



JavaZone



Jolokia – JMX on Capsaicin

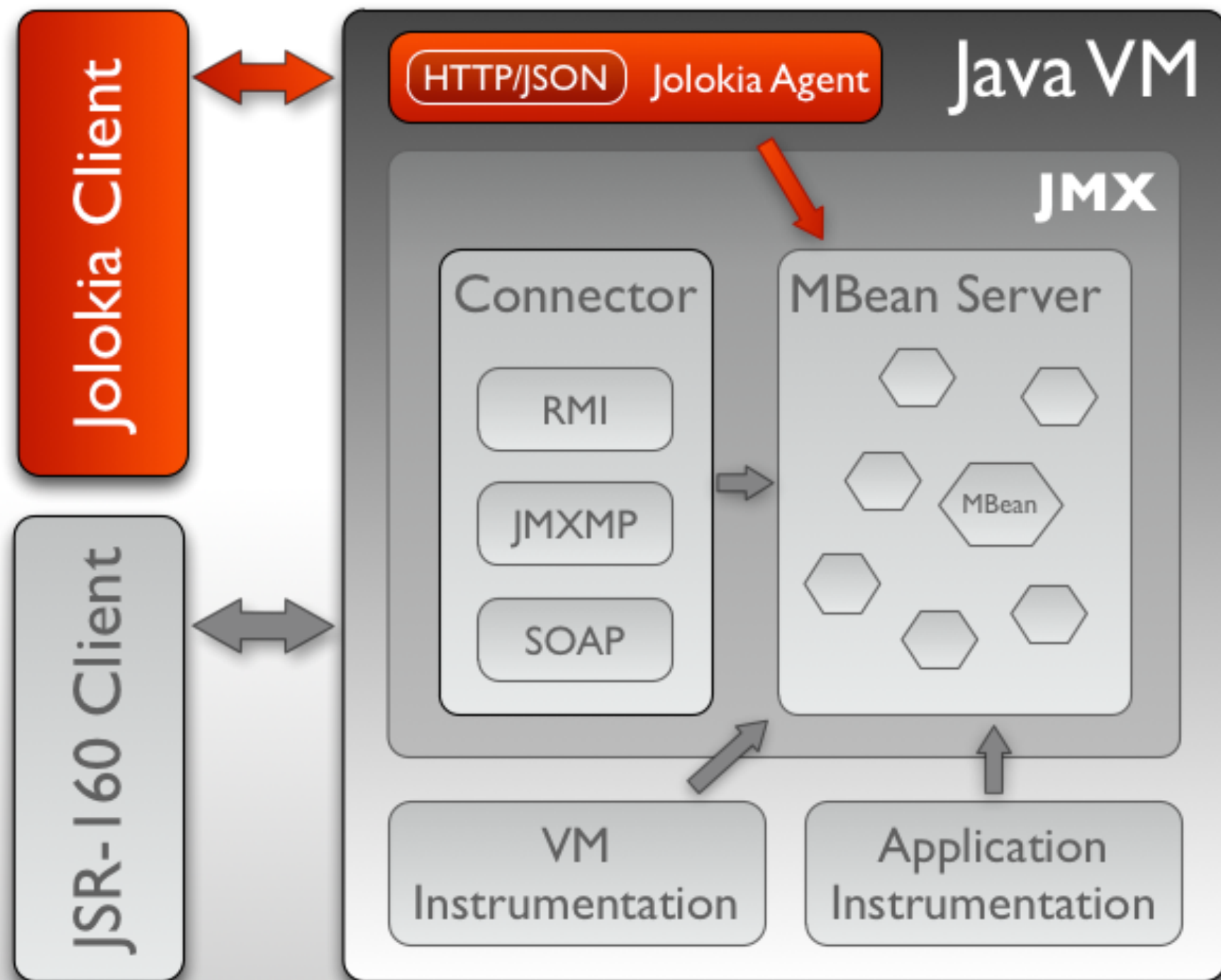
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JMX

- ▶ **Java Management Extensions (JSR-3, 2000)**
 - ❖ Management: Configuration, Lifecycle Operations ...
 - ❖ Monitoring: Memory Size, Connection Pools, ...
- ▶ **Available in every JVM since JDK 1.5**
- ▶ **JSR-160: JMX Remote API**
 - ❖ Crossing Firewall boundaries is incredibly hard (RMI)
 - ❖ Java only
 - ❖ Security is "all-or-nothing"

Jolokia



Agents

JEE

OSGi

Mule

JVM

Request

► HTTP GET

```
http://localhost/jolokia/read/java.lang:type=Memory/HeapMemoryUsage
```

► HTTP POST

```
{  
  "mbean": "java.lang:type=Memory",  
  "type": "read",  
  "attribute": "HeapMemoryUsage"  
}
```

Response

```
{
  "value":{
    "init":134217728,
    "max":532742144,
    "committed":133365760,
    "used":19046472
  },
  "status":200,
  "timestamp":1244839118,
  "request":{
    "mbean":"java.lang:type=Memory",
    "type":"read",
    "attribute":"HeapMemoryUsage"
  }
}
```

Request Types

read	Reading of attributes
write	Writing of attributes
exec	Execution of operations
search	MBean search
list	MBean metadata
version	Version and server information

What else ?

- ▶ Bulk Requests
- ▶ JSR-160 Proxy
- ▶ Fine grained Security via XML Policies
- ▶ Client-Libs:
 - ❖ JavaScript, Java, Perl (provided by Jolokia/jmx4Perl)
 - ❖ Python, node.js, ... (external)

Who uses Jolokia ?

j4psh	Readline based JMX Shell
check_jmx4perl	Nagios Check
ActiveMQ	Management Remote API
Spring Boot	Management Remote API
hawt.io	Modular web console for Java management

Thanks !



<http://www.jolokia.org>