

Number of items in directory

Description

This app reports the number, file size, names and dates about items in a directory (or folder) at specified intervals. It does this by outputting a JSON-file through the outgoing connection. The JSON is also attached to the file as a dataset and has a private data key with the number of items from the directory (or folder).

Use cases include monitoring a directory (or folder) when it becomes empty. Perhaps you have a significant workload and want to be notified when it has been processed. Alternatively, you may need to monitor if a folder becomes filled with files beyond a certain threshold (number of file size); for instance, if a process crashes and the files waiting in the input folder keeps accumulating.

With this app, you can set up monitoring by sorting the JSON-file based on the number of items in the folder and triggering an email or other actions based on the log.

Compatibility

Switch 2022 Fall and later

Connections

The app has only an outgoing connection. This contains the JSON-file with the number of items in the folder as private data.

Properties detailed info

Interval to check directory: Determines how often you need to check the directory/folder. This is in seconds.

Directory to check: Defines the directory to check for number of items.

Private data key: Defines the name under which the private data is saved.

Dataset name: Defines the name of the dataset with information about the files in the directory.

Filename: The name of the JSON-file saved with the information. Remember the JSON is also attached as a dataset, so there is no need for JSON pickup element.

Scan subdirectories: If set to Yes, subfolders are scanned as well. Subfolders are always taken into account when calculating the file size.

Example of JSON-file with "Scan subdirectories" set to No

```
{
  "directory": "/Users/jh/TEST Number of items",
  "fileCount": 11,
  "totalSizes": {
    "sizeInBytes": 265687722,
    "sizeInKilobytes": 259460.67,
    "sizeInMegabytes": 253.38,
    "sizeInGigabytes": 0.25,
    "sizeInTerabytes": 0,
    "sizeHuman": "253.38 MB"
  },
  "fileTypes": {
    "ds_store": {
      "count": 1,
      "sizes": {
        "sizeInBytes": 10244,
        "sizeInKilobytes": 10,
        "sizeInMegabytes": 0.01,

```

```
    "sizeInGigabytes": 0,
    "sizeInTerabytes": 0,
    "sizeHuman": "10 KB"
  },
  "png": {
    "count": 4,
    "sizes": {
      "sizeInBytes": 8204320,
      "sizeInKilobytes": 8012.03,
      "sizeInMegabytes": 7.82,
      "sizeInGigabytes": 0.01,
      "sizeInTerabytes": 0,
      "sizeHuman": "7.82 MB"
    }
  },
  "pdf": {
    "count": 3,
    "sizes": {
      "sizeInBytes": 6130355,
      "sizeInKilobytes": 5986.67,
      "sizeInMegabytes": 5.85,
      "sizeInGigabytes": 0.01,
      "sizeInTerabytes": 0,
      "sizeHuman": "5.85 MB"
    }
  },
  "zip": {
    "count": 1,
    "sizes": {
      "sizeInBytes": 92843487,
      "sizeInKilobytes": 90667.47,
      "sizeInMegabytes": 88.54,
      "sizeInGigabytes": 0.09,
      "sizeInTerabytes": 0,
      "sizeHuman": "88.54 MB"
    }
  },
  "directory": {
    "count": 2,
    "sizes": {
      "sizeInBytes": 158499316,
      "sizeInKilobytes": 154784.49,
      "sizeInMegabytes": 151.16,
      "sizeInGigabytes": 0.15,
      "sizeInTerabytes": 0,
      "sizeHuman": "151.16 MB"
    }
  }
},
"items": [
  {
    "name": ".DS_Store",
    "nameProper": ".DS_Store",
    "path": "/Users/jh/TEST Number of items/.DS_Store",
    "type": "ds_store",
    "sizes": {
      "sizeInBytes": 10244,
      "sizeInKilobytes": 10,
      "sizeInMegabytes": 0.01,
      "sizeInGigabytes": 0,
      "sizeInTerabytes": 0,
      "sizeHuman": "10 KB"
    },
    "createdDate": "2025-05-21T10:04:16",
    "modifiedDate": "2025-05-21T10:09:13",
    "timeZoneName": "Europe/Copenhagen"
  },
  {
    "name": "Sample file 01.png",
    "nameProper": "Sample file 01.png",
    "path": "/Users/jh/TEST Number of items/Sample file 01.png",
    "type": "png",
    "sizes": {
      "sizeInBytes": 5286075,
      "sizeInKilobytes": 5162.18,
      "sizeInMegabytes": 5.04,
      "sizeInGigabytes": 0,
      "sizeInTerabytes": 0,
      "sizeHuman": "5.04 MB"
    },
    "createdDate": "2024-06-17T17:01:06",
    "modifiedDate": "2024-06-17T17:01:06",
    "timeZoneName": "Europe/Copenhagen"
  }
],
```

```
{
  "name": "Sample file 02.pdf",
  "nameProper": "Sample file 02.pdf",
  "path": "/Users/jh/TEST Number of items/Sample file 02.pdf",
  "type": "pdf",
  "sizes": {
    "sizeInBytes": 1576722,
    "sizeInKilobytes": 1539.77,
    "sizeInMegabytes": 1.5,
    "sizeInGigabytes": 0,
    "sizeInTerabytes": 0,
    "sizeHuman": "1.5 MB"
  },
  "createdDate": "2025-04-10T14:17:19",
  "modifiedDate": "2025-04-10T14:17:19",
  "timeZoneName": "Europe/Copenhagen"
},
{
  "name": "Sample file 03.png",
  "nameProper": "Sample file 03.png",
  "path": "/Users/jh/TEST Number of items/Sample file 03.png",
  "type": "png",
  "sizes": {
    "sizeInBytes": 66013,
    "sizeInKilobytes": 64.47,
    "sizeInMegabytes": 0.06,
    "sizeInGigabytes": 0,
    "sizeInTerabytes": 0,
    "sizeHuman": "64.47 KB"
  },
  "createdDate": "2024-12-03T09:25:30",
  "modifiedDate": "2024-12-03T09:25:30",
  "timeZoneName": "Europe/Copenhagen"
},
{
  "name": "Sample file 04.pdf",
  "nameProper": "Sample file 04.pdf",
  "path": "/Users/jh/TEST Number of items/Sample file 04.pdf",
  "type": "pdf",
  "sizes": {
    "sizeInBytes": 2977037,
    "sizeInKilobytes": 2907.26,
    "sizeInMegabytes": 2.84,
    "sizeInGigabytes": 0,
    "sizeInTerabytes": 0,
    "sizeHuman": "2.84 MB"
  },
  "createdDate": "2025-03-14T13:56:23",
  "modifiedDate": "2025-03-14T13:56:24",
  "timeZoneName": "Europe/Copenhagen"
},
{
  "name": "Sample file 05.pdf",
  "nameProper": "Sample file 05.pdf",
  "path": "/Users/jh/TEST Number of items/Sample file 05.pdf",
  "type": "pdf",
  "sizes": {
    "sizeInBytes": 1576596,
    "sizeInKilobytes": 1539.64,
    "sizeInMegabytes": 1.5,
    "sizeInGigabytes": 0,
    "sizeInTerabytes": 0,
    "sizeHuman": "1.5 MB"
  },
  "createdDate": "2025-04-10T14:17:15",
  "modifiedDate": "2025-04-10T14:17:15",
  "timeZoneName": "Europe/Copenhagen"
},
{
  "name": "Sample file 06.png",
  "nameProper": "Sample file 06.png",
  "path": "/Users/jh/TEST Number of items/Sample file 06.png",
  "type": "png",
  "sizes": {
    "sizeInBytes": 14159,
    "sizeInKilobytes": 13.83,
    "sizeInMegabytes": 0.01,
    "sizeInGigabytes": 0,
    "sizeInTerabytes": 0,
    "sizeHuman": "13.83 KB"
  },
  "createdDate": "2025-01-26T13:04:07",
  "modifiedDate": "2025-01-26T13:04:07",
  "timeZoneName": "Europe/Copenhagen"
},
}
```

```
{
  "name": "Sample file 07.png",
  "nameProper": "Sample file 07.png",
  "path": "/Users/jh/TEST Number of items/Sample file 07.png",
  "type": "png",
  "sizes": {
    "sizeInBytes": 2838073,
    "sizeInKilobytes": 2771.56,
    "sizeInMegabytes": 2.71,
    "sizeInGigabytes": 0,
    "sizeInTerabytes": 0,
    "sizeHuman": "2.71 MB"
  },
  "createdDate": "2025-04-09T12:46:33",
  "modifiedDate": "2025-04-09T12:46:33",
  "timeZoneName": "Europe/Copenhagen"
},
{
  "name": "Sample file 08.zip",
  "nameProper": "Sample file 08.zip",
  "path": "/Users/jh/TEST Number of items/Sample file 08.zip",
  "type": "zip",
  "sizes": {
    "sizeInBytes": 92843487,
    "sizeInKilobytes": 90667.47,
    "sizeInMegabytes": 88.54,
    "sizeInGigabytes": 0.09,
    "sizeInTerabytes": 0,
    "sizeHuman": "88.54 MB"
  },
  "createdDate": "2025-03-10T07:53:26",
  "modifiedDate": "2025-03-10T07:53:52",
  "timeZoneName": "Europe/Copenhagen"
},
{
  "name": "Sub 1",
  "nameProper": "Sub 1",
  "path": "/Users/jh/TEST Number of items/Sub 1",
  "type": "directory",
  "sizes": {
    "sizeInBytes": 67273651,
    "sizeInKilobytes": 65696.92,
    "sizeInMegabytes": 64.16,
    "sizeInGigabytes": 0.06,
    "sizeInTerabytes": 0,
    "sizeHuman": "64.16 MB"
  },
  "createdDate": "2025-05-21T10:03:57",
  "modifiedDate": "2025-05-21T10:09:06",
  "timeZoneName": "Europe/Copenhagen"
},
{
  "name": "Sub 2",
  "nameProper": "Sub 2",
  "path": "/Users/jh/TEST Number of items/Sub 2",
  "type": "directory",
  "sizes": {
    "sizeInBytes": 91225665,
    "sizeInKilobytes": 89087.56,
    "sizeInMegabytes": 87,
    "sizeInGigabytes": 0.08,
    "sizeInTerabytes": 0,
    "sizeHuman": "87 MB"
  },
  "createdDate": "2025-05-21T10:04:03",
  "modifiedDate": "2025-05-21T10:08:57",
  "timeZoneName": "Europe/Copenhagen"
}
],
"systemTimestamp": "2025-05-21T10:09:34",
"systemTimeZoneName": "Europe/Copenhagen"
}
```

