dans-scala-lib servlet logging

Logging request and response data in a standardized way

Joke Pol Richard van Heest

Why servlet logging?

- Insight in servlet calls
- Standardized
- Simple calls to add to existing servlet
- Masking if necessary

Log output (GET)

actionHeaders=[]

```
curl http://deasy.dans.knaw.nl:20140/
[2019-02-18 13:48:30,177] INFO GET
http://deasy.dans.knaw.nl:20140/ remote=192.168.33.1;
params=[]; headers=[User-Agent -> [curl/7.54.0],
Accept \rightarrow [*/*], Host \rightarrow [deasy.dans.knaw.nl:20140]]
[2019-02-18 13:48:30,217] INFO GET
http://deasy.dans.knaw.nl:20140/ returned status=200;
authHeaders=[Date -> [Mon, 18 Feb 2019 12:48:29 GMT],
Content-Type -> [text/plain;charset=utf-8]];
```

Log output (invalid POST call)

curl -X POST

```
http://deasy.dans.knaw.nl:20140/create?doi
[2019-02-18 13:49:04,123] INFO POST
http://deasy.dans.knaw.nl:20140/create
remote=192.168.33.1; params=[doi -> []];
headers=[User-Agent -> [curl/7.54.0], Accept -> [*/*],
Host -> [deasy.dans.knaw.nl:20140]]
[2019-02-18 13:49:04,132] INFO POST
http://deasy.dans.knaw.nl:20140/create returned
status=400; authHeaders=[Date -> [Mon, 18 Feb 2019
12:49:04 GMT]]; actionHeaders=[]
```

Log output (POST with params)

```
curl -X POST
http://deasy.dans.knaw.nl:20140/create?type=doi
[2019-02-18 13:49:41,174] INFO POST
http://deasy.dans.knaw.nl:20140/create
remote=192.168.33.1; params=[type -> [doi]];
headers=[User-Agent -> [curl/7.54.0], Accept -> [*/*],
Host -> [deasy.dans.knaw.nl:20140]]
[2019-02-18 13:49:41,432] INFO POST
http://deasy.dans.knaw.nl:20140/create returned
status=201; authHeaders=[Date -> [Mon, 18 Feb 2019
12:49:41 GMT]]; actionHeaders=[]
```

Log output (masked)

```
easy-deposit-api login
[2019-02-18 14:31:12,503] INFO POST
http://localhost:20190/auth/login
remote=**.**.**.1; params=[]; headers=[<...>,
Authorization -> [Basic *****], <...>]
[2019-02-18 14:31:13,026] INFO POST
http://localhost:20190/auth/login returned
status=204; authHeaders=[
Set-Cookie -> [scentry.auth.default.user=*****],
<...>, REMOTE USER -> [*****]]; actionHeaders=[]
```

Log output

```
[2019-02-18 13:48:30,177] INFO GET http://deasy.dans.knaw.nl:20140/ remote=192.168.33.1; params=[]; headers=[02019-02-18 13:48:30,217] INFO GET http://deasy.dans.knaw.nl:20140/ returned status=200; authHeaders=[Date -> [2019-02-18 13:49:04,123] INFO POST http://deasy.dans.knaw.nl:20140/create remote=192.168.33.1; params=[doi -: [2019-02-18 13:49:04,132] INFO POST http://deasy.dans.knaw.nl:20140/create returned status=400; authHeaders=[02019-02-18 13:49:41,174] INFO POST http://deasy.dans.knaw.nl:20140/create remote=192.168.33.1; params=[type -: [2019-02-18 13:49:41,429] INFO Minted a new doi: 10.5072/dans-x6f-kf66 [2019-02-18 13:49:41,432] INFO POST http://deasy.dans.knaw.nl:20140/create returned status=201; authHeaders=[02019-02-18 13:49:41,432] INFO POST http://deasy.dans.knaw.nl:20140/create returned status=201; authHeaders=[02019-0
```

Example

```
import org.scalatra.{ Ok, ScalatraServlet }
class MyServlet extends ScalatraServlet {
 get("/") {
   Ok("foobar")
```

Example (plain logging)

```
import nl.knaw.dans.lib.logging.DebugEnhancedLogging
import nl.knaw.dans.lib.logging.servlet. // IMPORT!!!
import org.scalatra.{ Ok, ScalatraServlet }
class MyServlet extends ScalatraServlet
 with ServletLogger // add servlet logging
 with PlainLogFormatter // select plain logging
 with DebugEnhancedLogging { // select logger
 get("/") {
   Ok("foobar").logResponse // add response log
```

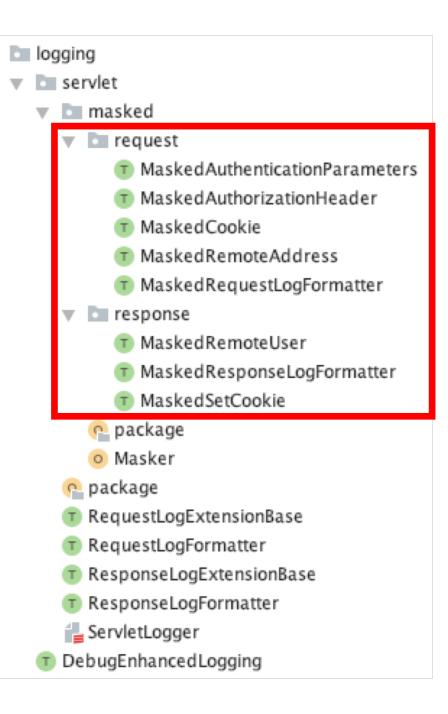
Example (masking)

```
import nl.knaw.dans.lib.logging.DebugEnhancedLogging
import nl.knaw.dans.lib.logging.servlet.
import org.scalatra.{ Ok, ScalatraServlet }
class MyServlet extends ScalatraServlet
 with ServletLogger
 with MaskedLogFormatter // select masked logging
 with DebugEnhancedLogging {
 get("/") {
   Ok("foobar").logResponse
```

Example (partial masking)

```
import nl.knaw.dans.lib.logging.DebugEnhancedLogging
import nl.knaw.dans.lib.logging.servlet.
import nl.knaw.dans.lib.logging.servlet.masked. //IMPORT
import org.scalatra.{ Ok, ScalatraServlet }
class MyServlet extends ScalatraServlet
 with ServletLogger
 with PlainLogFormatter // select plain logging
 with MaskedRemoteAddress // add masking parts
 with MaskedRemoteUser
 with DebugEnhancedLogging {
   //...
```

Example (partial masking)



Hackethon

- easy-auth-info
- easy-bag-index
- easy-bag-store
- easy-deposit-agreement-creator
- easy-deposit-api
- easy-download
- easy-pid-generator
- easy-solr4files-index
- easy-sword2
- easy-validate-dans-bag

- narcis-pid-aggregator
- narcis-pid-manager
- narcis-pid-graph

Hackethon (tasks for each project)

- 1. Add dans-scala-lib v1.5.0 to pom.xml
- 2. Add logging to each servlet
- 3. Deploy on deasy and test that the logging shows up in /var/opt/dans.knaw.nl/log/easy-*/easy-*.log
- 4. Create a pull request