

# Running OBM Flash UIs after Flash Player End of Life

**Preparing and configuring an environment which allows the  
operation of the UIs based on Flash technology**

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## Introduction

Adobe® has announced to stop support and distribution of its Flash Player by the end of the year 2020. In line with this, web browsers like Google Chrome, Mozilla Firefox and Microsoft Edge will remove their capability to run Flash based content after end of year 2020.

Operations Bridge Manager (OBM) contains UIs based on Flash technology. This document provides procedures to prepare an environment which allows a controlled operation of these UIs on a Microsoft Windows based client system after end of the year 2020.

## Preparation of the client system

**The preparation must be completed before Flash Player end-of-life. After this date, the required binaries cannot be downloaded anymore, and non-prepared web browsers will stop to execute Flash based content. If required, we recommend to review the chosen solution with your IT Security department.**

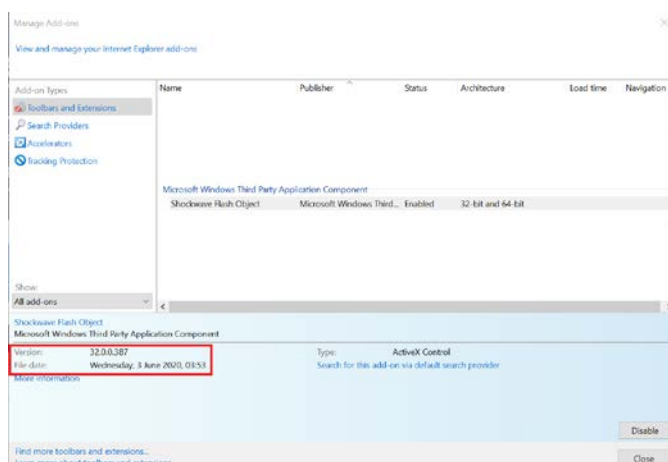
The system to use as a client to access OBM should be prevented from accessing the internet by disabling proxy settings and/or configuring a firewall which prevents/controls outbound traffic. The reason for this is to prevent auto-updating and/or disabling and uninstalling Flash Player from the client system. As the auto-updates for the web browser need to be disabled it might also expose the user to security risks when accessing sites on the internet.

### Option 1 - Internet Explorer 11

Microsoft [has announced the end of support of Adobe Flash Player](#) and will start in January 2021 to disable Flash Player by default and block versions older than June 2020.

To use Internet Explorer:

- For Windows 10 / Windows 8 make sure to update the system via Windows Update, so a current version of the Flash Player add-on is installed (version  $\geq 32.0.0.387$ ).  
For Windows 7, download Adobe Flash Player from [here](#) and install it.
- Enable the add-in in Internet Explorer (if it is not enabled yet):
  - Open the *Tools* menu and select *Manage add-ons*
  - In the *Manage add-ons* window right click the *Shockwave Flash Object* entry and click *Enable*.  
(if you cannot see the entry switch to *All add-ons* in the *Show* selector)



- Place the Flash Player configuration file (*mms.cfg*) on the system as described in *Configuring the Flash Player*.

## Option 2 - Firefox ESR Portable

To have better control over the Firefox browser to use together with Flash Player we recommend the usage of Firefox Portable. This is a 'distribution package' of Firefox which is not directly installed on the client's operating system but rather lays out a directory structure where the browser can be run from. This could even allow to copy the files on a USB drive and carry it from system to system.

For this:

- Download Mozilla Firefox ESR Portable, version 78.4.1 ESR, from the [official web page](#) or from their [archive](#)
- Run the downloaded executable to extract the file structure.
- Create a configuration file named `FirefoxPortable.ini` with the following content:

```
[FirefoxPortable]
FirefoxDirectory=App\firefox
ProfileDirectory=Data\profile
SettingsDirectory=Data\settings
PluginsDirectory=Data\plugins
FirefoxExecutable=firefox.exe
AdditionalParameters=
LocalHomepage=
WaitForFirefox=false
DisableSplashScreen=false
AllowMultipleInstances=false
DisableIntelligentStart=false
SkipCompregFix=false
RunLocally=false
AlwaysUse32Bit=true
```

and place it next to the `FirefoxPortable.exe` in the extracted file structure.

This will force Firefox Portable to always run the 32bit version of Firefox.

- Create the folder <Firefox ESR Portable Install Dir>\Data\plugins
- Download Adobe Flash Player from [here](#) and install it
- Copy all files from %WINDIR%\SysWOW64\Macromed\Flash to <Firefox ESR Portable Install Dir>\Data\plugins folder
- Disable auto-update for the Firefox ESR package and limit browser access to selected URLs:
  - Create a directory named **distribution** under <Firefox ESR Portable Install Dir>\App\Firefox
  - Create the file `policies.json` in the distribution directory and add the following content:

```
{
  "policies": {
    "DisableAppUpdate": true,
    "DisableSystemAddonUpdate": true,
    "CaptivePortal": false,
    "WebsiteFilter": {
      "Block": ["<all_urls>"],
      "Exceptions": ["<OBM URL>/*"]
    }
  }
}
```
  - Note the "Block" statement above is correct as written and will block all urls unless there is an explicit exception as in the "Exceptions" line
  - Replace <OBM URL> with the URL of your system, e.g. `"https://obm.example.com/*"`.
  - Add other URLs in the same way if needed.  
Example: `["https://obm.example.com/*", "https://obm-dev.example.com/*"]`  
More details on the URL patterns can be found [here](#).
- Open Mozilla Firefox by running `FirefoxPortable.exe` and apply configurations specific to your target environment (e.g. import trusted certificates, set proxy, ...), then close the browser.
- Zip the Firefox ESR Portable directory structure and transfer it to your client system.

- Unzip it on the target system (in a folder of your liking).
- Place the Flash Player configuration file (`mms.cfg`) on the system as described in *Configuring the Flash Player*.
- Start using the Firefox Portable browser by running the `FirefoxPortable.exe` executable.

## Configuring the Flash Player

Starting with Flash Player's June 2020 release several configuration options were introduced to limit which content can be loaded by the Flash Player as well as options to configure update and removal of the plugin. After Dec 31<sup>st</sup>, 2020, Adobe Flash Player will work only for URLs which are explicitly listed in its configuration file.

To enable the Flash Player for the OBM UIs apply the following steps:

Create new folder (if not already exists):

- on 32-bit Windows: `%WINDIR%\System32\Macromed\Flash`
- on 64-bit Windows: `%WINDIR%\SysWow64\Macromed\Flash`

In this folder create (if not already exists) a file named `mms.cfg` and update it with the following content:

```
SilentAutoUpdateEnable=0
AutoUpdateDisable=1
EOLUninstallDisable=1

TraceOutputEcho=1

EnableWhitelist=1
WhitelistPreview=0
WhitelistUrlPattern=https://<OBM URL>/

EnableAllowlist=1
AllowlistPreview=0
AllowlistUrlPattern=https://<OBM URL>/
```

### Note:

You need to specify the top-level URL of the OBM system.

Example: `WhitelistUrlPattern=https://obm.example.com/`

You can specify multiple allowed entries by adding a separate `WhitelistUrlPattern` and `AllowlistUrlPattern` pattern line for each of them.

Example:

```
WhitelistUrlPattern=https://obm.example.com/
WhitelistUrlPattern=https://obm-dev.example.com:10443/
WhitelistUrlPattern=https://*.prod.example.com/
```

More details can be found in [Adobe's Flash Player 32.0 Admin Guide](#) / Chapter 5

## Google Chrome

Google Chrome support for Adobe Flash will be completely removed from the underlying Chromium, targeted for the Chrome 88 release. See this [Chromium Flash Roadmap link](#) for additional information.

## Disclaimer

Micro Focus will not provide support for non-Micro Focus product instructions in this document, use them at your own risk.

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