The Cluster Valve object (Van Cluster object)

Introduction

- Cluster valve không khác biệt so với Tomcat Valve. Cluster valves là interceptor trong chuỗi request HTTP, và thực clustering thực thi sử dụng valve để đưa ra quyết định thông minh xung quanh data và khi data cần được nhân bản.

- Cluster valve cần thực thi “org.apache.catalina.ha.ClusterValve” interface. Nó đơn giản là interface mở rộng “org.apache.catalina.Valve” interface.

org.apache.catalina.ha.tcp.ReplicationValve

- The ReplicationValve will notify the cluster at the end of a HTTP request so that the cluster can make a decision whether there is data to be replicated or not.

Attributes

|  |  |
| --- | --- |
| **Attribute** | **Description** |
| **className** | Set value to org.apache.catalina.ha.tcp.ReplicationValve |
| filter | For known file extensions or urls, you can use this Valve to notify the cluster that the session has not been modified during this request and the cluster doesn't have to probe the session managers for changes. If the request matches this filter pattern, the cluster assumes there has been no session change. An example filter would look like filter=".\*\.gif|.\*\.js|.\*\.jpeg|.\*\.jpg|.\*\.png|.\*\.htm|.\*\.html|.\*\.css|.\*\.txt" . The filter is a regular expression using java.util.regex. |
| primaryIndicator | Boolean value, so to true, and the replication valve will insert a request attribute with the name defined by the primaryIndicatorName attribute. The value inserted into the request attribute is either Boolean.TRUEor Boolean.FALSE |
| primaryIndicatorName | Default value is org.apache.catalina.ha.tcp.isPrimarySession The value defined here is the name of the request attribute that contains the boolean value if the session is primary on this server or not. |
| statistics | Boolean value. Set to true if you want the valve to collect request statistics. Default value is false |

org.apache.catalina.ha.authenticator.ClusterSingleSignOn

- The ClusterSingleSignOn supports feature of single sign on in cluster. By using ClusterSingleSignOn, the security identity authenticated by one web application is recognized by other web applications on the same virtual host, and it is propagated to other nodes in the cluster.

Attributes

|  |  |
| --- | --- |
| **Attribute** | **Description** |
| **className** | Java class name of the implementation to use. This MUST be set to**org.apache.catalina.ha.authenticator.ClusterSingleSignOn**. |
| cookieDomain | Sets the host domain to be used for sso cookies. |
| mapSendOptions | The Valve uses a replicated map. You can setup the flag for how this map sends messages. The default value is 6 (synchronous). Note that if you use asynchronous messaging it is possible for update messages to be processed by the receiving node in a different order to the order in which they were sent. |
| requireReauthentication | Default false. Flag to determine whether each request needs to be reauthenticated to the security **Realm**. If "true", this Valve uses cached security credentials (username and password) to reauthenticate to the **Realm** each request associated with an SSO session. If "false", the Valve can itself authenticate requests based on the presence of a valid SSO cookie, without rechecking with the **Realm**. |
| rpcTimeout | The Valve uses a replicated map. This is the timeout for messages that transfer state to/from the other nodes in the cluster. If not specified, a default value of 15000 milliseconds is used. |
| terminateOnStartFailure | Set to true if you wish this Valve to fail if the underlying replication fails to start. If the Valve fails, then the associated container will fail to start. If you set this attribute to false, and the underlying replications fails to start, the Valve will start and it will attempt to join the cluster and start replication as part of the heartbeat process. If not specified, the default value of false is used. |
| accessTimeout | The timeout for a ping message. If a remote map does not respond within this timeout period, its regarded as disappeared. Default value is 5000 milliseconds. |