='agreeTerms11']").check({timeout: 5000});
     |                                                          ^
  20 |
  21 |
  22 | }).
```

Note-
When we see question mark, thats optional parameter to pass to method–

```
3    import path from 'path';
4    import { webkit, chromium, firefox } from 'playwright'
5
6
7    // test.use({
8    //      actionTimeout: 10000 // Set the action
9    // });
10
11   test('auto wait checks ', async()=>{
12       const browser:Browser =  await chromium.l
13       const page: Page = await browser.newPage(
14       // page.setDefaultTimeout(15000);
15       //defult time out = 30 secs
16
17        await page.goto("https://classic.freecrm
18
19       await page.locator("input[name='agreeTerms11']").check({timeout: 5000}); — 5003ms
20
```

(method) Locator.check(options?: {
    force?: boolean | undefined;
    noWaitAfter?: boolean | undefined;
    position?: {
        x: number;
        y: number;
    } | undefined;
    timeout?: number | undefined;
    trial?: boolean | undefined;
} | undefined): Promise<...>

Ensure that checkbox or radio element is checked.

Details

Add more test-
Set time out for all tests-

```
autowait5.spec.ts 1 ×    autowait7.spec.ts 1    autowait6.spec.ts 1

mytest > autowait5.spec.ts > ...
1    import {test, expect, Browser, Page, Locator, FrameLocator} from '@playwright/test'
2    import { log } from 'console';
3    import path from 'path';
4    import { webkit, chromium, firefox } from 'playwright'
5
6    //set the timeout at global level for all actions.
7    //so all test in this file will have the timeout.
8    //this timeout is not for other classes.
9    //this timeout is for this file only.
10   test.use({
11       actionTimeout: 5000});
12
13   test('auto wait checks 1 ', async()=>{
14       const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
15       const page: Page = await browser.newPage();
16
17       await page.goto("https://classic.freecrm.com/register/");
18
19       //click i agree checkbox.
20       await page.locator('input[name="agreeTerm1212"]').check();
21
22   });
23
24   test('auto wait checks 2 ', async()=>{
25       const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
26       const page: Page = await browser.newPage();
27
28       await page.goto("https://classic.freecrm.com/register/");
29
30       //click i agree checkbox.
31       await page.locator('input[name="agreeTerm1212"]').check();
32
```

```
31          await page.locator('input[name="agreeTerm1212"]').check();
32
33   });
34
35   test('auto wait checks 3 ', async()=>{
36       const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
37       const page: Page = await browser.newPage();
38
39       await page.goto("https://classic.freecrm.com/register/");
40
41       //click i agree checkbox.
42       await page.locator('input[name="agreeTerm1212"]').check();
43
44   });
45
```

---

autowait7.spec.ts 1   autowait6.spec.ts 1 ✕

mytest > autowait6.spec.ts > ...

```
1    import {test, expect, Browser, Page, Locator, FrameLocator} from '@playwright/test'
2    import { log} from 'console';
3    import path from 'path';
4    import { webkit, chromium, firefox } from 'playwright'
5
6    //here the global timeout of 30000 ms is applied not the one we set.
7
8    test('auto wait checks 1 ', async()=>{
9        const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
10       const page: Page = await browser.newPage();
11
12       await page.goto("https://classic.freecrm.com/register/");
13
14       //click i agree checkbox.
15       await page.locator('input[name="agreeTerm1212"]').check();
16
17   });
18
19   test('auto wait checks 2 ', async()=>{
20       const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
21       const page: Page = await browser.newPage();
22
23       await page.goto("https://classic.freecrm.com/register/");
24
25       //click i agree checkbox.
26       await page.locator('input[name="agreeTerm1212"]').check();
27
28   });
29
```

```
28     });
29
30     test('auto wait checks 3 ', async()=>{
31         const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
32         const page: Page = await browser.newPage();
33
34         await page.goto("https://classic.freecrm.com/register/");
35
36         //click i agree checkbox.
37         await page.locator('input[name="agreeTerm1212"]').check();
38
39     });
40
```

Change individual timeout for test1-

```
        autowait7.spec.ts 1 ✕

mytest >     autowait7.spec.ts >     test('auto wait checks 1 ') callback
    1     import {test, expect, Browser, Page, Locator, FrameLocator} from '@playwright/test'
    2     import { log} from 'console';
    3     import path from 'path';
    4     import { webkit, chromium, firefox } from 'playwright'
    5
    6     test.use({
    7         actionTimeout: 15000});
    8
⊗   9     test('auto wait checks 1 ', async()=>{
    10        const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
    11        const page: Page = await browser.newPage();
    12
    13        await page.goto("https://classic.freecrm.com/register/");
    14
    15        //click i agree checkbox.
    16        //set the individual timeout also in addition to global timeout.
    17        await page.locator('input[name="agreeTerm1212"]').check({timeout:5000});   ⊗ TimeoutError: locator.check: Timeout 5000ms exceeded.
    18
    19     });
    20
⊗   21     test('auto wait checks 2 ', async()=>{
    22        const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
    23        const page: Page = await browser.newPage();
    24
    25        await page.goto("https://classic.freecrm.com/register/");
    26
    27        //click i agree checkbox.
    28        //here timeout is 15000 ms - global one.
    29        await page.locator('input[name="agreeTerm1212"]').check();   ⊗ TimeoutError: locator.check: Timeout 15000ms exceeded.
    30
    31     });
    32
```

```
31    });
32
33    test('auto wait checks 3 ', async()=>{
34        const browser: Browser = await chromium.launch({headless: false, channel: 'chrome'});
35        const page: Page = await browser.newPage();
36
37        await page.goto("https://classic.freecrm.com/register/");
38
39        //click i agree checkbox.
40        //here timeout is 15000 ms - global one.
41        await page.locator('input[name="agreeTerm1212"]').check();    ⊗ TimeoutError: locator.check: Timeout 15000ms exceeded.
42
43    });
44
```