

File log4j2.properties

Il file **log4j2.properties**, è utilizzato per configurare le modalità di logging in geoweb.

Questa è la **versione 2** di [log4j](#), che è introdotta a partire dalla versione 4.6.X del framework.

L'introduzione è stata forzata in seguito alla scoperta di un rilevante bug di sicurezza. info [qui](#). Non sono affette dal bug le versioni 1.x di log4j, precedentemente utilizzate da Geoweb, ma la richiesta di aggiornamento da parte di certi clienti è stata pressante, ed è statao deciso di passare comunque all'ultima versione rilasciata.

Si possono specificare, tra l'altro, i *logging level* selettivamente e su quali file verranno salvati i log.

Per una guida completa fare riferimento a quella ufficiale [qui](#).

Logging Level

Impostando un logging level, si avrà come effetto quello di visualizzare loggati solo i messaggi di pari livello o superiore. Ecco la lista dei logging level, in ordine crescente dal meno al più restrittivo:

- **all** All levels including custom levels.
- **trace** Designates finer-grained informational events than the debug.
- **debug** Designates fine-grained informational events that are most useful to debug an application.
- **info** Designates informational messages that highlight the progress of the application at coarse-grained level.
- **warn** Designates potentially harmful situations.
- **error** Designates error events that might still allow the application to continue running.
- **fatal** Designates very severe error events that will presumably lead the application to abort.
- **off** The highest possible rank and is intended to turn off logging.

Per quanto riguarda in Geoweb, è buona prassi impostare il logging level a *debug* in fase di sviluppo/dispiegamento in ambiente di test/collaudato, ed ad *warn* od *error* in produzione.

Log generati da librerie di terze parti, come *Activti* e *MongoDB* vengono in genere tenuti sempre con logging level più restrittivi, come *error*, a meno di specifiche necessità di debugging.

I log relativi al *GwMailService* sono in genere configurati per essere loggati su un file separato.

Note sulla configurazione log4j2

- Ora si può configurare un lasso di tempo alla fine del quale il file di configurazione viene ricaricato e valutato. **Questo senza più necessità di stoppare il server**. Questo si imposta tramite il parametro, in secondi:

```
monitorInterval=
```

- Dentro i template, in alto, sono state portate delle *property* da cui si può più facilmente settare il log level per le varie componenti:

```
...  
#####  
# log threshold levels  
#####  
property.globalLogLevel = debug  
property.geowebLogLevel = debug  
property.securityLogLevel = info  
property.emailLogLevel = debug  
property.activitiLogLevel = error  
property.mongodbLogLevel = error  
...
```

- le property contenenti

```
appenders=
```

e

```
appenderRefs=
```

sono opzionali e sono obbligatorie solo in caso di nomi con caratteri speciali degli appender. Sono volutamente lasciate per capire più facilmente le correlazioni fra i vari elementi della configurazione

- per ogni **logger** va fatta una riga separata per ogni **appender** che si intende collegare ad esso
- inoltre valgono in generale le seguenti correlazioni determinate dai colori:

```
##### #  
geoweb logger  
#####  
logger.geoweb.name = com.geowebframework logger.geoweb.level =  
${geowebLogLevel} logger.geoweb.additivity = false logger.geoweb.appenderRefs  
= <color #ed1c24>stdout</color>,<color #ff7f27>rolling</color>  
logger.geoweb.appenderRef.<color #ed1c24>stdout</color>.ref = STDOUT  
logger.geoweb.appenderRef.<color #ff7f27>rolling</color>.ref = RollingFile  
##### #  
appenders  
#####  
#appenders definition can be optional, but it's useful to understand  
properties syntax correlation appenders = <color  
#ffaec9>console</color>,<color #c8bfe7>rolling</color>  
##### #  
STDOUT (Console) appender  
#####  
appender.<color #ffaec9>console</color>.type = Console appender.<color  
#ffaec9>console</color>.name = STDOUT appender.<color
```

```
#ffaec9>console</color>.layout.type = PatternLayout appender.<color
#ffaec9>console</color>.layout.pattern = %d [%t] %-5p %c - %m%n
appender.<color #ffaec9>console</color>.filter.threshold.type =
ThresholdFilter appender.<color
#ffaec9>console</color>.filter.threshold.level = ${globalLogLevel}
##### #
RollingFile (RollingFile) appender
#####
appender.<color #c8bfe7>rolling</color>.type = RollingFile appender.<color
#c8bfe7>rolling</color>.name = RollingFile appender.<color
#c8bfe7>rolling</color>.fileName =
${sys:catalina.home}/logs/geoweb_client.log appender.<color
#c8bfe7>rolling</color>.filePattern =
${sys:catalina.home}/logs/geoweb_client-%d{yyyy-MM-dd-HH-mm-ss}-%i.log
appender.<color #c8bfe7>rolling</color>.layout.type = PatternLayout
appender.<color #c8bfe7>rolling</color>.layout.pattern = %d [%t] %-5p %c -
%m%n appender.<color #c8bfe7>rolling</color>.policies.type = Policies
appender.<color #c8bfe7>rolling</color>.policies.time.type =
TimeBasedTriggeringPolicy appender.<color
#c8bfe7>rolling</color>.policies.time.interval = 86400 appender.<color
#c8bfe7>rolling</color>.policies.time.modulate = true appender.<color
#c8bfe7>rolling</color>.policies.size.type = SizeBasedTriggeringPolicy
appender.<color #c8bfe7>rolling</color>.policies.size.size = 20MB
appender.<color #c8bfe7>rolling</color>.strategy.type =
DefaultRolloverStrategy appender.<color #c8bfe7>rolling</color>.strategy.max
= 10 appender.<color #c8bfe7>rolling</color>.strategy.fileIndex = min
```

Template log4j2.properties (Webclient)

log4j2.properties

```
# documentation here:
# https://logging.apache.org/log4j/2.x/manual/configuration.html

#####
# log threshold levels
#####
property.globalLogLevel = debug
property.geowebLogLevel = debug
property.securityLogLevel = info
property.emailLogLevel = debug
property.activitiLogLevel = error
property.mongodbLogLevel = error

#####
# global settings
#####
name = GwPropertiesConfig
# status
```

```
# The level of internal Log4j events that should be logged to the
console.
# Valid values for this attribute are "off", "trace", "debug", "info",
"warn", "error", "fatal", and "all".
# Log4j will log details about initialization, rollover and other
internal actions to the status logger.
# Setting status="trace" is one of the first tools available to you if
you need to troubleshoot log4j.
# (Alternatively, setting system property log4j2.debug will also print
internal Log4j2 logging to the console,
# including internal logging that took place before the configuration
file was found.)
status = info
# dest
# Either "err" for stderr, "out" for stdout, a file path, or a URL.
dest = out
# monitorInterval
# The minimum amount of time, in seconds, that must elapse before the
file configuration is checked for changes.
monitorInterval=60

filter.threshold.type = ThresholdFilter
filter.threshold.level = ${globalLogLevel}

#####
# root logger
#####
rootLogger.level = ${globalLogLevel}
rootLogger.appenderRefs = stdout
rootLogger.appenderRef.stdout.ref = STDOUT

#####
# geoweb logger
#####
logger.geoweb.name = com.geowebframework
logger.geoweb.level = ${geowebLogLevel}
logger.geoweb.additivity = false
logger.geoweb.appenderRefs = stdout,rolling
logger.geoweb.appenderRef.stdout.ref = STDOUT
logger.geoweb.appenderRef.rolling.ref = RollingFile

#####
# security logger
#####
logger.security.name =
com.geowebframework.webclient.security.LogFileLogger
logger.security.level = ${securityLogLevel}
logger.security.additivity = false
logger.security.appenderRefs = stdout,rolling
```

```
logger.security.appenderRef.stdout.ref = STDOUT
logger.security.appenderRef.rolling.ref = RollingFileAccess

#####
# email logger
#####
logger.email.name = com.geowebframework.calendar.service.GwMailService
logger.email.level = ${emailLogLevel}
logger.email.additivity = false
logger.email.appenderRefs = stdout,rolling
logger.email.appenderRef.stdout.ref = STDOUT
logger.email.appenderRef.rolling.ref = RollingFileEmail

#####
# activiti logger
#####
logger.activiti.name = org.activiti
logger.activiti.level = ${activitiLogLevel}
logger.activiti.additivity = false
logger.activiti.appenderRefs = stdout,rolling
logger.activiti.appenderRef.stdout.ref = STDOUT
logger.activiti.appenderRef.rolling.ref = RollingFile

#####
# mongodb logger
#####
logger.mongodb.name = org.mongodb.driver.cluster
logger.mongodb.level = ${mongodbLogLevel}
logger.mongodb.additivity = false
logger.mongodb.appenderRefs = stdout,rolling
logger.mongodb.appenderRef.stdout.ref = STDOUT
logger.mongodb.appenderRef.rolling.ref = RollingFile

#####
# appenders
#####
#appenders definition can be optional, but it's useful to understand
properties syntax correlation
appenders = console,rolling,rollingEmail,rollingAccess

#####
# STDOUT (Console) appender
#####
appender.console.type = Console
appender.console.name = STDOUT
appender.console.layout.type = PatternLayout
appender.console.layout.pattern = %d [%t] %-5p %c - %m%n
appender.console.filter.threshold.type = ThresholdFilter
appender.console.filter.threshold.level = ${globalLogLevel}
```

```
#####  
# RollingFile (RollingFile) appender  
#####  
appender.rolling.type = RollingFile  
appender.rolling.name = RollingFile  
appender.rolling.fileName = ${sys:catalina.home}/logs/geoweb_client.log  
appender.rolling.filePattern = ${sys:catalina.home}/logs/geoweb_client-  
%d{yyyy-MM-dd-HH-mm-ss}-%i.log  
appender.rolling.layout.type = PatternLayout  
appender.rolling.layout.pattern = %d [%t] %-5p %c - %m%n  
appender.rolling.policies.type = Policies  
appender.rolling.policies.time.type = TimeBasedTriggeringPolicy  
appender.rolling.policies.time.interval = 86400  
appender.rolling.policies.time.modulate = true  
appender.rolling.policies.size.type = SizeBasedTriggeringPolicy  
appender.rolling.policies.size.size = 20MB  
appender.rolling.strategy.type = DefaultRolloverStrategy  
appender.rolling.strategy.max = 10  
appender.rolling.strategy.fileIndex = min  
  
#####  
# RollingFileEmail (RollingFile) appender  
#####  
appender.rollingEmail.type = RollingFile  
appender.rollingEmail.name = RollingFileEmail  
appender.rollingEmail.fileName = ${sys:catalina.home}/logs/gwMail.log  
appender.rollingEmail.filePattern = ${sys:catalina.home}/logs/gwMail-  
%d{MM-dd-yy-HH-mm-ss}-%i.log  
appender.rollingEmail.layout.type = PatternLayout  
appender.rollingEmail.layout.pattern = %d [%t] %-5p %c - %m%n  
appender.rollingEmail.policies.type = Policies  
appender.rollingEmail.policies.time.type = TimeBasedTriggeringPolicy  
appender.rollingEmail.policies.time.interval = 86400  
appender.rollingEmail.policies.time.modulate = true  
appender.rollingEmail.policies.size.type = SizeBasedTriggeringPolicy  
appender.rollingEmail.policies.size.size = 20MB  
appender.rollingEmail.strategy.type = DefaultRolloverStrategy  
appender.rollingEmail.strategy.max = 10  
appender.rollingEmail.strategy.fileIndex = min  
  
#####  
# RollingFileAccess (RollingFile) appender  
#####  
appender.rollingAccess.type = RollingFile  
appender.rollingAccess.name = RollingFileAccess  
appender.rollingAccess.fileName = ${catalina.home}/logs/gwAccess.log  
appender.rollingAccess.filePattern = ${catalina.home}/logs/gwAccess-  
%d{MM-dd-yy-HH-mm-ss}-%i.log
```

```

appender.rollingAccess.layout.type = PatternLayout
appender.rollingAccess.layout.pattern = %d [%t] %-5p %c - %m%n
appender.rollingAccess.policies.type = Policies
appender.rollingAccess.policies.time.type = TimeBasedTriggeringPolicy
appender.rollingAccess.policies.time.interval = 86400
appender.rollingAccess.policies.time.modulate = true
appender.rollingAccess.policies.size.type = SizeBasedTriggeringPolicy
appender.rollingAccess.policies.size.size = 20MB
appender.rollingAccess.strategy.type = DefaultRolloverStrategy
appender.rollingAccess.strategy.max = 10
appender.rollingAccess.strategy.fileIndex = min

```

Template log4j2.properties (Webadmin)

log4j2.properties

```

# documentation here:
# https://logging.apache.org/log4j/2.x/manual/configuration.html

#####
# log threshold levels
#####
property.globalLogLevel = debug
property.geowebLogLevel = debug
property.activitiLogLevel = error

#####
# global settings
#####
name = GwPropertiesConfig
# status
# The level of internal Log4j events that should be logged to the
console.
# Valid values for this attribute are "off", "trace", "debug", "info",
"warn", "error", "fatal", and "all".
# Log4j will log details about initialization, rollover and other
internal actions to the status logger.
# Setting status="trace" is one of the first tools available to you if
you need to troubleshoot log4j.
# (Alternatively, setting system property log4j2.debug will also print
internal Log4j2 logging to the console,
# including internal logging that took place before the configuration
file was found.)
status = info
# dest
# Either "err" for stderr, "out" for stdout, a file path, or a URL.
dest = out
# monitorInterval

```

```
# The minimum amount of time, in seconds, that must elapse before the
file configuration is checked for changes.
monitorInterval=60

filter.threshold.type = ThresholdFilter
filter.threshold.level = ${globalLogLevel}

#####
# root logger
#####
rootLogger.level = ${globalLogLevel}
rootLogger.appenderRefs = stdout
rootLogger.appenderRef.stdout.ref = STDOUT

#####
# geoweb logger
#####
logger.geoweb.name = com.geowebframework
logger.geoweb.level = ${geowebLogLevel}
logger.geoweb.additivity = false
logger.geoweb.appenderRefs = stdout,rolling
logger.geoweb.appenderRef.stdout.ref = STDOUT
logger.geoweb.appenderRef.rolling.ref = RollingFile

#####
# activiti logger
#####
logger.activiti.name = org.activiti
logger.activiti.level = ${activitiLogLevel}
logger.activiti.additivity = false
logger.activiti.appenderRefs = stdout,rolling
logger.activiti.appenderRef.stdout.ref = STDOUT
logger.activiti.appenderRef.rolling.ref = RollingFile

#####
# appenders
#####
#appenders definition can be optional, but it's useful to undestand
properties syntax correlation
appenders = console,rolling

#####
# STDOUT (Console) appender
#####
appender.console.type = Console
appender.console.name = STDOUT
appender.console.layout.type = PatternLayout
```

```
appender.console.layout.pattern = %d [%t] %-5p %c - %m%n
appender.console.filter.threshold.type = ThresholdFilter
appender.console.filter.threshold.level = ${globalLogLevel}

#####
# RollingFile (RollingFile) appender
#####
appender.rolling.type = RollingFile
appender.rolling.name = RollingFile
appender.rolling.fileName = ${sys:catalina.home}/logs/geoweb_admin.log
appender.rolling.filePattern = ${sys:catalina.home}/logs/geoweb_admin-
%d{yyyy-MM-dd-HH-mm-ss}-%i.log
appender.rolling.layout.type = PatternLayout
appender.rolling.layout.pattern = %d [%t] %-5p %c - %m%n
appender.rolling.policies.type = Policies
appender.rolling.policies.time.type = TimeBasedTriggeringPolicy
appender.rolling.policies.time.interval = 86400
appender.rolling.policies.time.modulate = true
appender.rolling.policies.size.type = SizeBasedTriggeringPolicy
appender.rolling.policies.size.size=10MB
appender.rolling.strategy.type = DefaultRolloverStrategy
appender.rolling.strategy.max = 10
appender.rolling.strategy.fileIndex = min
```

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