

# Java - 2

Java

## Spring / Spring MVC

### 90. spring

1.

JavaBean EJB

Java

Spring (IoC) (AOP)

2.

Spring Spring 1MB JAR Spring Spring

3.

Spring IoC IoC IoC JNDI -

4.

Spring auditing transaction ---

5.

Spring bean --- prototype bean

6.

Spring Spring XML Spring

Spring Spring

91. aop

AOP Aspect-Oriented Programming                      OOP Object-Oriented Programing                      OO

AOP                      “ ”                      “Aspect”                      “ ”

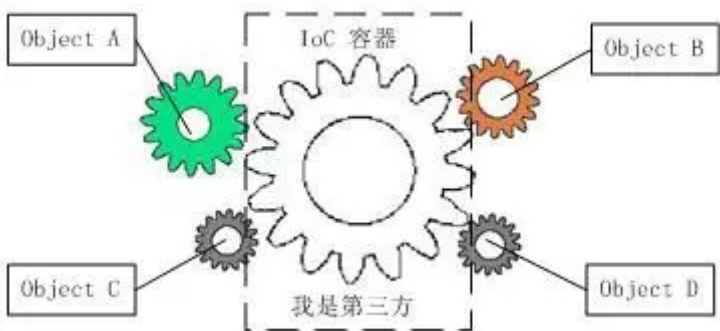
“ ” AOP

92. ioc

IOC Inversion of Control                      “ ”

1996 Michael Mattson                      IOC

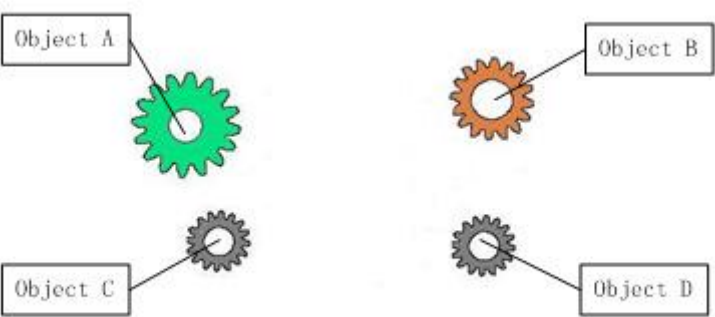
IOC                      “ ”



IOC

“ ” IOC      A B C D 4                      “ ”                      “ ”IOC

IOC



IOC

B C D

B

B

"

IOC

2. setter

3.

## 95. spring bean

Spring Bean Bean spring Bean scope Bear

## 96. spring bean

spring Bean Bean Bean Spring 5

- singleton Spring IoC singleton Bean
  - prototype getBean prototype Bean Bean
  - request HTTP request Bean HTTP Bean Web Spring
  - session HTTP Session session Bean Web Spring
  - globalsection HTTP Session session Bean portlet context
- singleton prototype singleton Bean Bean Bean Bean
- Bean Bean
- Bean Spring singleton Java Java pro

## 97. spring bean

Spring bean ID Spring bean

spring bean

- bean
- java XML

## 98. spring

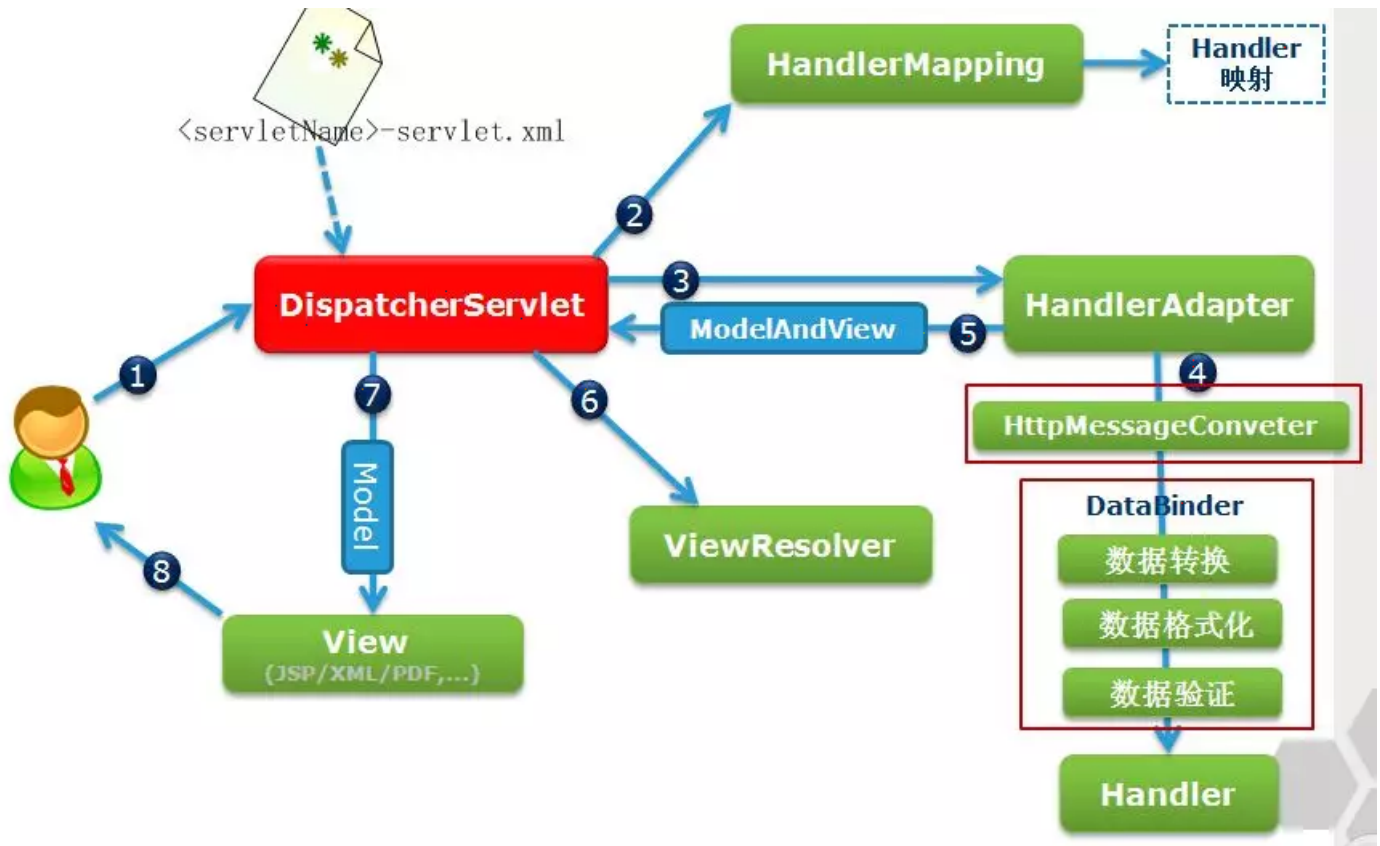
- POJO beginTransaction() commit() rollback()
- TransactionProxyFactoryBean
- @Transactional
- Aspectj AOP

## 99. spring

- “ ” “ ”
- select DDL

# 100. spring mvc

## Spring MVC



## Spring

1. Spring Servlet DispatcherServlet
  2. DispatcherServlet URL URI URI HandlerMapping Handler
  3. DispatcherServlet Handler HandlerAdapter HandlerAdapter
  4. Request Handler Handler Controller) Handler Spring
  5. Handler DispatcherServlet ModelAndView
  6. ModelAndView ViewResolver Spring ViewResolver) DispatcherServlet
  7. ViewResolver Model View
  - 8.
- **HttpMessageConverter** Json xml
  - String Integer Double
  - BindingResult Error

# 101. spring mvc

## Spring MVC

1. DispatcherServlet
2. Controller
3. HandlerMapping controller
4. ModelAndView
5. ViewResolver
6. Interceptors

## 102. @RequestMapping

RequestMapping

RequestMapping

**value method**

- value URI Template
- method method GET POST PUT DELETE

**consumes produces**

- consumes Content-Type application/json, text/html
- produces request (Accept)

**params headers**

- params request
- headers request header

## 103. @Autowired

@Autowired [blog.csdn.net/u013257679/article/details/52295106](http://blog.csdn.net/u013257679/article/details/52295106)

## Spring Boot / Spring Cloud

### 104. spring boot

Spring Spring SpringMvc Spring (IOC) (DI),  
SpringBoot Spring SpringBoot

### 105. spring boot

- Spring Boot
- Spring Boot
- Spring Boot
- Spring Boot
- Spring

## 106. spring boot

Spring Boot

- properties
- yml

## 107. spring boot

Spring Boot                      properties    yml                      properties            yml                                      yml

## 108. spring boot

SpringBoot

①.    **spring loaded**

```

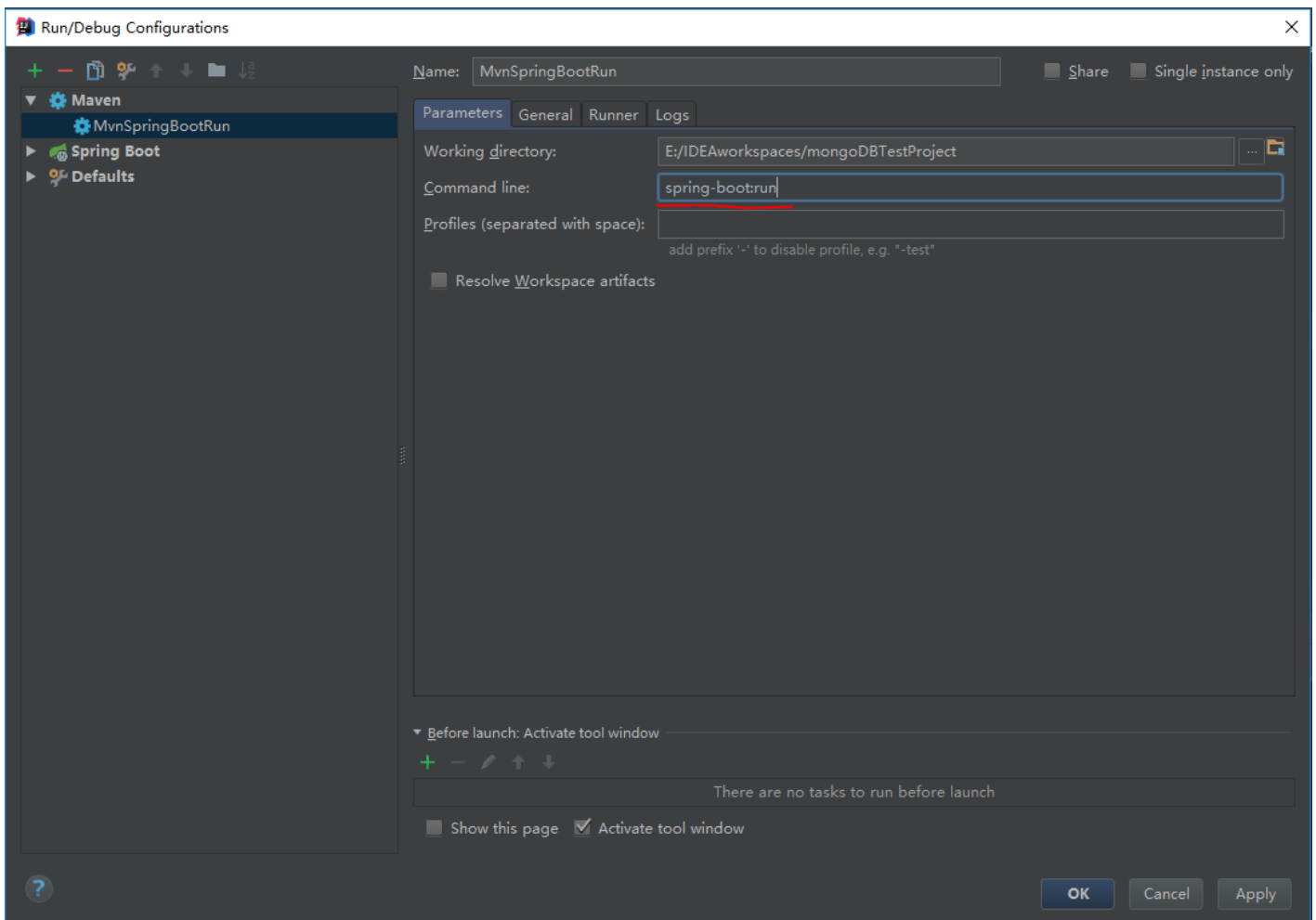
<build>
  <plugins>
    <plugin>
      <!-- springBoot -->
      <groupId>org.springframework.boot</groupId>
      <artifactId>spring-boot-maven-plugin</artifactId>
      <dependencies>
        <!-- spring -->
        <!-- build plugin -->
        <dependency>
          <groupId>org.springframework</groupId>
          <artifactId>springloaded</artifactId>
          <version>1.2.6.RELEASE</version>
        </dependency>
      </dependencies>
    </plugin>
  </plugins>
</build>

```

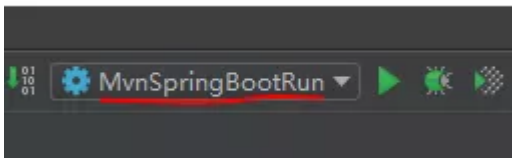
mvn

IDEA Edit configurations , "+", maven (





IDEA



## ②. spring-boot-devtools

pom

```
<!-- jar -->
<dependency>
  <groupId>org.springframework.boot</groupId>
  <artifactId>spring-boot-devtools</artifactId>
</dependency>
```

shift+ctrl+alt+ "/" IDEA

"Registry"

compiler.automake.allow.when.app.running

## 109. jpa hibernate

- JPA Java Persistence API Java EE 5 ORM ejb3
- Hibernate ORM JPA JPA
- JPA Hibernate JPA Hibernate Hibernate JPA Hibernate  
entitymanager hibernate-core
- hibernate-annotation Hibernate annotation JPA annotation Hibernate annotation
- hibernate-core Hibernate Hibernate
- hibernate-entitymanager JPA hibernate-core JPA ORM hibernate-c

## 110. spring cloud

Spring Cloud

Spring Cloud Spring

Spring Cloud

- .....

Spring Cloud

## 111. spring cloud

Spring Cloud Hystrix CPU

## 112. spring cloud

### ①. —Netflix Eureka

RESTful AWS Region Eureka Eureka Eureka Eureka

### ②. —Netflix Ribbon

Ribbon Ribbon Ribbon

### ③. —Netflix Hystrix

CPU

### ④. —Netflix Zuul

nginx netflix

# Hibernate

## 113. hibernate

JDBC

- Hibernate JDBC ORM DAO
- hibernate Java
- hibernate

## 114. ORM

- Object-Relational Mapping ORM

## 115. hibernate sql

[blog.csdn.net/Randy\\_Wang\\_/article/details/79460306](http://blog.csdn.net/Randy_Wang_/article/details/79460306)

## 116. hibernate

1. hql
2. sql
- 3.

hql sql

HQL: Hibernate Query Language. :

```
Query query = session.createQuery("from Customer where name = ?");  
query.setParameter(0, " ");  
Query.list();
```

QBC: Query By Criteria.( )

```
Criteria criteria = session.createCriteria(Customer.class);  
criteria.add(Restrictions.eq("name", " "));
```

```
List<Customer> list = criteria.list();
```

SQL:

```
SQLQuery query = session.createSQLQuery("select * from customer");
```

```
List<Object[]> list = query.list();
```

```
SQLQuery query = session.createSQLQuery("select * from customer");
```

```
query.addEntity(Customer.class);
```

```
List<Customer> list = query.list();
```

Hql

1          2                  3          4          5

HQL SQL

HQL                  SQL

## 117. hibernate                                  final

Hibernate                  final                  Hibernate                                  final                  Java                  final

## 118.      hibernate                  Integer      int

Hibernate                  OID      Integer                  Hibernate                                  null                                  OID                  int                  hbm

## 119. hibernate

hibernate

1.      Configuration config = new Configuration().configure();//                  hibernate.cfg.xml
2.      hibernate.cfg.xml
3.      SessionFactory sf = config.buildSessionFactory();//      SessionFactory
4.      Session session = sf.openSession();//      Sesssion
5.      Transaction tx = session.beginTransaction();//                  Transation

6. persistent operate
7. tx.commit();//
8. Session
9. SesssionFactory

## 120. get() load()

- load() SQL
- get() SQL

## 121. hibernate

Hibernate

Session , SesionFactory

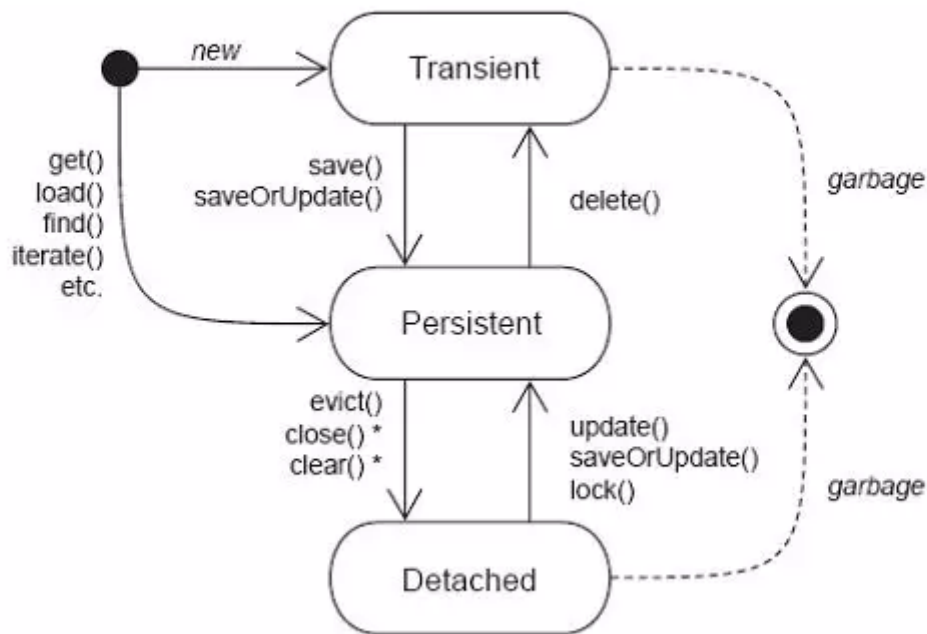
- 
- 
- 

hibernate memcahe,redis

## 122. hibernate

hibernate

1. Transient new id
2. Persistent save() saveOrUpdate() Persistent id
3. Detached session close() Detached



## 123. hibernate getSession openSession

getSession session session session  
getSession session session session  
getSession openSession openSession

## 124. hibernate

hibernate Class newInstance

## Mybatis

## 125. mybatis #{ } \${ }

- `#{ }` `${ }`
- Mybatis `#{ }` sql `#{ }` ? PreparedStatement set

- Mybatis `${}` `${}`
- `#{} SQL`

## 126. mybatis

- sql
- RowBounds

## 128. mybatis

- `org.apache.ibatis.session.SqlSession` ,

## 129. mybatis

Mybatis association collection association collection Mybatis  
 CGLIB a.getB().getName() invoke() a.getB() null  
 Mybatis Hibernate

## 130. mybatis

: PerpetualCache HashMap Session Session flush close Session Cache  
 PerpetualCache HashMap Mapper(Namespace) Ehcache  
 ( Session/ Namespaces) C/U/D select clear

## 131. mybatis hibernate

1 Mybatis hibernate ORM MyBatis Sql  
 2 Mybatis sql sql my  
 3 Hibernate / hibernate

## 132. mybatis Executor

Mybatis Executor  
 1. SimpleExecutor update select Statement Statement  
 2. ReuseExecutor update select sql key Statement Statement  
 3.

## 133. mybatis

Mybatis   sql   sql   dialect

## 134. mybatis

[blog.csdn.net/qq\\_30051265/article/details/80266434](http://blog.csdn.net/qq_30051265/article/details/80266434)

Mybatis   Mybatis   Executor   StatementHandler   ParameterHandler   ResultSetHandler

- Executor   (log )
- StatementHandler   Sql
- ParameterHandler
- ResultSetHandler

Mybatis   Interceptor

```
public interface Interceptor {  
    Object intercept(Invocation invocation) throws Throwable;  
    Object plugin(Object target);  
    void setProperties(Properties properties);  
}
```

// intercept

// plugin   signatureMap

// setProperties   Properties

demo

```
// ExamplePlugin.java  
@Intercepts({@Signature(  
    type= Executor.class,  
    method = "update",
```



```

    args = {MappedStatement.class, Object.class}}))
public class ExamplePlugin implements Interceptor {
    public Object intercept(Invocation invocation) throws Throwable {
        Object target = invocation.getTarget(); //
        Method method = invocation.getMethod(); //
        Object[] args = invocation.getArgs(); //
        // do something .....
        Object result = invocation.proceed();
        // do something .....
        return result;
    }
    public Object plugin(Object target) {
        return Plugin.wrap(target, this);
    }
    public void setProperties(Properties properties) {
    }
}

```

@Intercepts      @Signature @Signature

- type                  Executor
- method                  Executor update
- args

# RabbitMQ

## 135. rabbitmq

①.

②.

EAI

③.

④.

EDA

Stage

⑤.

⑥.

CDN

# 136. rabbitmq

RabbitMQ

- RabbitMQ “ ” “ ”

# 137. rabbitmq

- ConnectionFactory Rabbit
- Channel
- Exchange
- Queue
- RoutingKey
- BindingKey

# 138. rabbitmq vhost

vhost broker mini-RabbitMQ server queue exchange binding

# 139. rabbitmq

RabbitMQ rabbit server tcp tcp rabbit

# 140. rabbitmq

- channel confirm

# 141. rabbitmq

- ACK
- 

# 142.

- durable true.
- deliveryMode 2
- 

# 143. rabbitmq

ssd

## 144. rabbitmq

- fanout: bind exchange queue RabbitMQ
- direct: routingKey exchange queue
- topic: routingKey( ) routingKey bind queue

## 145. rabbitmq

- RabbitMQ-delayed-message-exchange

## 146. rabbitmq

- RabbitMQ
- 

## 147. rabbitmq

## 148. rabbitmq

- "--link"
- erlang cookie " "
- 

## 149. rabbitmq

## 150. rabbitmq

## 151. rabbitmq

RabbitMQ

## Kafka

## 152. kafka zookeeper

kafka zookeeper kafka zookeeper kafka

## 153. kafka

kafka

154. kafka                    7                    10G                    10G

kafka

155.                    kafka

- cpu
- 

156.       kafka

- 7
- 

Zookeeper

157. zookeeper

zookeeper                    google chubby                    hadoop    hbase

158. zookeeper

- zookeeper
- zookeeper                    z
- 

159. zookeeper

zookeeper

- zookeeper

160. zookeeper

zookeeper                    server                    zab       zab

161.

162.       3                    zookeeper

163. zookeeper

znode watcher znode zookeeper znode

MySql

164.

165. 7 2 mysql

- MyISAM id 18
- InnoDB id 15

InnoDB id id

166.

select version() MySQL

167. ACID

- Atomicity transaction Rollback
- Consistency
- Isolation Read
- Durability

168. char varchar

char(n) char(10) "abc" 10 7

chat md5 char

varchar(n)

varcahr char

169. float double

- float 8 4

- double 16 8

170. mysql

inner join left join right join

171. mysql

MySQL B+ B+

172. mysql

explain SQL

explain explain select \* from table where type=1

173.

MySQL MySQL. ini transaction-isolation = REPEATABLE-READ

READ-UNCOMMITTED READ-COMMITTED REPEATABLE-READ SERIALIZABLE

- READ-UNCOMMITTED
- READ-COMMITTED
- REPEATABLE-READ
- SERIALIZABLE

A A

A n n+1

174. mysql

InnoDB InnoDB acid MySQL InnoDB  
MyIASM MySQL InnoDB

175. mysql

MyISAM InnoDB

176.

- version 1 version version

177. mysql

- show processlist
- explain SQL
- SQL

178. mysql

- select \*
- 

Redis

179. redis

Redis ANSI C Key-Value API

Redis

180. redis

181. redis memecache

- memcached redis
- redis memcached
- redis

182. redis

cpu Redis Redis cpu

Redis

nginx nodejs

183.

# 184. redis

string list hash set zset

# 185. redis      java

Redisson Jedis lettuce                  Redisson

# 186. jedis    redisson

Jedis Redis Java                  API                  Redis

Redisson                  Java                  Jedis                                  Redis    Redisson                  Red

# 187.

- Redis

# 188. redis

Redis

- RDB Redis Database
- AOF Append Only File                  write

# 189. redis

Redis                  “ ”                  “ ”

setnx(set if not exists)                  del

# 190. redis

Redis

# 191. redis

hashes

web                  key,



## 192. redis

- volatile-lru                    server. db[i]. expires
- volatile-ttl                   server. db[i]. expires
- volatile-random                server. db[i]. expires
- allkeys-lru            server. db[i]. dict
- allkeys-random           server. db[i]. dict
- no-eviction

## 193. redis

- Redis

# JVM

## 194.        jvm

- ClassLoader
- Runtime Data Area
- Execution Engine
- Native Interface

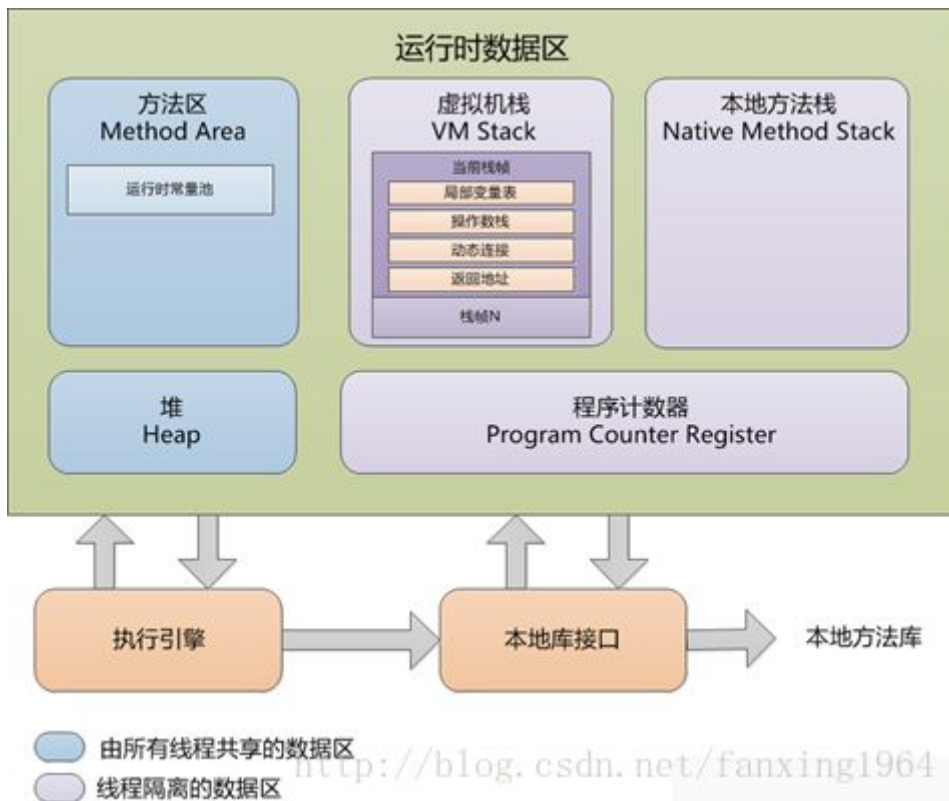
ClassLoader        Java

Runtime Data Area

JVM

## 195.        jvm

-



196.

197.

- Deque
- 

198.

JVM

cli

- Bootstrap ClassLoader `Java_HOME/lib/` `-Xbootclasspath`
- Extension ClassLoader `<java_home style="box-sizing: border-box; -webkit-tap-highlight-color: transparent; text-size-adjust: none; -webkit-font-smoothing: antialiased; outline: 0px !important;">\lib\ext Java. ext. dirs </java_home>`
- Application ClassLoader `classpath`

199.

5

1. class
2. class
- 3.

200.

- +1 -1 0
- GC Roots GC Roots

201. java

- /

202. jvm

- -
- -
- 

203. jvm

- Serial
- Serial Old Serial CMS
- ParNew Serial
- Parallel ParNew Parallel
- Parallel Old Parallel Parallel Old -
- CMS B/S

G1 GC JDK 9 GC

204. CMS

CMS Concurrent Mark-Sweep JVM

CMS - gc Concurrent Mode Failure CMS

205.

- Serial ParNew Parallel Scavenge
- Serial Old Parallel Old CMS
- G1

206.

3      Eden To Survivor From Survivor      8:1:1

- Eden + From Survivor      To Survivor
  - Eden    From Survivor
  - From Survivor    To Survivor      From Survivor    To Survivor    To Survivor    From Survivor
- From Survivor    To Survivor      +1      15      15

## 207.      jvm

JDK      JDK    bin      jconsole    jvisualvm

- jconsole      JVM
- jvisualvm JDK      gc

## 208.      jvm

- -Xms2g      2g
- -Xmx2g      2g
- -XX:NewRatio=4      1:4
- -XX:SurvivorRatio=8      Eden    Survivor      8:2
- -XX:+UseParNewGC      ParNew + Serial Old
- -XX:+UseParallelOldGC      ParNew + ParNew Old
- -XX:+UseConcMarkSweepGC      CMS + Serial Old
- -XX:+PrintGC      gc
- -XX:+PrintGCDetails      gc

[Java](#)      - 1

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Updated 8 August 2021 08:58:00 by