

D4Science Infrastructure - Task #4414

New server for the Broker Service

Jun 23, 2016 05:31 PM - Michele Artini

Status:	Closed	Start date:	Mar 23, 2017
Priority:	Normal	Due date:	
Assignee:	_InfraScience Systems Engineer	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	UnSprintable		
Infrastructure:	Development		
Description Can you prepare a virtual machine for the development of the Broker Service? We need the following components: <ul style="list-style-type: none">• Java 8• Tomcat 8• RabbitMQ (latest version)• ElasticSearch (latest version) At the beginning I think that it is sufficient a machine with 4 cores and 8 GB. Can you also add the administrator rights to me, claudio and alessia?			
Subtasks: Task # 7654: Configure logrotate for Literature Broker Service Closed			

History

#1 - Jun 23, 2016 05:38 PM - Pasquale Pagano

- Tracker changed from Support to Task

#2 - Jun 23, 2016 09:24 PM - Andrea Dell'Amico

There is no tomcat 8 package available on our supported distribution. Is it really needed?

#3 - Jun 24, 2016 09:26 AM - Michele Artini

No it's not needed, you can install tomcat 7.

#4 - Jun 25, 2016 04:06 PM - Andrea Dell'Amico

VM name is going to be broker1-dev-dnet.d4science.org, IP 146.48.123.4

#5 - Jun 29, 2016 06:41 PM - Andrea Dell'Amico

- Status changed from New to In Progress

- % Done changed from 0 to 50

You can access the machine and the services are running. rabbitmq needs some love:

- Can you remind me of what plugins are needed?
- Do the server needs to be contacted from local only?
- does elasticsearch need to be contacted from outside?

In the next days I'll also provide an nginx instance acting as reverse proxy.

#6 - Jun 30, 2016 04:14 PM - Andrea Dell'Amico

- % Done changed from 50 to 90

We only need the reverse proxy.

#7 - Jul 27, 2016 11:07 AM - Michele Artini

Andrea, can you increase the RAM?

At least 16 GBs are required.

Today the server is used for a demo, so
you should perform the update in the next days.

#8 - Jul 27, 2016 11:26 AM - Tommaso Piccioli

VM prepared to be restarted with 8 vcpu and 16 GB ram.

#9 - Aug 01, 2016 01:48 PM - Andrea Dell'Amico

Server rebooted with the new resources.

Let me know what parts need to be contacted directly, because we still need a reverse proxy before the applications.

#10 - Oct 28, 2016 03:08 PM - Michele Artini

The following services should be accessible only from the ISTI network:

- Tomcat (port 8080)
- ElasticSearch (9200 and 9300)
- RabbitMQ (5672 and 15672)

#11 - Nov 03, 2016 10:36 AM - Michele Artini

Paolo says to suspend the ticket for a couple of days, he has to perform a demo.

(Probably it will be necessary to clone this server to realize a specific demo server).

#12 - Jan 31, 2017 03:39 PM - Michele Artini

Can you close the access to this server?

The broker will be available in a new server as described in [#6748](#).

#13 - Feb 22, 2017 10:12 AM - Michele Artini

We have deployed a new release of the broker service;
it has been developed using spring-boot (so tomcat can be uninstalled);

We have copied the necessary files in the following folders:

- /usr/lib/dnet : contains the executable jar
- /etc/dnet : contains properties files
- /var/lib/dnet : contains the data

It is also necessary to update the firewall configuration for port 8080:

- CLOSED by default
- OPEN for ISTI and NKUA addresses

#14 - Apr 11, 2017 08:02 PM - Andrea Dell'Amico

- Status changed from In Progress to Closed

Done.

#15 - Jul 06, 2017 09:53 AM - Claudio Atzori

- Status changed from Closed to In Progress

- Assignee changed from Andrea Dell'Amico to _InfraScience Systems Engineer

broker1-dev-dnet.d4science.org is out of free disk space.

The majority seems to be used by elasticsearch and rabbitmq

```
root@broker1-dev-dnet:~# df -h
```

```

Filesystem      Size  Used Avail Use% Mounted on
udev            10M   4.0K   10M   1% /dev
tmpfs           3.1G   88K   3.1G   1% /run
/dev/xvda2      80G   80G   33M 100% /
none            4.0K     0   4.0K   0% /sys/fs/cgroup
none            5.0M     0   5.0M   0% /run/lock
none            7.7G     0   7.7G   0% /run/shm
none            100M     0  100M   0% /run/user
root@broker1-dev-dnet:~# du -hsc /var/lib/rabbitmq/
38G /var/lib/rabbitmq/
38G total
root@broker1-dev-dnet:~# du -hsc /var/lib/elasticsearch/
40G /var/lib/elasticsearch/
40G total

```

Is it possible to extend the volume? In the worst case we'd need ~200GB. As an alternative we could also benefit of separated volumes, 100Gb each, dedicated to elasticsearch and rabbitmq.

#16 - Jul 06, 2017 12:51 PM - Tommaso Piccioli

Now on /var/lib/rabbitmq and /var/lib/elasticsearch are mounted two separate file system of 100 GB
After the reboot of broker1-dev-dnet I can see

```

Size  Used Avail Use% Mounted on
12G  2.6G  9.5G  21% /
100G  38M  100G   1% /var/lib/rabbitmq
100G  40G   61G  40% /var/lib/elasticsearch

```

#17 - Jul 20, 2017 12:26 PM - Andrea Dell'Amico

- Status changed from In Progress to Closed

Please open new tickets if new issues arise.