

# How to use Reason RPV311 Web Interface after Flash Player end-of-life

## VERSION CONTROL

Version	Reason for change	Date
01	Initial	22-dec-2020
02	Changes in the procedure after plugin block based on date (12 Jan 2021)	20-jan-2021
03	Removed references for not required specific browser versions and removed section Running Conftool	23-feb-2021
04	Removed link for the latest Flash Player version, added info about plugin on Internet Explorer and updated the Advanced Flash Player configuration	16-mar-2021



## Summary

1.	INTRODUCTION .....	3
2.	PROCEDURES TO CONFIGURE FLASH PLAYER IN WINDOWS 7 AND 10.....	4
2.1.	Configuring Flash Player to allow access to the devices and ConfTool .....	4
3.	ADVANCED FLASH PLAYER CONFIGURATIONS.....	5
4.	CYBERSECURITY DISCLAIMER .....	9
5.	BROWSER COMPATIBILITY .....	10
6.	REFERENCES.....	11



### 1. INTRODUCTION

This application note presents how to continue using the Reason RPV311 Web Interface (online and Conftool) after the Flash Player end-of-life (EOL) by December 31, 2020 as announced by [Adobe](#).

*“Adobe will block Flash content from running in Flash Player beginning January 12, 2021 and the major browser vendors will continue to disable Flash Player from running after the EOL Date. Flash Player may remain on the user’s system unless the user uninstalls it.”*

These actions affected all customers who had the latest Flash Player Plugin regardless the browser version, therefore this procedure is recommended to properly access RPV311 Web Interface and the Conftool software after Flash Player obsolescence.

This application note was made to target Windows 7 and 10, both 64bits. For other operational systems please contact our support team through the e-mail [ga.support@ge.com](mailto:ga.support@ge.com)

## 2. PROCEDURES TO CONFIGURE FLASH PLAYER IN WINDOWS 7 AND 10

For accessing RPV311 Web interface it is a pre-requirement to have the Flash Player plugin installed. For these instructions, the following versions were considered:

- Adobe Flash Player 32 NPAPI 32.0.0.465 → Used with Firefox;
- Adobe Flash Player 32 ActiveX 32.0.0.465 → Used with Internet Explorer

### 2.1. Configuring Flash Player to allow access to the devices and ConfTool

After Flash Player version 32.0 several policies and behaviors were made configurable to the user specially to prepare enterprises to Flash Player EOL. With these new configuration options administrators can configure security policies and allow Flash Plugins to run trusted paths, as the ones needed to operate RPV311 Web configuration, RPV311 web monitoring tools and ConfTool.

To configure these new behaviors, it is necessary to **use administrator permissions** to edit the “*mms.cfg*” file located in the system path of your Flash Player installation, as in the example below.

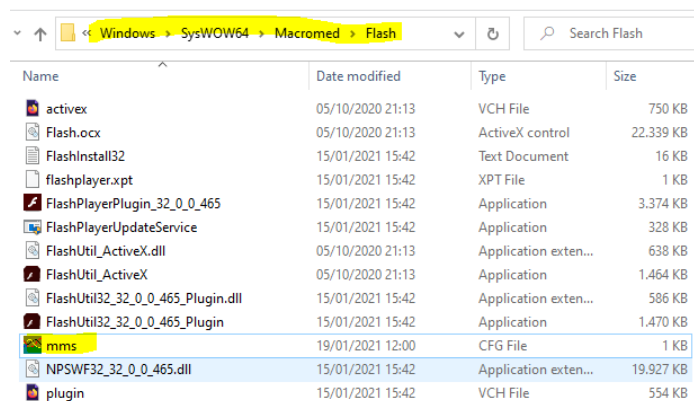


Figure 1 – Example path for mms.cfg flash player configuration file.

We recommend making a backup of the file “C:\Windows\SysWOW64\Macromed\Flash\mms.cfg”. In Windows 32bit this file must be saved in “C:\Windows\System32\Macromed\Flash”.

Open the “mms.cfg” file and add new lines for each of the following configuration:

- *AutoUpdateDisable=1*- This shall disable Flash Plugin auto updates, which can implement other operational blocks to RPV311 web functions.
- *EOLUninstallDisable=1*- Disable uninstall due to EOL.

- *AllowListRootMovieOnly=1* - Apply policies to all flash movies based on the policy configured to the main movie.

To allow ConfTool add the following line:

- *AllowListUrlPattern=file:///C:/* - Allow ConfTool plugin to run independently of where it is installed on C drive.

To access, monitor and configure devices directly you must add a new line with a configuration **for each IP address** according to the following example:

- *AllowListUrlPattern=\*/10.7.77.27/* - The wildcard \* enables all needed protocols to RPV311 and "10.7.77.27" is an IP address example that you need to substitute for the ones you want to enable access.

In the end your configuration file shall be similar to the picture below.

```
1 # Update options
2 AutoUpdateDisable=1
3 EOLUninstallDisable=1
4 SilentAutoUpdateEnable=0
5
6 #Generic policies configuration
7 AllowListRootMovieOnly=1
8
9 # Below line shall enable ConfTool
10 AllowListUrlPattern=file:///C:/
11
12 # Below lines shall be added to all devices you want to access in your installation
13 # In this case we are enabling device on the ip 10.7.77.27, 192.168.0.199 and 192.168.1.199
14 AllowListUrlPattern=*/10.7.77.27/
15 AllowListUrlPattern=*/192.168.0.199/
16 AllowListUrlPattern=*/192.168.1.199/
17
```

Figure 2 - Example mms.cfg file

**This change requires browser to be restarted.**

A full documentation with all configuration options and further clarification can be found here: [https://www.adobe.com/content/dam/acom/en/devnet/flashplayer/articles/flash\\_player\\_admin\\_guide/pdf/latest/flash\\_player\\_32\\_0\\_admin\\_guide.pdf](https://www.adobe.com/content/dam/acom/en/devnet/flashplayer/articles/flash_player_admin_guide/pdf/latest/flash_player_32_0_admin_guide.pdf).

### 3. ADVANCED FLASH PLAYER CONFIGURATIONS

After the end-of-life date of the Flash Player it will not possible to make configuration through the website ([http://www.macromedia.com/support/documentation/en/flashplayer/help/settings\\_manager03.html](http://www.macromedia.com/support/documentation/en/flashplayer/help/settings_manager03.html)).



This configuration is saved in the **.sol** file (Flash Shared Object) located in the hard disk. To edit this file please use a “.sol” editor. One alternative may be the Sol editor published as [Mozilla Public License 1.1 \(MPL 1.1\)](#).

1. Close the all browser window opened.
2. Make backup of the file “C:\Users\[**YOUR USERNAME**]\AppData\Roaming\Macromedia\FlashPlayer\macromedia.com\support\flashplayer\sys\**settings.sol**”. The “AppData” is a hidden folder. Ensure to enable Windows Explorer to show hidden items or
  - a. Open the Windows Explorer.
  - b. Type %appdata% into the address bar and hit enter.
  - c. Navigate to the “Macromedia\FlashPlayer\macromedia.com\support\flashplayer\sys” folder.
3. Open the file “C:\Users\[**YOUR USERNAME**]\AppData\Roaming\Macromedia\FlashPlayer\macromedia.com\support\flashplayer\sys\**settings.sol**” using a Sol editor.
4. Search the “defaultklimit” option and change the value to **-2**. This value corresponds to “unlimited”.



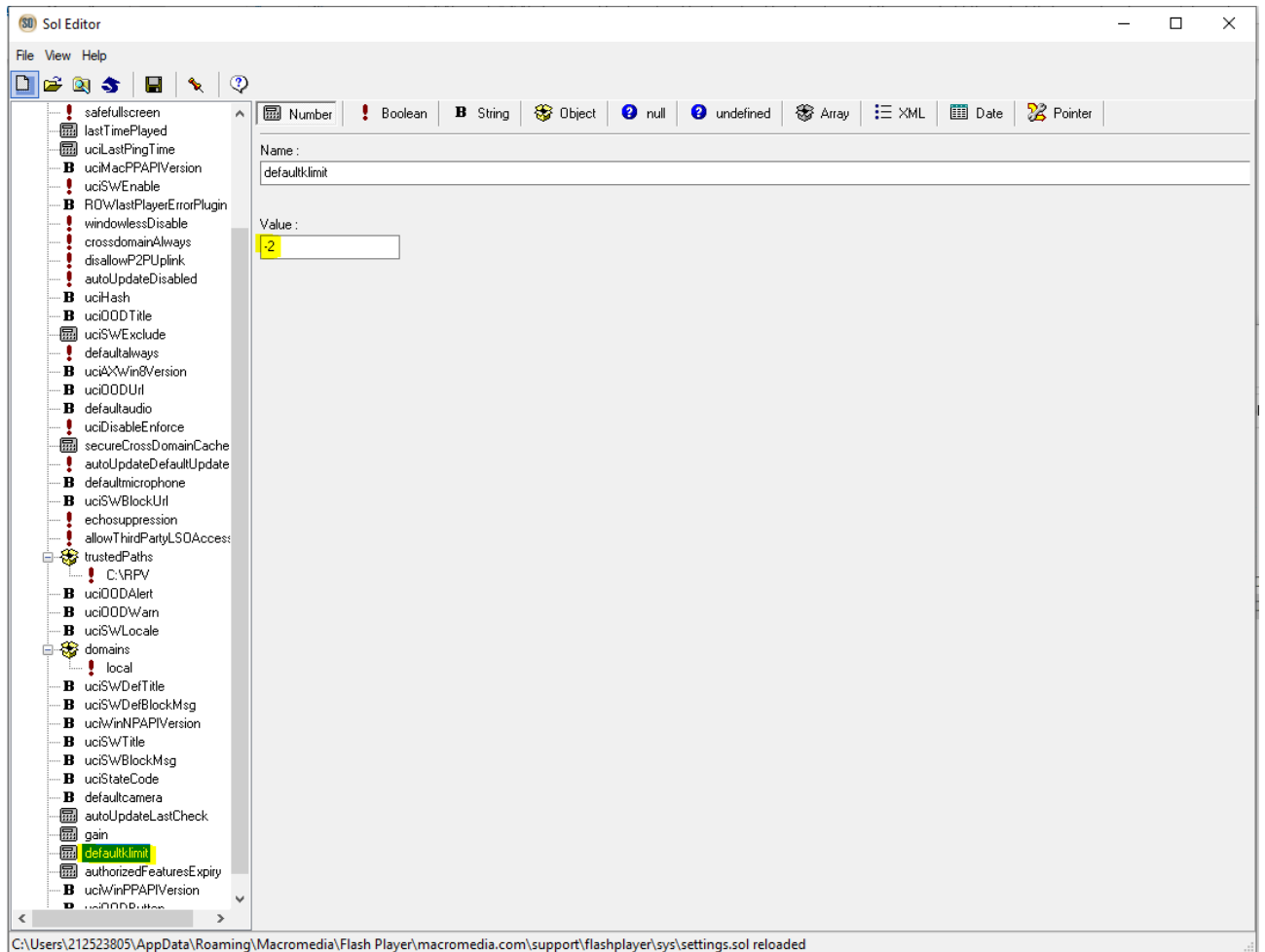


Figure 3 - Sol Editor to configure the amount of disk space allowed for Flash Player

#### Examples:

- -1 -> None
- -2 -> Unlimited
- 100 -> 100 KB
- 10240 -> 10 MB

5. Search the option “trustedPaths” and add value “**C:\RPV**” e/ou **C:\Reason DR Manager** if they do not exist yet.



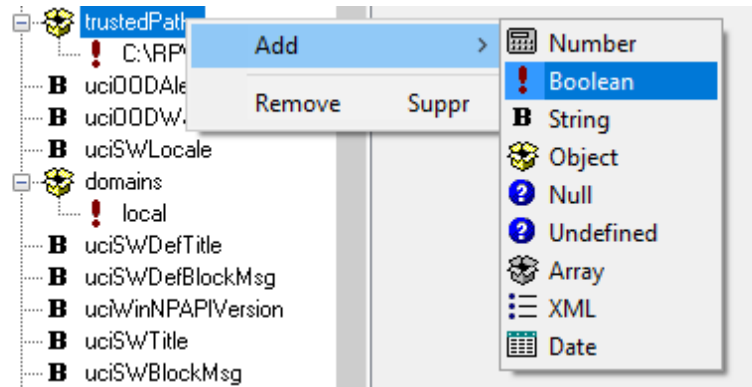


Figure 4 - Sol Editor to add a trusted path

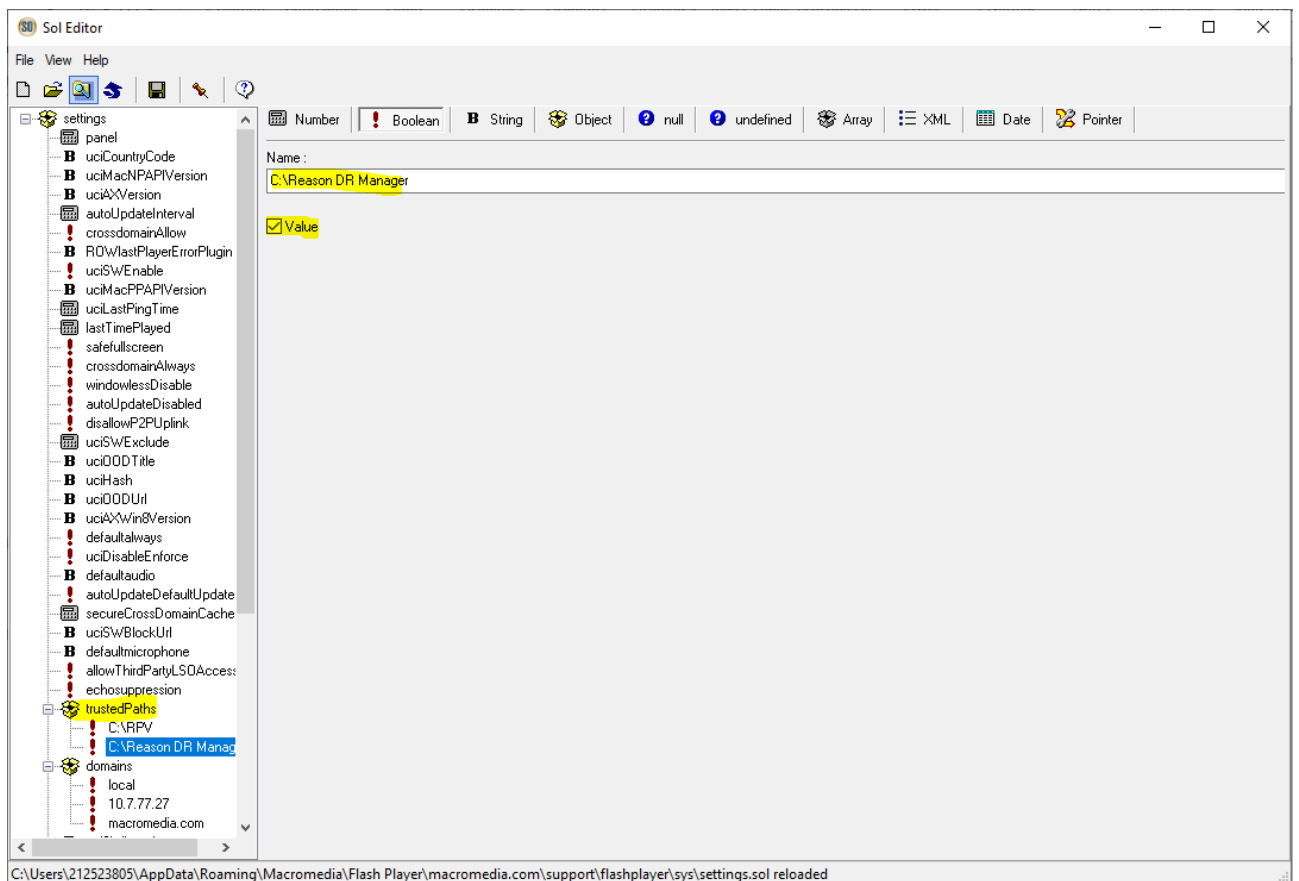


Figure 5 - Sol Editor for Trusted Paths

6. Check the local storage settings from the “#local” folder
  - a. The website “local” must be configured as “Allow” for the “When the selected site wants to use local storage” option:



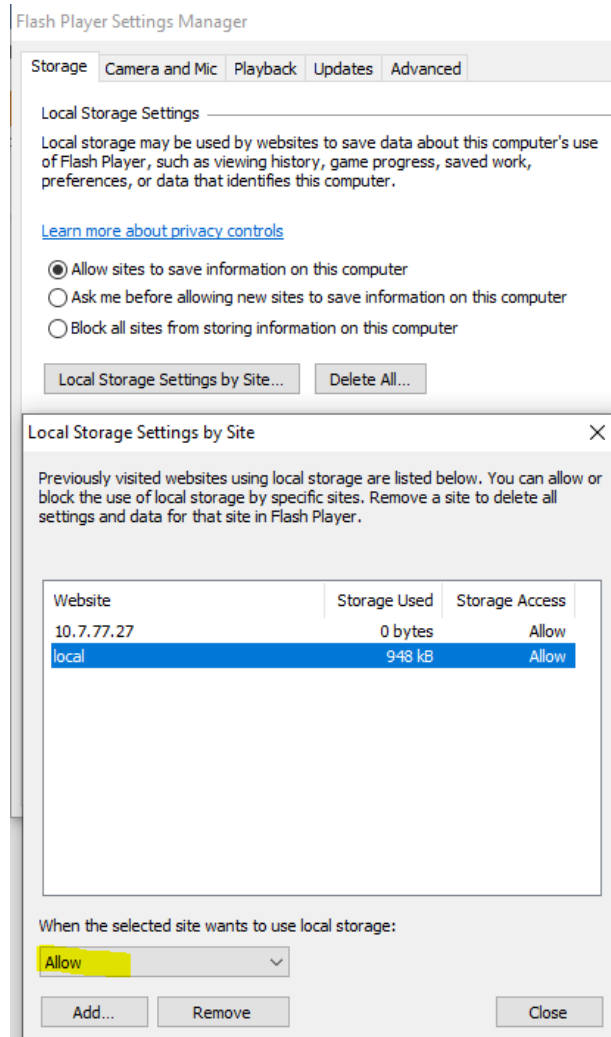


Figure 6 - Local Storage Settings by site

- b. Make backup of the file "C:\Users\[**YOUR USERNAME**]\AppData\Roaming\Macromedia\FlexPlayer\macromedia.com\support\flashplayer\sys\**#local\settings.sol**".
- c. Open the "...\**#local\settings.sol**" file using a Sol editor.
- d. Search the "defaultklimit" option and change the value to the same value configured on the Figure 3.

#### 4. CYBERSECURITY DISCLAIMER

Considering the RPV311 is designed to be installed and operated in industrial and power substation environment, in applications where it is not needed access to public networks, GE recommend RPV311 devices to be protected using network defense-in-depth practices. This includes, but is not limited to,

placing RPV311 devices inside the control system network security perimeter, and having access controls, monitoring (such as an Intrusion Detection System), and other mitigating technologies in place.

## 5. BROWSER COMPATIBILITY

This procedure focus on Flash Player plugin EOL and RPV311 compatibility, that is identifiable if standard Flash Player image as shown in Figure 7 is presented.

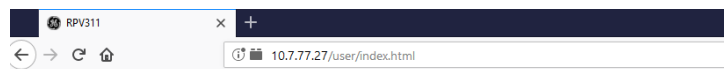


Figure 7 - Image related to Flash Player EOL block.

If you are experiencing other issues with RPV311 Web Interface or ConfTool, it might be related to browser compatibility, which in this case it is suggested to contact our support team through the e-mail [ga.support@ge.com](mailto:ga.support@ge.com).

### 6. REFERENCES

- ✓ Adobe Flash Player EOL General Information Page  
<https://www.adobe.com/br/products/flashplayer/end-of-life.html>
  
- ✓ Adobe Flash Player 32.0 Administration Guide  
[https://www.adobe.com/content/dam/acom/en/devnet/flashplayer/articles/flash\\_player\\_admin\\_guide/pdf/latest/flash\\_player\\_32\\_0\\_admin\\_guide.pdf](https://www.adobe.com/content/dam/acom/en/devnet/flashplayer/articles/flash_player_admin_guide/pdf/latest/flash_player_32_0_admin_guide.pdf)
  
- ✓ SOL Editor 1.1 installer:  
<https://sourceforge.net/projects/soleditor/>

