

D4Science Infrastructure - VM Creation #10930

Task # 10929 (Closed): Accounting Service Cluster dev/preprod

Create accounting-service1-d

Jan 15, 2018 04:18 PM - Luca Frosini

Status:	Closed	Start date:	Jan 15, 2018
Priority:	Urgent	Due date:	
Assignee:	_InfraScience Systems Engineer	% Done:	100%
Target version:	Resource Provisioning	Applications list and version:	accounting-service (latest)
Infrastructure:	Development, Pre-Production	Applications context path:	
RAM:	4	External storage data disk:	
CPU:	2	Smartgears auth connector:	
DiskSpace:	25	data transfer enabled:	No
Smartgears:	Yes	PostgreSQL database:	No
Smartgears Version:	latest	Number of VMs:	1
Application Instructions:			
Smartgears scopes:	/gcube /gcube/preprod /gcube/preprod/preVRE /gcube/preprod/preECO /gcube/preprod/Dorne /gcube/devNext /gcube/devNext/NextNext /gcube/devsec /gcube/devsec/devVRE		
Description			
The machine will host accounting-service as 'accounting-service-d' (playbook is already available)			
Related issues:			
Blocks D4Science Infrastructure - Task #10931: Please create HAProxy instance...		Closed	Jan 15, 2018
Blocked by D4Science Infrastructure - Task #10934: Please fix ansible playboo...		Closed	Jan 15, 2018

History

#1 - Jan 15, 2018 04:20 PM - Luca Frosini

- Smartgears scopes updated

#2 - Jan 15, 2018 04:21 PM - Luca Frosini

- Blocks Task #10931: Please create HAProxy instance in front of accounting-service-d and accounting-service1-d added

#3 - Jan 16, 2018 10:59 AM - Roberto Cirillo

- Priority changed from Normal to Urgent

#4 - Jan 17, 2018 03:36 PM - Andrea Dell'Amico

- Status changed from New to In Progress

#5 - Jan 17, 2018 05:32 PM - Andrea Dell'Amico

- RAM changed from 2 to 4

- DiskSpace changed from 10 to 25
- Infrastructure Development added
- Infrastructure deleted (Production)

#6 - Jan 17, 2018 05:33 PM - Andrea Dell'Amico

- Smartgears scopes updated

#7 - Jan 17, 2018 05:36 PM - Andrea Dell'Amico

On accounting-service-d.d4science.org the scopes listed into container.xml are:

```
/gcube
/gcube/preprod
/gcube/preprod/preVRE
/gcube/preprod/preECO
/gcube/preprod/Dorne
/gcube/devNext
/gcube/devNext/NextNext
```

What are the correct ones?

#8 - Jan 17, 2018 05:38 PM - Luca Frosini

Yes should also add

```
/gcube/devsec
/gcube/devsec/devVRE
```

#9 - Jan 17, 2018 05:40 PM - Andrea Dell'Amico

- Smartgears scopes updated

hostname and IP address are going to be: accounting-service1-d.dev.d4science.org 146.48.122.56

#10 - Jan 17, 2018 05:43 PM - Luca Frosini

If we use dev.d4science.org domain we can avoid to use -d but I don't any problem if you prefer with -d suffix in hostname

#11 - Jan 17, 2018 05:49 PM - Andrea Dell'Amico

Luca Frosini wrote:

If we use dev.d4science.org domain we can avoid to use -d but I don't any problem if you prefer with -d suffix in hostname

The -d suffix is needed because otherwise when connected via ssh it would be impossible to distinguish between a dev and a prod server. The BP for the server naming are seldom used, but they exist: https://support.d4science.org/projects/aginfraplut/wiki/Best_practices_for_the_servers_naming

#12 - Jan 17, 2018 06:07 PM - Luca Frosini

Andrea Dell'Amico wrote:

Luca Frosini wrote:

If we use dev.d4science.org domain we can avoid to use -d but I don't any problem if you prefer with -d suffix in hostname

The -d suffix is needed because otherwise when connected via ssh it would be impossible to distinguish between a dev and a prod server. The BP for the server naming are seldom used, but they exist:

https://support.d4science.org/projects/aginfraplut/wiki/Best_practices_for_the_servers_naming

You are right, I forget it.

#13 - Jan 17, 2018 06:38 PM - Andrea Dell'Amico

Provisioning is in progress.

#14 - Jan 17, 2018 06:45 PM - Andrea Dell'Amico

The Oracle JDK is failing to download from the Oracle site. I'll try again later.

#15 - Jan 18, 2018 01:20 PM - Andrea Dell'Amico

The oracle java8 installer is still broken, I guess the reason is that Oracle just released jdk-8u161. I asked the package author for a fix.

Otherwise we should try OpenJDK.

#16 - Jan 18, 2018 04:20 PM - Luca Frosini

I think we can give a try to OpenJDK

#17 - Jan 18, 2018 04:41 PM - Andrea Dell'Amico

The service starts, but then I see this exception:

```
2018-01-18 16:39:47,088 [catalina-exec-6] ERROR org.apache.catalina.core.ContainerBase.[Catalina].[localhost].
[/accounting-service].[org.gcube.accounting.service.AccountingResource]- Servlet.service() for servlet [org.gc
ube.accounting.service.AccountingResource] in context with path [/accounting-service] threw exception
java.lang.IllegalStateException: Cannot call sendError() after the response has been committed
    at org.apache.catalina.connector.ResponseFacade.sendError(ResponseFacade.java:450)
    at org.gcube.smartgears.managers.RequestManager.handleError(RequestManager.java:227)
    at org.gcube.smartgears.managers.RequestManager.doFilter(RequestManager.java:98)
    at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:241)
    at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:208)
    at org.apache.catalina.core.StandardWrapperValve.invoke(StandardWrapperValve.java:220)
    at org.apache.catalina.core.StandardContextValve.invoke(StandardContextValve.java:122)
    at org.apache.catalina.authenticator.AuthenticatorBase.invoke(AuthenticatorBase.java:501)
    at org.apache.catalina.core.StandardHostValve.invoke(StandardHostValve.java:170)
    at org.apache.catalina.valves.ErrorReportValve.invoke(ErrorReportValve.java:98)
    at org.apache.catalina.valves.AccessLogValve.invoke(AccessLogValve.java:950)
    at org.apache.catalina.valves.RemoteIpValve.invoke(RemoteIpValve.java:683)
    at org.apache.catalina.core.StandardEngineValve.invoke(StandardEngineValve.java:116)
    at org.apache.catalina.connector.CoyoteAdapter.service(CoyoteAdapter.java:408)
    at org.apache.coyote.http11.AbstractHttp11Processor.process(AbstractHttp11Processor.java:1041)
    at org.apache.coyote.AbstractProtocol$AbstractConnectionHandler.process(AbstractProtocol.java:607)
    at org.apache.tomcat.util.net.JIoEndpoint$SocketProcessor.run(JIoEndpoint.java:313)
    at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149)
    at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624)
    at java.lang.Thread.run(Thread.java:748)
```

#18 - Jan 18, 2018 04:43 PM - Andrea Dell'Amico

- % Done changed from 0 to 70

And, in catalina.out:

```
javax.servlet.ServletException: org.glassfish.jersey.server.ContainerException: java.lang.NoClassDefFoundError
: org.gcube/smartgears/ApplicationManager
    at org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:393)
    at org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:381)
    at org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:344)
    at org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:221)
    at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:303)
    at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:208)
    at org.gcube.smartgears.managers.RequestManager.doFilter(RequestManager.java:95)
    at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:241)
    at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:208)
    at org.apache.catalina.core.StandardWrapperValve.invoke(StandardWrapperValve.java:220)
    at org.apache.catalina.core.StandardContextValve.invoke(StandardContextValve.java:122)
    at org.apache.catalina.authenticator.AuthenticatorBase.invoke(AuthenticatorBase.java:501)
    at org.apache.catalina.core.StandardHostValve.invoke(StandardHostValve.java:170)
    at org.apache.catalina.valves.ErrorReportValve.invoke(ErrorReportValve.java:98)
    at org.apache.catalina.valves.AccessLogValve.invoke(AccessLogValve.java:950)
    at org.apache.catalina.valves.RemoteIpValve.invoke(RemoteIpValve.java:683)
    at org.apache.catalina.core.StandardEngineValve.invoke(StandardEngineValve.java:116)
    at org.apache.catalina.connector.CoyoteAdapter.service(CoyoteAdapter.java:408)
    at org.apache.coyote.http11.AbstractHttp11Processor.process(AbstractHttp11Processor.java:1041)
    at org.apache.coyote.AbstractProtocol$AbstractConnectionHandler.process(AbstractProtocol.java:607)
    at org.apache.tomcat.util.net.JIoEndpoint$SocketProcessor.run(JIoEndpoint.java:313)
    at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149)
    at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624)
    at java.lang.Thread.run(Thread.java:748)
Caused by: org.glassfish.jersey.server.ContainerException: java.lang.NoClassDefFoundError: org.gcube/smartgear
s/ApplicationManager
    at org.glassfish.jersey.servlet.internal.ResponseWriter.rethrow(ResponseWriter.java:256)
    at org.glassfish.jersey.servlet.internal.ResponseWriter.failure(ResponseWriter.java:238)
    at org.glassfish.jersey.server.ServerRuntime$Responder.process(ServerRuntime.java:439)
    at org.glassfish.jersey.server.ServerRuntime$1.run(ServerRuntime.java:277)
```

```
at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271)
at org.glassfish.jersey.internal.Errors$1.call(Errors.java:267)
at org.glassfish.jersey.internal.Errors.process(Errors.java:315)
at org.glassfish.jersey.internal.Errors.process(Errors.java:297)
at org.glassfish.jersey.internal.Errors.process(Errors.java:267)
at org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:297)
at org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:254)
at org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1030)
at org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:373)
... 23 more
```

#19 - Jan 18, 2018 04:48 PM - Luca Frosini

- % Done changed from 70 to 0

I think is better to restore the use of Oracle JDK

#20 - Jan 18, 2018 04:51 PM - Luca Frosini

I found that the problem is in the service with has common-smartgears-app to provided.
The strange thing is that it worked with Oracle JDK.

I'm going to fix dependencies on accounting-service

#21 - Jan 18, 2018 05:02 PM - Luca Frosini

I lauched the compilation of the accounting-service on ETICS. I'll advise you as soon as it will succeed to deploy the service again.

#22 - Jan 18, 2018 05:29 PM - Luca Frosini

Launching the compilation from GUI fails due to use of java 1.7 instead of 1.8.
@mariaantonietta.digirolamo@eng.it is investigating such an issue.

#23 - Jan 19, 2018 11:15 AM - Maria Di Girolamo

- Status changed from In Progress to Closed

- % Done changed from 0 to 100

Dear @luca.frosini@isti.cnr.it
due the updating of the common configuration scanner , it was needed the re-build of accounting-analytics.
Infact accounting-service try the old configuration of accounting-analytics (and it not found).

The build of accounting-analytics and accounting-service have been executed with success.
The report of the last remote build of accounting-service is available here:
http://etics.esl.eng.it/etics-repository-ws/reports/id/72f3958f-604b-4213-b8ee-3e15a064355e/centos6.9_x86_64_gcc447/-/reports/build-status.xml.

#24 - Jan 19, 2018 11:20 AM - Luca Frosini

- Status changed from Closed to In Progress

- % Done changed from 100 to 0

Thank you @mariaantonietta.digirolamo@eng.it

#25 - Jan 19, 2018 11:22 AM - Luca Frosini

@andrea.dellamico@isti.cnr.it can you please retry?

#26 - Jan 19, 2018 11:37 AM - Andrea Dell'Amico

It seems that the new build is not present on nexus yet.

#27 - Jan 19, 2018 12:55 PM - Andrea Dell'Amico

I tried to force a download, but I still got the same version as yesterday.

#28 - Jan 19, 2018 03:19 PM - Andrea Dell'Amico

- Status changed from In Progress to Feedback

- % Done changed from 0 to 100

Now it worked. The exceptions are gone.

#29 - Jan 19, 2018 03:31 PM - Andrea Dell'Amico

- Blocked by Task #10934: Please fix ansible playbook to copy document-store-lib-couchbase in tomcat/lib and remove document-store-lib-accounting-service in accountign-service installation added

#30 - Jan 19, 2018 04:36 PM - Andrea Dell'Amico

I just run the playbook again with the fixed tasks.

#31 - Jan 19, 2018 05:14 PM - Luca Frosini

- Status changed from Feedback to Closed

the service seems working.
Here the stress tests results I made:

```
$ ab -n 1000 -T 'application/json' -p ~/workspace/Varie/accounting-data-simple.txt -H 'gcube-token: XXXXXXXXXXXX  
XXXXXXXXXX' https://accounting-service1-d.dev.d4science.org:443/accounting-service/record  
This is ApacheBench, Version 2.3 <$Revision: 1796539 $>  
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/  
Licensed to The Apache Software Foundation, http://www.apache.org/
```

```
Benchmarking accounting-service1-d.dev.d4science.org (be patient)  
Completed 100 requests  
Completed 200 requests  
Completed 300 requests  
Completed 400 requests  
Completed 500 requests  
Completed 600 requests  
Completed 700 requests  
Completed 800 requests  
Completed 900 requests  
Completed 1000 requests  
Finished 1000 requests
```

```
Server Software:      nginx  
Server Hostname:      accounting-service1-d.dev.d4science.org  
Server Port:          443  
SSL/TLS Protocol:     TLSv1.2,ECDHE-RSA-AES128-GCM-SHA256,2048,128  
TLS Server Name:      accounting-service1-d.dev.d4science.org
```

```
Document Path:        /accounting-service/record  
Document Length:      0 bytes
```

```
Concurrency Level:     1  
Time taken for tests:  5.260 seconds  
Complete requests:     1000  
Failed requests:       0  
Total transferred:     536000 bytes  
Total body sent:       787000  
HTML transferred:      0 bytes  
Requests per second:   190.11 [#/sec] (mean)  
Time per request:      5.260 [ms] (mean)  
Time per request:      5.260 [ms] (mean, across all concurrent requests)  
Transfer rate:          99.51 [Kbytes/sec] received  
                        146.11 kb/s sent  
                        245.62 kb/s total
```

Connection Times (ms)					
	min	mean[+/-sd]	median	max	
Connect:	3	3 0.3	3	7	
Processing:	1	2 2.5	2	68	
Waiting:	1	2 2.5	2	68	
Total:	4	5 2.5	5	72	

Percentage of the requests served within a certain time (ms)		
50%	5	
66%	5	
75%	5	
80%	5	
90%	6	
95%	7	
98%	8	
99%	9	

100% 72 (longest request)

and

```
$ ab -n 10000 -C 10 -T 'application/json' -p ~/workspace/Varie/accounting-data-simple.txt -H 'gcube-token: xxx
xxxxxxxxxxxxxxxxxxxxx' https://accounting-service-d.d4science.org:443/accounting-service/record
This is ApacheBench, Version 2.3 <$Revision: 1796539 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/
```

Benchmarking accounting-service-d.d4science.org (be patient)

```
Completed 1000 requests
Completed 2000 requests
Completed 3000 requests
Completed 4000 requests
Completed 5000 requests
Completed 6000 requests
Completed 7000 requests
Completed 8000 requests
Completed 9000 requests
Completed 10000 requests
Finished 10000 requests
```

```
Server Software:      nginx
Server Hostname:      accounting-service-d.d4science.org
Server Port:          443
SSL/TLS Protocol:     TLSv1.2,ECDHE-ECDSA-AES128-GCM-SHA256,256,128
TLS Server Name:      accounting-service-d.d4science.org
```

```
Document Path:        /accounting-service/record
Document Length:       0 bytes
```

```
Concurrency Level:     1
Time taken for tests:   50.595 seconds
Complete requests:      10000
Failed requests:         0
Total transferred:      5360000 bytes
Total body sent:        7940000
HTML transferred:       0 bytes
Requests per second:    197.65 [#/sec] (mean)
Time per request:       5.059 [ms] (mean)
Time per request:       5.059 [ms] (mean, across all concurrent requests)
Transfer rate:          103.46 [Kbytes/sec] received
                        153.25 kb/s sent
                        256.71 kb/s total
```

Connection Times (ms)

	min	max	mean[+/-sd]	median	max
Connect:	2	4	14.7	3	1034
Processing:	1	1	4.4	1	419
Waiting:	1	1	4.4	1	419
Total:	3	5	15.5	4	1036

Percentage of the requests served within a certain time (ms)

50%	4
66%	5
75%	5
80%	5
90%	5
95%	6
98%	7
99%	10
100%	1036 (longest request)

#32 - Jan 23, 2018 02:29 PM - Andrea Dell'Amico

- Status changed from Closed to In Progress

- % Done changed from 100 to 80

I'm reopening this one because the discussion was ongoing on the wrong ticket. There's a new exception now:

```
2018-01-23 14:24:57,326 [ContainerBackgroundProcessor[StandardEngine[Catalina]]] INFO org.apache.catalina.sta
rtup.HostConfig- Undeploying context [/accounting-service]
```

```

2018-01-23 14:24:57,330 [ContainerBackgroundProcessor[StandardEngine[Catalina]]] ERROR org.apache.catalina.core.ContainerBase.[Catalina].[localhost].[/accounting-service]- Servlet org.gcube.accounting.service.AccountingResource threw unload() exception
javax.servlet.ServletException: Servlet.destroy() for servlet org.gcube.accounting.service.AccountingResource threw exception
    at org.apache.catalina.core.StandardWrapper.unload(StandardWrapper.java:1502)
    at org.apache.catalina.core.StandardWrapper.stopInternal(StandardWrapper.java:1842)
    at org.apache.catalina.util.LifecycleBase.stop(LifecycleBase.java:232)
    at org.apache.catalina.core.StandardContext.stopInternal(StandardContext.java:5684)
    at org.apache.catalina.util.LifecycleBase.stop(LifecycleBase.java:232)
    at org.apache.catalina.core.ContainerBase.removeChild(ContainerBase.java:1028)
    at org.apache.catalina.startup.HostConfig.undeploy(HostConfig.java:1478)
    at org.apache.catalina.startup.HostConfig.checkResources(HostConfig.java:1406)
    at org.apache.catalina.startup.HostConfig.check(HostConfig.java:1626)
    at org.apache.catalina.startup.HostConfig.lifecycleEvent(HostConfig.java:328)
    at org.apache.catalina.util.LifecycleSupport.fireLifecycleEvent(LifecycleSupport.java:117)
    at org.apache.catalina.util.LifecycleBase.fireLifecycleEvent(LifecycleBase.java:90)
    at org.apache.catalina.core.ContainerBase.backgroundProcess(ContainerBase.java:1374)
    at org.apache.catalina.core.ContainerBase$ContainerBackgroundProcessor.processChildren(ContainerBase.java:1530)
    at org.apache.catalina.core.ContainerBase$ContainerBackgroundProcessor.processChildren(ContainerBase.java:1540)
    at org.apache.catalina.core.ContainerBase$ContainerBackgroundProcessor.run(ContainerBase.java:1519)
    at java.lang.Thread.run(Thread.java:748)
Caused by: java.lang.NoClassDefFoundError: org/jvnet/hk2/internal/ServiceLocatorImpl$7
    at org.jvnet.hk2.internal.ServiceLocatorImpl.shutdown(ServiceLocatorImpl.java:811)
    at org.glassfish.jersey.internal.inject.Injections.shutdownLocator(Injections.java:285)
    at org.glassfish.jersey.server.internal.ConfigHelper$ServiceLocatorShutdownListener.onShutdown(ConfigHelper.java:149)
    at org.glassfish.jersey.server.internal.ConfigHelper$2.onShutdown(ConfigHelper.java:115)
    at org.glassfish.jersey.servlet.ServletContainer.destroy(ServletContainer.java:352)
    at org.apache.catalina.core.StandardWrapper.unload(StandardWrapper.java:1481)
    ... 16 more
Caused by: java.lang.ClassNotFoundException: org.jvnet.hk2.internal.ServiceLocatorImpl$7
    at org.apache.catalina.loader.WebappClassLoader.loadClass(WebappClassLoader.java:1719)
    at org.apache.catalina.loader.WebappClassLoader.loadClass(WebappClassLoader.java:1570)
    ... 22 more

```

#33 - Jan 23, 2018 02:31 PM - Andrea Dell'Amico

- Status changed from In Progress to Closed

- % Done changed from 80 to 100

Sorry, I was wrong. It was from an older run. The service has been deployed correctly.

#34 - Jan 23, 2018 02:51 PM - Luca Frosini

I confirm that the service is running correctly:

```
$ ab -n 10000 -C 10 -T 'application/json' -p ~/workspace/Varie/accounting-data-simple.txt -H 'gcube-token: 7c66c94c-7f6e-49cd-9a34-909cd3832f3e-98187548' https://accounting-service1-d.dev.d4science.org:443/accounting-service/record
```

This is ApacheBench, Version 2.3 <\$Revision: 1796539 \$>
 Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
 Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking accounting-service1-d.dev.d4science.org (be patient)

```

Completed 1000 requests
Completed 2000 requests
Completed 3000 requests
Completed 4000 requests
Completed 5000 requests
Completed 6000 requests
Completed 7000 requests
Completed 8000 requests
Completed 9000 requests
Completed 10000 requests
Finished 10000 requests

```

```

Server Software:      nginx
Server Hostname:      accounting-service1-d.dev.d4science.org
Server Port:          443
SSL/TLS Protocol:     TLSv1.2,ECDHE-RSA-AES128-GCM-SHA256,2048,128

```

TLS Server Name: accounting-service1-d.dev.d4science.org

Document Path: /accounting-service/record
Document Length: 0 bytes

Concurrency Level: 1
Time taken for tests: 46.901 seconds
Complete requests: 10000
Failed requests: 0
Total transferred: 5360000 bytes
Total body sent: 7990000
HTML transferred: 0 bytes
Requests per second: 213.22 [#/sec] (mean)
Time per request: 4.690 [ms] (mean)
Time per request: 4.690 [ms] (mean, across all concurrent requests)
Transfer rate: 111.60 [Kbytes/sec] received
166.37 kb/s sent
277.97 kb/s total

Connection Times (ms)

	min	mean[+/-sd]	median	max
Connect:	3	4 0.4	4	17
Processing:	1	1 1.0	1	75
Waiting:	1	1 1.0	1	75
Total:	4	5 1.1	5	79

Percentage of the requests served within a certain time (ms)

50%	5
66%	5
75%	5
80%	5
90%	5
95%	5
98%	6
99%	7
100%	79 (longest request)