

Usage and Configuration Documentation

File Attachment Filtering

There are two different kinds of attachment processing in SAS Enterprise GRC. One is part of the forms processing, and the other is related to custom pages (Custom function). The attachment filter behavior is the same, but the configuration is slightly different.

Configuring for forms attachment processing

1. Update customMessages.properties. There is a default error message that you can customize. The parameter is customMessage.attachment.verifyFileExt.disallowMsg.txt.
2. Update configData.properties. These are the parameters you can configure, depending on your needs:

```
monitor.attachment.fileExtValidation.rejectedExtensions =
monitor.attachment.fileExtValidation.rejectedStartsWith =
monitor.attachment.fileExtValidation.rejectedEndsWith =
monitor.attachment.fileExtValidation.onlyAllowExtensions =
monitor.attachment.fileExtValidation.onlyAllowStartsWith =
monitor.attachment.fileExtValidation.onlyAllowEndsWith =
```

Configuring for custom page processing

1. Update content.xml
 - a. Add a function statement for including the custom function:

```
<function name="C_FileAttachmentFilter" qualified-class-
name="com.sas.cpb.customFunctions.FileAttachmentFilter" />
```

- b. Add a call to the custom function, and validation test, in the finalize section of content.xml

```
<finalize>
  <validation test="C_FileAttachmentFilter(file, 'exe,bin...', 'start1, start2...', 'end1,end2...',
'pdf,txt...', 'start1,start2...', 'end1, enb2')">
    <errmsg>Adding an attachment with this name or content type is not
permitted.</errmsg>
  </validation>
</finalize>
```

How to use attachment filtering

Attachments can be filtered by file extension, and by file name. This definition, for usage purposes, is used:

File extension – anything following the last dot in a file name

File name - anything prior to the last dot in a file name. Spaces in the file name will attach.

Multi-dot file names will attach. File names without an extension will attach.

For filtering by file name to occur, the file extension must pass. If the file extension does not pass, the name is never checked because the attachment is already rejected. A file name without an extension will pass, regardless of your extension list.

You have an implementation choice to make. You can filter based on “everything rejected, except...”, or “only allow...”. You cannot do both.

If you do not configure or implement any attachment filtering, all files are permitted.

If you configure any filtering bases on “everything rejected, except...”, then “only allow...” filtering is not checked. All parameters for rejected must be null in content.xml (or blank in configdata.properties).

Parameter values are noted with a comma separated list. When configuring in content.xml, each set of parameter values must have a single quote around them ('value1, value2...'), or the key word null, without quotes, if there is no value for the parameter. When configuring in configdata.properties, each parameter must be noted by name, and equal sign, and the list of values (param.name=value1,value2) or, if no value for the parameter, leave the value blank, or do not have the parameter in configdata.properties.

You will likely want to update your error message to be specific to your needs. In content.xml, you would note it between <errmsg>... </errmsg>. In configdata.properties, you would update parameter customMessage.attachment.verifyFileExt.disallowMsg.txt.

All matches are case insensitive. For filter matching that means, for example,

dog == Dog == dOg == dOG == DoG == DOG .

Usage Examples

The following table refers to this statement in content.xml:

```
<validation test="C_FileAttachmentFilter(file, 'reject extensions', 'reject starts with', 'reject ends with', 'only allow extension', 'only allow starts with', 'only allow ends with')">
```

and these parameters in configdata.properties:

```
monitor.attachment.fileExtValidation.rejectedExtensions =
monitor.attachment.fileExtValidation.rejectedStartsWith =
```

`monitor.attachment.fileExtValidation.rejectedEndsWith =`
`monitor.attachment.fileExtValidation.onlyAllowExtensions =`
`monitor.attachment.fileExtValidation.onlyAllowStartsWith =`
`monitor.attachment.fileExtValidation.onlyAllowEndsWith =`

To make it easier to read the table, assume the configdata.properties name I note starts with `monitor.attachment.fileExtValidation`.

Parameter	Custom page attachment filtering (content.xml)	Forms attachment filtering (configdata.properties)	Comments
file	file	Not applicable	This is a variable that passes in the file name to the custom function. Based on code in content.xml, the only correct value is file, without single quotes.
Comma separated list of extensions.	null 'exe,bin'	rejectedExtensions = rejectedExtensions = exe,bin	No extensions are rejected Reject all files with extension exe or bin, case insensitive
Comma separated list of starts with – file name match	null 'cow,horse'	rejectedStartsWith = rejectedStartsWith = cow,horse	No files are rejected Reject all files starting with cow or horse, case insensitive
Comma separated list of ends with – file name match	Null 'frog,pig'	rejectedEndsWith = rejectedEndsWith = frog,pig	No files are rejected Reject all files ending with frog or pig, case insensitive
Comma separated list of extensions.	null 'exe,bin'	onlyAllowExtensions = onlyAllowExtensions = exe,bin	All extensions are allowed Only allow files with extension exe or bin, case insensitive
Comma separated list of starts with – file name match	null 'cow,horse'	onlyAllowStartsWith = onlyAllowStartsWith = cow,horse	All files are allowed Only allow files starting with cow or horse, case insensitive
Comma separated list of ends with – file name match	Null 'frog,pig'	onlyAllowEndsWith = onlyAllowEndsWith = frog,pig	All files are allowed Only allow files ending with frog or pig, case insensitive