

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

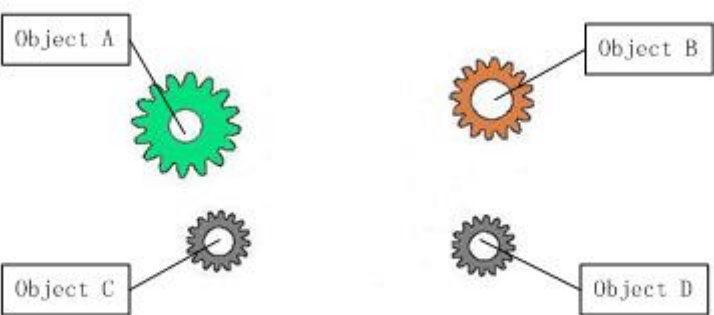
IOC “ ”



IOC

“ ” IOC A B C D 4 “ ” “ ”IOC

IOC



IOC

A B C D 4

A B C D

(IOC)

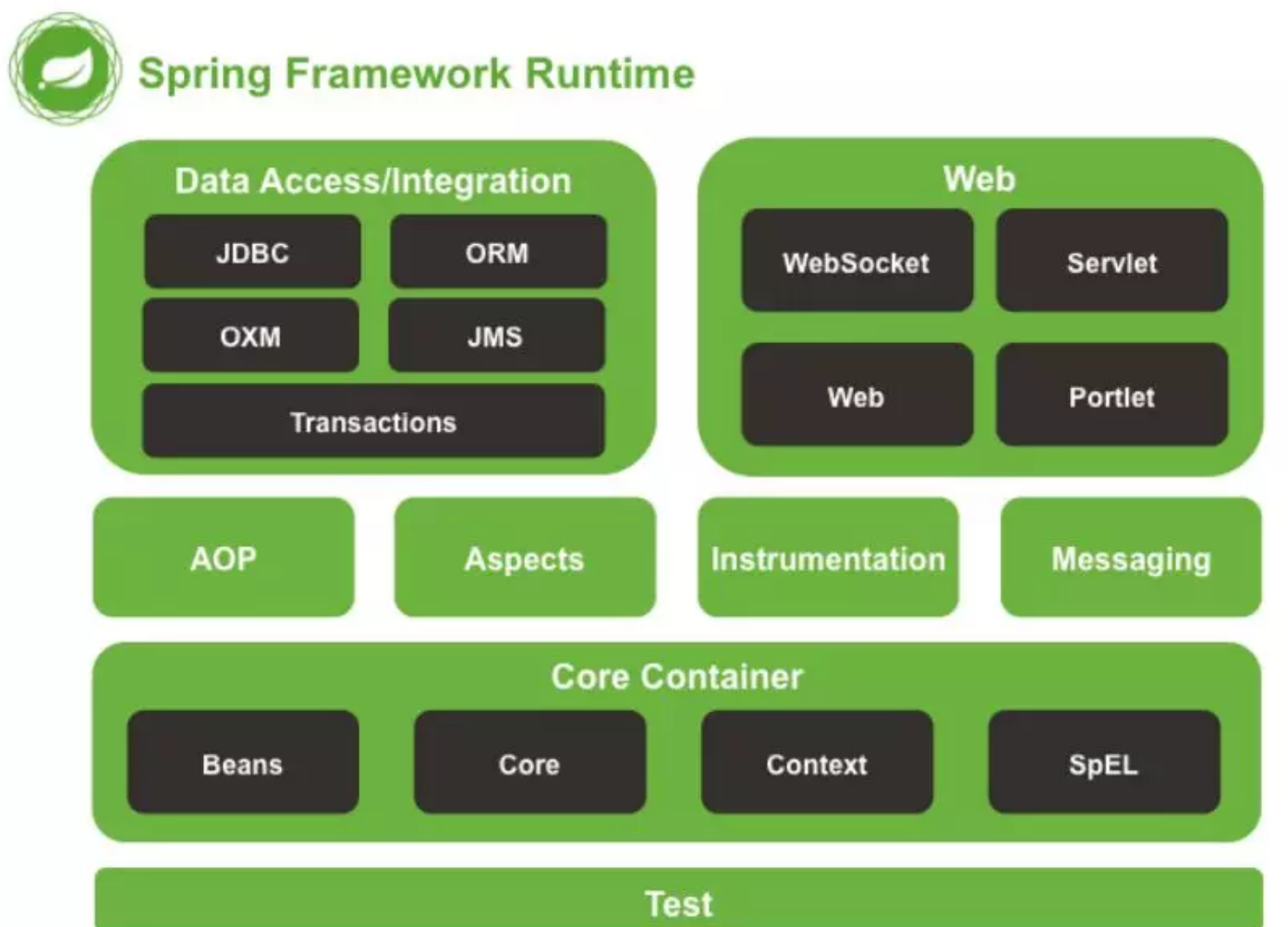
IOC 1 A B A B B B

IOC 3 IOC A B A B IOC B

A B , “ ”

93. spring

Spring 20 / , Web AOP



<https://blog.csdn.net/umbrellasoft>

94. spring

Spring DI 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 Spring singleton Java Java pro

97. spring bean

Spring bean ID Spring bean

spring bean

- bean
- java XML

98. spring

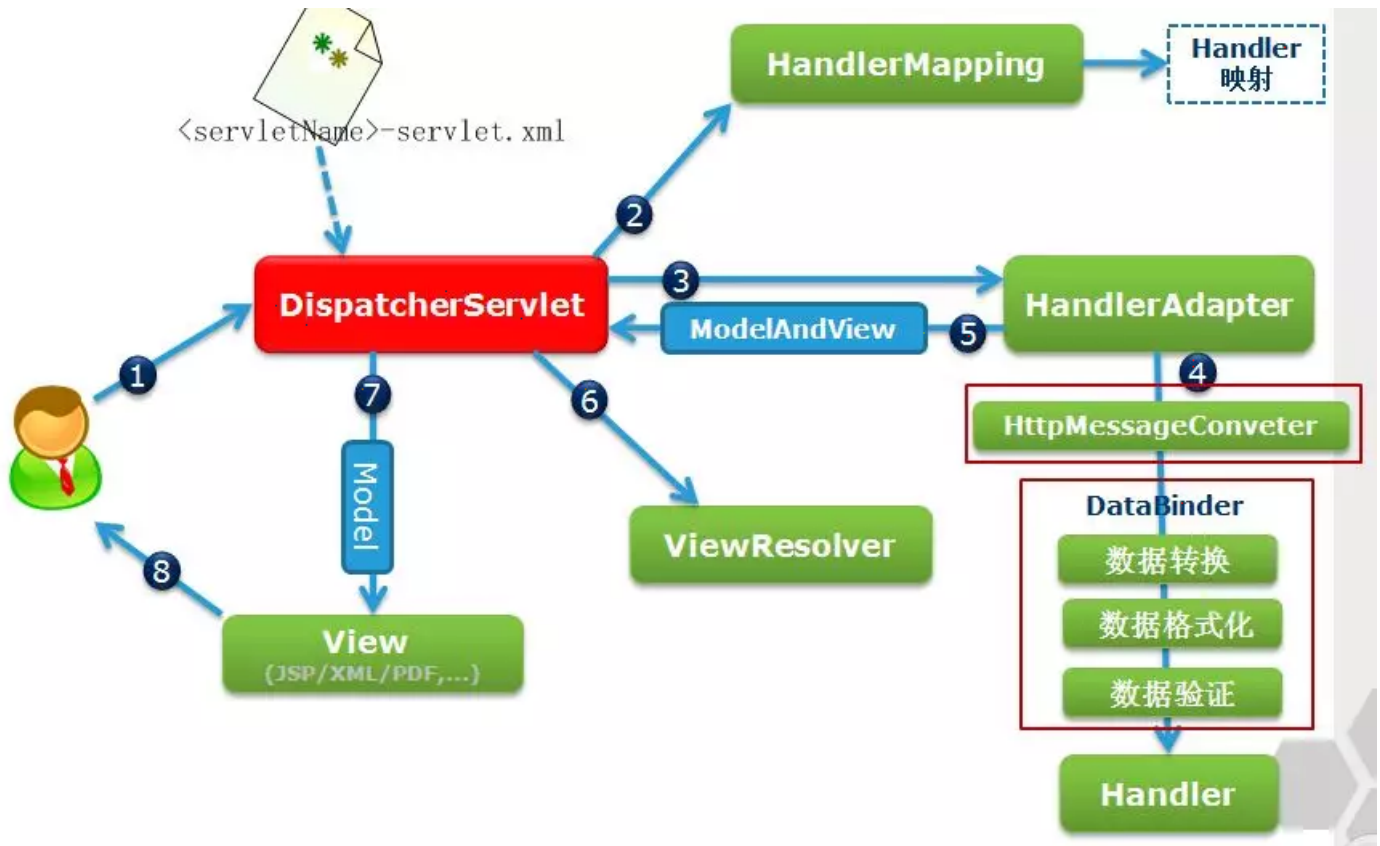
- POJO beginTransaction() commit() rollback()
- TransactionProxyFactoryBean
- @Transactional
- Aspectj AOP

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
- **HttpMessageConveter** Json xml
- String Integer Double
- BindingResult Error
5. Handler DispatcherServlet ModelAndView
6. ModelAndView ViewResolver Spring ViewResolver) DispatcherServlet
7. ViewResolver Model View
- 8.

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

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**

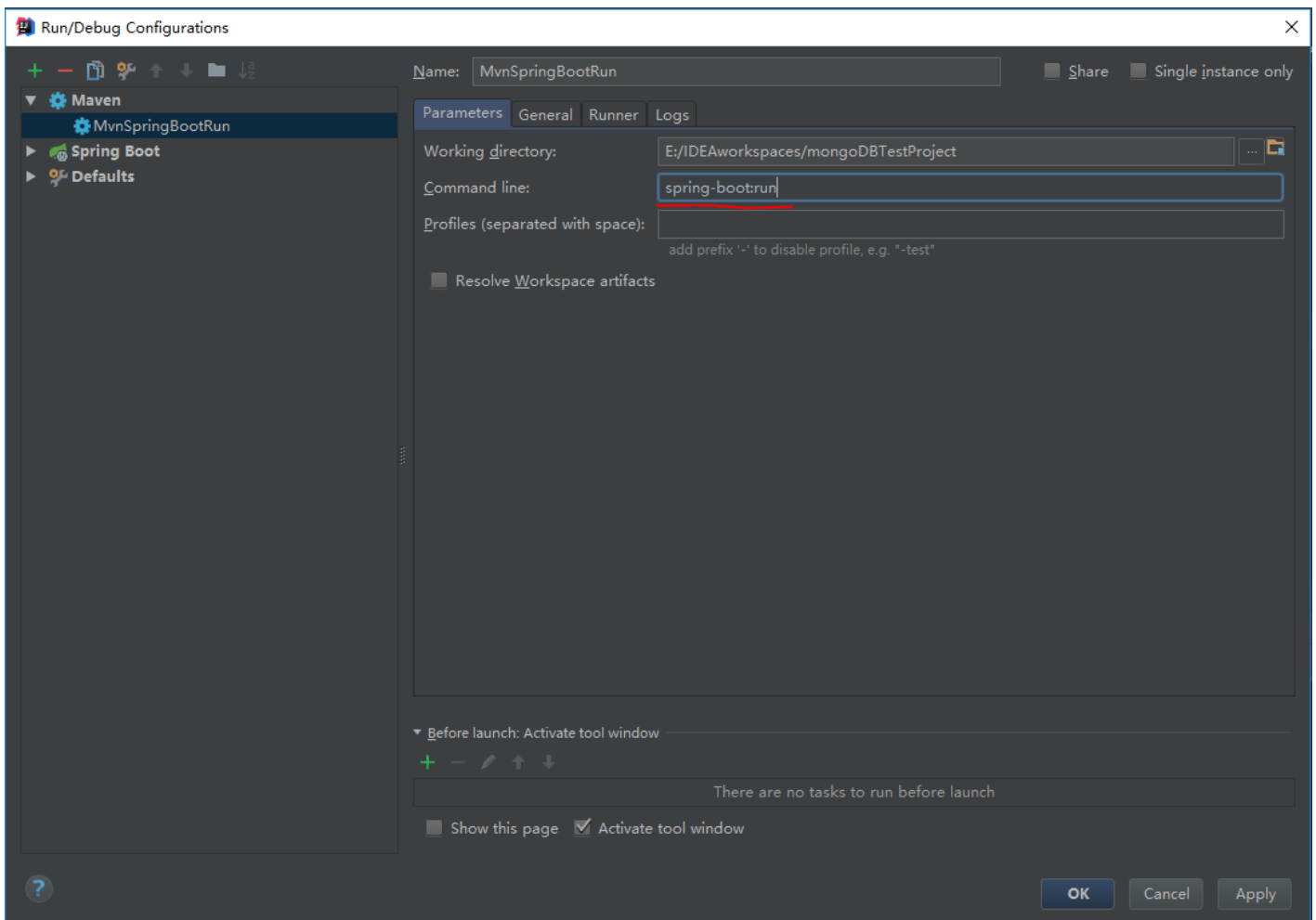
```

<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>

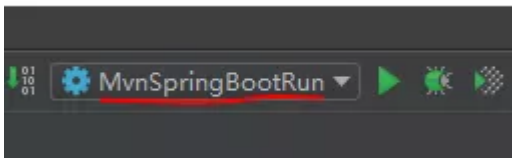
```

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

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. SessionFactory

120. get() load()

- load() SQL
- get() SQL

121. hibernate

Hibernate

Session , SessionFactory

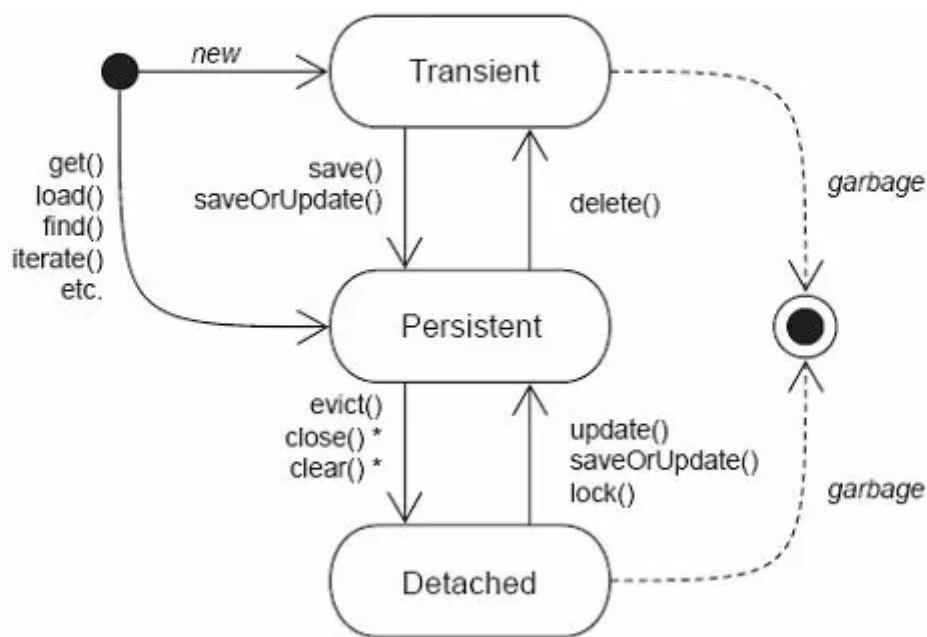
-
-
-

hibernate memcache,redis

122. hibernate

hibernate

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



123. hibernate getSession openSession

openSession 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.RowBounds` ,

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

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

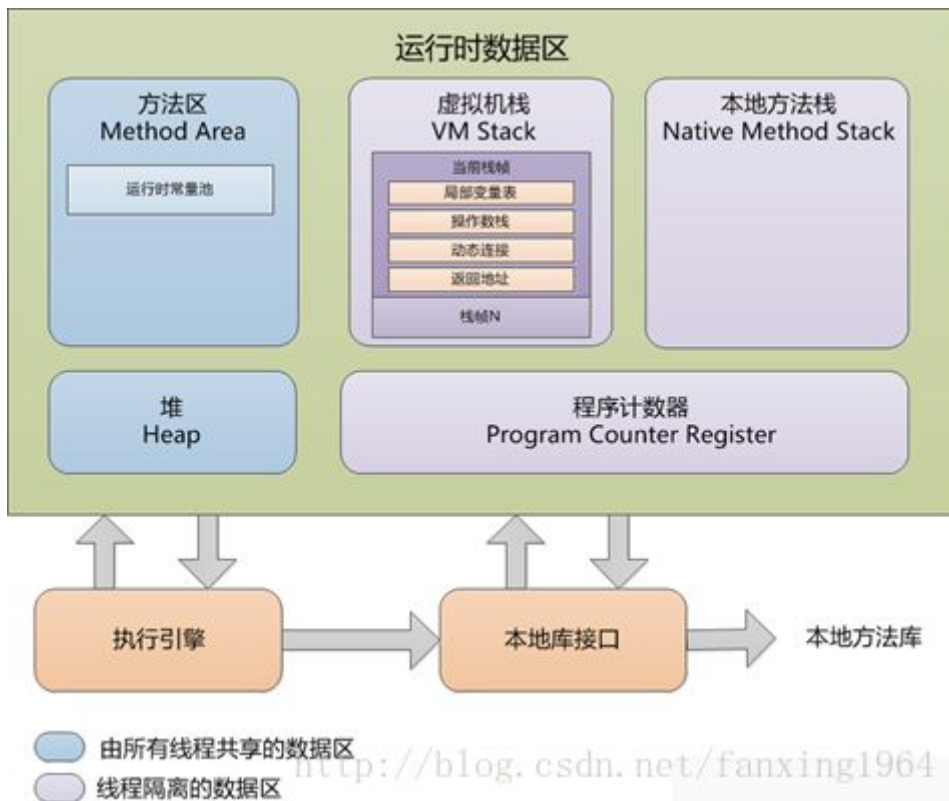
ClassLoader Java

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

Revision #2

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