

## Class: DownloadItem

Control file downloads from remote sources.

Process: [Main](#)

This class is not exported from the `'electron'` module. It is only available as a return value of other methods in the Electron API.

`DownloadItem` is an [EventEmitter](#) that represents a download item in Electron. It is used in `will-download` event of `Session` class, and allows users to control the download item.

```
// In the main process.
const { BrowserWindow } = require('electron')
const win = new BrowserWindow()
win.webContents.session.on('will-download', (event, item, webContents) => {
  // Set the save path, making Electron not to prompt a save dialog.
  item.setSavePath('/tmp/save.pdf')

  item.on('updated', (event, state) => {
    if (state === 'interrupted') {
      console.log('Download is interrupted but can be resumed')
    } else if (state === 'progressing') {
      if (item.isPaused()) {
        console.log('Download is paused')
      } else {
        console.log(`Received bytes: ${item.getReceivedBytes()}`)
      }
    }
  })
})
item.once('done', (event, state) => {
  if (state === 'completed') {
    console.log('Download successfully')
  } else {
    console.log(`Download failed: ${state}`)
  }
})
})
```

### Instance Events

#### Event: 'updated'

Returns:

- `event` `Event`
- `state` `string` - Can be `progressing` or `interrupted`.

Emitted when the download has been updated and is not done.

The `state` can be one of following:

- `progressing` - The download is in-progress.
- `interrupted` - The download has interrupted and can be resumed.

## Event: 'done'

Returns:

- `event` `Event`
- `state` `string` - Can be `completed`, `cancelled` or `interrupted`.

Emitted when the download is in a terminal state. This includes a completed download, a cancelled download (via `downloadItem.cancel()`), and interrupted download that can't be resumed.

The `state` can be one of following:

- `completed` - The download completed successfully.
- `cancelled` - The download has been cancelled.
- `interrupted` - The download has interrupted and can not resume.

## Instance Methods

The `downloadItem` object has the following methods:

### `downloadItem.setSavePath(path)`

- `path` `string` - Set the save file path of the download item.

The API is only available in session's `will-download` callback function. If `path` doesn't exist, Electron will try to make the directory recursively. If user doesn't set the save path via the API, Electron will use the original routine to determine the save path; this usually prompts a save dialog.

### `downloadItem.getSavePath()`

Returns `string` - The save path of the download item. This will be either the path set via `downloadItem.setSavePath(path)` or the path selected from the shown save dialog.

### `downloadItem.setSaveDialogOptions(options)`

- `options` `SaveDialogOptions` - Set the save file dialog options. This object has the same properties as the `options` parameter of [`dialog.showSaveDialog\(\)`](#).

This API allows the user to set custom options for the save dialog that opens for the download item by default. The API is only available in session's `will-download` callback function.

### `downloadItem.getSaveDialogOptions()`

Returns `SaveDialogOptions` - Returns the object previously set by `downloadItem.setSaveDialogOptions(options)`.

### `downloadItem.pause()`

Pauses the download.

### `downloadItem.isPaused()`

Returns `boolean` - Whether the download is paused.

### `downloadItem.resume()`

Resumes the download that has been paused.

**Note:** To enable resumable downloads the server you are downloading from must support range requests and provide both `Last-Modified` and `ETag` header values. Otherwise `resume()` will dismiss previously received bytes and restart the download from the beginning.

`downloadItem.canResume()`

Returns `boolean` - Whether the download can resume.

`downloadItem.cancel()`

Cancels the download operation.

`downloadItem.getURL()`

Returns `string` - The origin URL where the item is downloaded from.

`downloadItem.getMimeType()`

Returns `string` - The files mime type.

`downloadItem.hasUserGesture()`

Returns `boolean` - Whether the download has user gesture.

`downloadItem.getFilename()`

Returns `string` - The file name of the download item.

**Note:** The file name is not always the same as the actual one saved in local disk. If user changes the file name in a prompted download saving dialog, the actual name of saved file will be different.

`downloadItem.getTotalBytes()`

Returns `Integer` - The total size in bytes of the download item.

If the size is unknown, it returns 0.

`downloadItem.getReceivedBytes()`

Returns `Integer` - The received bytes of the download item.

`downloadItem.getContentDisposition()`

Returns `string` - The Content-Disposition field from the response header.

`downloadItem.getState()`

Returns `string` - The current state. Can be `progressing`, `completed`, `cancelled` or `interrupted`.

**Note:** The following methods are useful specifically to resume a `cancelled` item when session is restarted.

`downloadItem.getURLChain()`

Returns `string[]` - The complete URL chain of the item including any redirects.

`downloadItem.getLastModifiedTime()`

Returns `string` - Last-Modified header value.

`downloadItem.getETag()`

Returns `string` - ETag header value.

`downloadItem.getStartTime()`

Returns `Double` - Number of seconds since the UNIX epoch when the download was started.

## Instance Properties

`downloadItem.savePath`

A `string` property that determines the save file path of the download item.

The property is only available in session's `will-download` callback function. If user doesn't set the save path via the property, Electron will use the original routine to determine the save path; this usually prompts a save dialog.