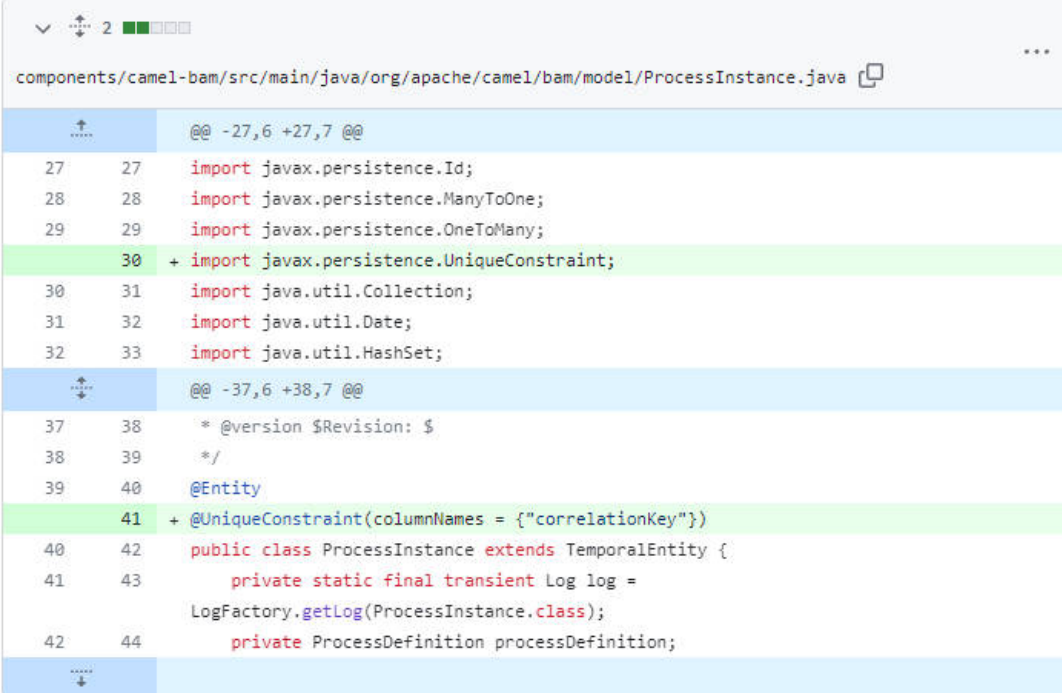


Figure 1,2,3 show the code changes of `ProcessInstance.java`, `BeanInfo.java`, and `CamelContextHelper.java`.



```
components/camel-bam/src/main/java/org/apache/camel/bam/model/ProcessInstance.java

@@ -27,6 +27,7 @@
27 27 import javax.persistence.Id;
28 28 import javax.persistence.ManyToOne;
29 29 import javax.persistence.OneToMany;
30 + import javax.persistence.UniqueConstraint;
30 31 import java.util.Collection;
31 32 import java.util.Date;
32 33 import java.util.HashSet;

@@ -37,6 +38,7 @@
37 38 * @version $Revision: $
38 39 */
39 40 @Entity
41 + @UniqueConstraint(columnNames = {"correlationKey"})
40 42 public class ProcessInstance extends TemporalEntity {
41 43     private static final transient Log log =
LogFactory.getLog(ProcessInstance.class);
42 44     private ProcessDefinition processDefinition;
```

Fig. 1. Code change of `ProcessInstance.java`.



```
camel-core/src/main/java/org/apache/camel/component/bean/BeanInfo.java

@@ -80,6 +80,13 @@ public class BeanInfo {
80 80 EXCLUDED_METHODS.addAll(Arrays.asList(Object.class.getMethods()));
81 81 // exclude all java.lang.reflect.Proxy methods as we dont want to invoke them
82 82 EXCLUDED_METHODS.addAll(Arrays.asList(Proxy.class.getMethods()));
83 + try {
84 + // but keep toString as this method is okay
85 + EXCLUDED_METHODS.remove(Object.class.getMethod("toString"));
86 + EXCLUDED_METHODS.remove(Proxy.class.getMethod("toString"));
87 + } catch (Throwable e) {
88 + // ignore
89 + }
83 90 }
84 91
85 92 public BeanInfo(CamelContext camelContext, Class<?> type) {
```

Fig. 2. Code change of `BeanInfo.java`.

```
camel-core/src/main/java/org/apache/camel/util/CamelContextHelper.java

@@ -166,13 +166,15 @@ public static Endpoint getEndpointInjection(CamelContext camelContext, String ur
    * @throws IllegalArgumentException is thrown if the property is illegal
    */
    public static int getMaximumCachePoolSize(CamelContext camelContext) throws IllegalArgumentException {
-        String s = camelContext.getProperties().get(Exchange.MAXIMUM_CACHE_POOL_SIZE);
-        if (s != null) {
-            Integer size = camelContext.getTypeConverter().convertTo(Integer.class, s);
-            if (size == null || size <= 0) {
-                throw new IllegalArgumentException("Property " + Exchange.MAXIMUM_CACHE_POOL_SIZE + " must
be a positive number, was: " + s);
+        if (camelContext != null) {
+            String s = camelContext.getProperties().get(Exchange.MAXIMUM_CACHE_POOL_SIZE);
+            if (s != null) {
+                Integer size = camelContext.getTypeConverter().convertTo(Integer.class, s);
+                if (size == null || size <= 0) {
+                    throw new IllegalArgumentException("Property " + Exchange.MAXIMUM_CACHE_POOL_SIZE + "
must be a positive number, was: " + s);
+                }
+            }
+            return size;
+        }
-        return size;
    }
}

// 1000 is the default fallback
```

Fig. 3. Code change of CamelContextHelper.java.