SpotBugs Report

Project Information

Project: kafka-UI

SpotBugs version: 4.8.3

Code analyzed:

- /Users/yiren/Documents/GitHub/kafka-ui/kafka-ui-api.zip

Metrics

0 lines of code analyzed, in 0 classes, in 25 packages.

Metric	Total	Density*
High Priority Warnings	17	0.00
Medium Priority Warnings	277	0.00
Low Priority Warnings	63	0.00
Total Warnings	**357**	**0.00**

(Defects per Thousand lines of non-commenting source statements)*

Contents

Summary

Warning Type	Number
Bad practice Warnings	4
Correctness Warnings	1
Experimental Warnings	1
Internationalization Warnings	32
Malicious code vulnerability Warnings	224
Performance Warnings	27
Dodgy code Warnings	68
Total	**357**

Warnings

Click on a warning row to see full context information.

Bad practice Warnings

Code	Warning
CT	Exception thrown in class com.provectus.kafka.ui.serdes.builtin.ProtobufFileSerde$ProtoSchemaLoader at new com.provectus.kafka.ui.serdes.builtin.ProtobufFileSerde$ProtoSchemaLoader(String) will leave the constructor. The object under construction remains partially initialized and may be vulnerable to Finalizer attacks.
Dm	com.provectus.kafka.ui.config.auth.DisabledAuthSecurityConfig.configure(ServerHttpSecurity, Environment, ApplicationContext) invokes System.exit(...), which shuts down the entire virtual machine
OS	com.provectus.kafka.ui.service.metrics.JmxSslSocketFactory.createFactoryFromThreadLocalCtx() may fail to close stream
OS	com.provectus.kafka.ui.util.WebClientConfigurator.configureSsl(String, String, String, String) may fail to close stream

Correctness Warnings

Code	Warning
RV	Return value of String.contains(CharSequence) ignored in com.provectus.kafka.ui.service.integration.odd.TopicsExporterTest.lambda$doesNotExportTopicsWhichDontFitFiltrationRule$2(DataEntity)

Experimental Warnings

Code	Warning
OBL	com.provectus.kafka.ui.service.metrics.JmxSslSocketFactory.createFactoryFromThreadLocalCtx() may fail to clean up java.io.InputStream

Internationalization Warnings

Code	Warning
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.controller.AccessController.lambda$mapPermissions$4(List, Permission)
Dm	Found reliance on default encoding in com.provectus.kafka.ui.emitter.PolledRecords.calculatePolledRecSize(Iterable): String.getBytes()
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.model.rbac.Permission.setResource(String)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.model.rbac.Subject.setProvider(String)
Dm	Found reliance on default encoding in com.provectus.kafka.ui.serdes.ConsumerRecordDeserializer.headerSize(Header): String.getBytes()
Dm	Found reliance on default encoding in com.provectus.kafka.ui.serdes.ConsumerRecordDeserializer.lambda$fillHeaders$0(Map, Header): new String(byte[])
Dm	Found reliance on default encoding in com.provectus.kafka.ui.serdes.ConsumerRecordDeserializerTest.dataMaskingAppliedOnDeserializedMessage(): String.getBytes()
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.serdes.CustomSerdeLoader.isArchive(Path)
Dm	Found reliance on default encoding in com.provectus.kafka.ui.serdes.ProducerRecordCreator.lambda$createHeaders$0(RecordHeaders, String, String): String.getBytes()
Dm	Found reliance on default encoding in com.provectus.kafka.ui.serdes.builtin.AvroEmbeddedSerde$1.deserialize(RecordHeaders, byte[]): new String(byte[])
Dm	Found reliance on default encoding in com.provectus.kafka.ui.serdes.builtin.AvroEmbeddedSerdeTest.deserializerParsesAvroDataWithEmbeddedSchema(): new String(byte[])
Dm	Found reliance on default encoding in com.provectus.kafka.ui.serdes.builtin.Base64SerdeTest.<static initializer for Base64SerdeTest>(): String.getBytes()
Dm	Found reliance on default encoding in com.provectus.kafka.ui.serdes.builtin.HexSerdeTest.<static initializer for HexSerdeTest>(): String.getBytes()
Dm	Found reliance on default encoding in com.provectus.kafka.ui.serdes.builtin.ProtobufFileSerde$2.deserialize(RecordHeaders, byte[]): new String(byte[])
Dm	Found reliance on default encoding in com.provectus.kafka.ui.service.OffsetsResetServiceTest.sendMsgsToPartition(Map): String.getBytes()
Dm	Found reliance on default encoding in com.provectus.kafka.ui.service.RecordEmitterTest.generateMsgs(): String.getBytes()
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.integration.odd.schema.AvroExtractor.logicalType(Schema)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.integration.odd.schema.ProtoExtractor.extractRepeated(Descriptors$FieldDescriptor, String, String, String, boolean, ImmutableSet, List)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.integration.odd.schema.ProtoExtractor.getLogicalTypeName(Descriptors$FieldDescriptor)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.ksql.KsqlServiceV2Test.listStreamsReturnsAllKsqlStreams()
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.ksql.KsqlServiceV2Test.listTablesReturnsAllKsqlTables()
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.rbac.AccessControlService.lambda$isAclAccessible$21(AclAction)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.rbac.AccessControlService.lambda$isApplicationConfigAccessible$7(ApplicationConfigAction)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.rbac.AccessControlService.lambda$isAuditAccessible$22(AuditAction)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.rbac.AccessControlService.lambda$isClusterConfigAccessible$9(ClusterConfigAction)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.rbac.AccessControlService.lambda$isConnectAccessible$17(ConnectAction)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.rbac.AccessControlService.lambda$isConsumerGroupAccessible$13(ConsumerGroupAction)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.rbac.AccessControlService.lambda$isKsqlAccessible$20(KsqlAction)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.rbac.AccessControlService.lambda$isSchemaAccessible$15(SchemaAction)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.service.rbac.AccessControlService.lambda$isTopicAccessible$10(TopicAction)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in com.provectus.kafka.ui.util.jsonschema.AvroJsonSchemaConverter.lambda$createUnionSchema$2(Map, Schema)
Dm	Use of non-localized String.toUpperCase() or String.toLowerCase() in new com.provectus.kafka.ui.util.jsonschema.JsonType$Type(String, int)

Malicious code vulnerability Warnings

Code	Warning
DP	com.provectus.kafka.ui.serdes.SerdesInitializerTest.pluggedSerdesInitializedByLoader() creates a java.net.URLClassLoader classloader, which should be performed within a doPrivileged block
DP	Invocation of reflect.Field.setAccessible(boolean), which should be invoked from within a doPrivileged block, in com.provectus.kafka.ui.service.metrics.JmxSslSocketFactory.<static initializer for JmxSslSocketFactory>()

EI	com.provectus.kafka.ui.config.ClustersProperties.getClusters() may expose internal representation by returning ClustersProperties.clusters
EI	com.provectus.kafka.ui.config.ClustersProperties.getPolling() may expose internal representation by returning ClustersProperties.polling
EI	com.provectus.kafka.ui.config.ClustersProperties$AuditProperties.getAuditTopicProperties() may expose internal representation by returning ClustersProperties$AuditProperties.auditTopicProperties
EI	com.provectus.kafka.ui.config.ClustersProperties$Cluster.getAudit() may expose internal representation by returning ClustersProperties$Cluster.audit
EI	com.provectus.kafka.ui.config.ClustersProperties$Cluster.getKafkaConnect() may expose internal representation by returning ClustersProperties$Cluster.kafkaConnect
EI	com.provectus.kafka.ui.config.ClustersProperties$Cluster.getKsqldbServerAuth() may expose internal representation by returning ClustersProperties$Cluster.ksqldbServerAuth
EI	com.provectus.kafka.ui.config.ClustersProperties$Cluster.getKsqldbServerSsl() may expose internal representation by returning ClustersProperties$Cluster.ksqldbServerSsl
EI	com.provectus.kafka.ui.config.ClustersProperties$Cluster.getMasking() may expose internal representation by returning ClustersProperties$Cluster.masking
EI	com.provectus.kafka.ui.config.ClustersProperties$Cluster.getMetrics() may expose internal representation by returning ClustersProperties$Cluster.metrics
EI	com.provectus.kafka.ui.config.ClustersProperties$Cluster.getProperties() may expose internal representation by returning ClustersProperties$Cluster.properties
EI	com.provectus.kafka.ui.config.ClustersProperties$Cluster.getSchemaRegistryAuth() may expose internal representation by returning ClustersProperties$Cluster.schemaRegistryAuth
EI	com.provectus.kafka.ui.config.ClustersProperties$Cluster.getSchemaRegistrySsl() may expose internal representation by returning ClustersProperties$Cluster.schemaRegistrySsl
EI	com.provectus.kafka.ui.config.ClustersProperties$Cluster.getSerde() may expose internal representation by returning ClustersProperties$Cluster.serde
EI	com.provectus.kafka.ui.config.ClustersProperties$Cluster.getSsl() may expose internal representation by returning ClustersProperties$Cluster.ssl
EI	com.provectus.kafka.ui.config.ClustersProperties$Masking.getFields() may expose internal representation by returning ClustersProperties$Masking.fields
EI	com.provectus.kafka.ui.config.ClustersProperties$Masking.getMaskingCharsReplacement() may expose internal representation by returning ClustersProperties$Masking.maskingCharsReplacement
EI	com.provectus.kafka.ui.config.ClustersProperties$SerdeConfig.getProperties() may expose internal representation by returning ClustersProperties$SerdeConfig.properties
EI	com.provectus.kafka.ui.config.auth.AuthenticatedUser.groups() may expose internal representation by returning AuthenticatedUser.groups
EI	com.provectus.kafka.ui.config.auth.OAuthProperties.getClient() may expose internal representation by returning OAuthProperties.client
EI	com.provectus.kafka.ui.config.auth.OAuthProperties$OAuth2Provider.getCustomParams() may expose internal representation by returning OAuthProperties$OAuth2Provider.customParams
EI	com.provectus.kafka.ui.config.auth.OAuthProperties$OAuth2Provider.getScope() may expose internal representation by returning OAuthProperties$OAuth2Provider.scope
EI	com.provectus.kafka.ui.config.auth.RbacOAuth2User.groups() may expose internal representation by returning RbacOAuth2User.groups
EI	com.provectus.kafka.ui.config.auth.RbacOidcUser.groups() may expose internal representation by returning RbacOidcUser.groups
EI	com.provectus.kafka.ui.config.auth.RoleBasedAccessControlProperties.getRoles() may expose internal representation by returning RoleBasedAccessControlProperties.roles
EI	com.provectus.kafka.ui.emitter.SeekOperations.getOffsetsForSeek() may expose internal representation by returning SeekOperations.offsetsForSeek
EI	com.provectus.kafka.ui.model.BrokerMetrics.getMetrics() may expose internal representation by returning BrokerMetrics.metrics
EI	com.provectus.kafka.ui.model.ConsumerPosition.getSeekTo() may expose internal representation by returning ConsumerPosition.seekTo
EI	com.provectus.kafka.ui.model.InternalBrokerConfig.getSynonyms() may expose internal representation by returning InternalBrokerConfig.synonyms
EI	com.provectus.kafka.ui.model.InternalClusterMetrics.getBrokers() may expose internal representation by returning InternalClusterMetrics.brokers
EI	com.provectus.kafka.ui.model.InternalClusterMetrics.getInternalBrokerDiskUsage() may expose internal representation by returning InternalClusterMetrics.internalBrokerDiskUsage
EI	com.provectus.kafka.ui.model.InternalClusterMetrics.getInternalBrokerMetrics() may expose internal representation by returning InternalClusterMetrics.internalBrokerMetrics
EI	com.provectus.kafka.ui.model.InternalClusterMetrics.getLastKafkaException() may expose internal representation by returning InternalClusterMetrics.lastKafkaException
EI	com.provectus.kafka.ui.model.InternalClusterMetrics.getMetrics() may expose internal representation by returning InternalClusterMetrics.metrics
EI	com.provectus.kafka.ui.model.InternalClusterMetrics.getTopics() may expose internal representation by returning InternalClusterMetrics.topics
EI	com.provectus.kafka.ui.model.InternalClusterState.getDiskUsage() may expose internal representation by returning InternalClusterState.diskUsage
EI	com.provectus.kafka.ui.model.InternalClusterState.getFeatures() may expose internal representation by returning InternalClusterState.features
EI	com.provectus.kafka.ui.model.InternalConsumerGroup.getEndOffsets() may expose internal representation by returning InternalConsumerGroup.endOffsets
EI	com.provectus.kafka.ui.model.InternalConsumerGroup.getMembers() may expose internal representation by returning InternalConsumerGroup.members
EI	com.provectus.kafka.ui.model.InternalConsumerGroup.getOffsets() may expose internal representation by returning InternalConsumerGroup.offsets
EI	com.provectus.kafka.ui.model.InternalConsumerGroup$InternalMember.getAssignment() may expose internal representation by returning InternalConsumerGroup$InternalMember.assignment
EI	com.provectus.kafka.ui.model.InternalLogDirStats.getBrokerStats() may expose internal representation by returning InternalLogDirStats.brokerStats
EI	com.provectus.kafka.ui.model.InternalLogDirStats.getPartitionsStats() may expose internal representation by returning InternalLogDirStats.partitionsStats
EI	com.provectus.kafka.ui.model.InternalLogDirStats.getTopicStats() may expose internal representation by returning InternalLogDirStats.topicStats
EI	com.provectus.kafka.ui.model.InternalPartition.getReplicas() may expose internal representation by returning InternalPartition.replicas
EI	com.provectus.kafka.ui.model.InternalSegmentSizeDto.getInternalTopicWithSegmentSize() may expose internal representation by returning InternalSegmentSizeDto.internalTopicWithSegmentSize
EI	com.provectus.kafka.ui.model.InternalTopic.getClustersProperties() may expose internal representation by returning InternalTopic.clustersProperties
EI	com.provectus.kafka.ui.model.InternalTopic.getPartitions() may expose internal representation by returning InternalTopic.partitions
EI	com.provectus.kafka.ui.model.InternalTopic.getTopicConfigs() may expose internal representation by returning InternalTopic.topicConfigs
EI	com.provectus.kafka.ui.model.InternalTopicConfig.getSynonyms() may expose internal representation by returning InternalTopicConfig.synonyms
EI	com.provectus.kafka.ui.model.KafkaCluster.getConnectsClients() may expose internal representation by returning KafkaCluster.connectsClients
EI	com.provectus.kafka.ui.model.KafkaCluster.getOriginalProperties() may expose internal representation by returning KafkaCluster.originalProperties
EI	com.provectus.kafka.ui.model.KafkaCluster.getProperties() may expose internal representation by returning KafkaCluster.properties
EI	com.provectus.kafka.ui.model.Metrics.getBrokerBytesInPerSec() may expose internal representation by returning Metrics.brokerBytesInPerSec
EI	com.provectus.kafka.ui.model.Metrics.getBrokerBytesOutPerSec() may expose internal representation by returning Metrics.brokerBytesOutPerSec
EI	com.provectus.kafka.ui.model.Metrics.getPerBrokerMetrics() may expose internal representation by returning Metrics.perBrokerMetrics
EI	com.provectus.kafka.ui.model.Metrics.getTopicBytesInPerSec() may expose internal representation by returning Metrics.topicBytesInPerSec
EI	com.provectus.kafka.ui.model.Metrics.getTopicBytesOutPerSec() may expose internal representation by returning Metrics.topicBytesOutPerSec

EI	com.provectus.kafka.ui.model.PartitionDistributionStats.getInSyncPartitions() may expose internal representation by returning PartitionDistributionStats.inSyncPartitions
EI	com.provectus.kafka.ui.model.PartitionDistributionStats.getPartitionLeaders() may expose internal representation by returning PartitionDistributionStats.partitionLeaders
EI	com.provectus.kafka.ui.model.PartitionDistributionStats.getPartitionsCount() may expose internal representation by returning PartitionDistributionStats.partitionsCount
EI	com.provectus.kafka.ui.model.Statistics.getFeatures() may expose internal representation by returning Statistics.features
EI	com.provectus.kafka.ui.model.Statistics.getLastKafkaException() may expose internal representation by returning Statistics.lastKafkaException
EI	com.provectus.kafka.ui.model.Statistics.getTopicConfigs() may expose internal representation by returning Statistics.topicConfigs
EI	com.provectus.kafka.ui.model.Statistics.getTopicDescriptions() may expose internal representation by returning Statistics.topicDescriptions
EI	com.provectus.kafka.ui.model.connect.InternalConnectInfo.getConfig() may expose internal representation by returning InternalConnectInfo.config
EI	com.provectus.kafka.ui.model.connect.InternalConnectInfo.getTasks() may expose internal representation by returning InternalConnectInfo.tasks
EI	com.provectus.kafka.ui.model.connect.InternalConnectInfo.getTopics() may expose internal representation by returning InternalConnectInfo.topics
EI	com.provectus.kafka.ui.model.rbac.AccessContext.getAclActions() may expose internal representation by returning AccessContext.aclActions
EI	com.provectus.kafka.ui.model.rbac.AccessContext.getApplicationConfigActions() may expose internal representation by returning AccessContext.applicationConfigActions
EI	com.provectus.kafka.ui.model.rbac.AccessContext.getAuditAction() may expose internal representation by returning AccessContext.auditAction
EI	com.provectus.kafka.ui.model.rbac.AccessContext.getClusterConfigActions() may expose internal representation by returning AccessContext.clusterConfigActions
EI	com.provectus.kafka.ui.model.rbac.AccessContext.getConnectActions() may expose internal representation by returning AccessContext.connectActions
EI	com.provectus.kafka.ui.model.rbac.AccessContext.getConsumerGroupActions() may expose internal representation by returning AccessContext.consumerGroupActions
EI	com.provectus.kafka.ui.model.rbac.AccessContext.getKsqlActions() may expose internal representation by returning AccessContext.ksqlActions
EI	com.provectus.kafka.ui.model.rbac.AccessContext.getSchemaActions() may expose internal representation by returning AccessContext.schemaActions
EI	com.provectus.kafka.ui.model.rbac.AccessContext.getTopicActions() may expose internal representation by returning AccessContext.topicActions
EI	com.provectus.kafka.ui.model.rbac.Permission.getActions() may expose internal representation by returning Permission.actions
EI	com.provectus.kafka.ui.model.rbac.Role.getClusters() may expose internal representation by returning Role.clusters
EI	com.provectus.kafka.ui.model.rbac.Role.getPermissions() may expose internal representation by returning Role.permissions
EI	com.provectus.kafka.ui.model.rbac.Role.getSubjects() may expose internal representation by returning Role.subjects
EI	com.provectus.kafka.ui.service.ConsumerGroupService$ConsumerGroupsPage.consumerGroups() may expose internal representation by returning ConsumerGroupService$ConsumerGroupsPage.consumerGroups
EI	com.provectus.kafka.ui.service.ReactiveAdminClient$ClusterDescription.getAuthorizedOperations() may expose internal representation by returning ReactiveAdminClient$ClusterDescription.authorizedOperations
EI	com.provectus.kafka.ui.service.ReactiveAdminClient$ClusterDescription.getNodes() may expose internal representation by returning ReactiveAdminClient$ClusterDescription.nodes
EI	com.provectus.kafka.ui.service.ksql.KsqlApiClient$KsqlResponseTable.getColumnNames() may expose internal representation by returning KsqlApiClient$KsqlResponseTable.columnNames
EI	com.provectus.kafka.ui.service.ksql.KsqlApiClient$KsqlResponseTable.getValues() may expose internal representation by returning KsqlApiClient$KsqlResponseTable.values
EI	com.provectus.kafka.ui.service.metrics.RawMetric$SimpleMetric.labels() may expose internal representation by returning RawMetric$SimpleMetric.labels
EI	com.provectus.kafka.ui.service.rbac.AccessControlService.getOauthExtractors() may expose internal representation by returning AccessControlService.oauthExtractors
EI	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure.getAuth() may expose internal representation by returning DynamicConfigOperations$PropertiesStructure.auth
EI	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure.getKafka() may expose internal representation by returning DynamicConfigOperations$PropertiesStructure.kafka
EI	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure.getWebclient() may expose internal representation by returning DynamicConfigOperations$PropertiesStructure.webclient
EI	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure$Auth.getOauth2() may expose internal representation by returning DynamicConfigOperations$PropertiesStructure$Auth.oauth2
EI	com.provectus.kafka.ui.util.jsonschema.JsonSchema.getDefinitions() may expose internal representation by returning JsonSchema.definitions
EI	com.provectus.kafka.ui.util.jsonschema.JsonSchema.getProperties() may expose internal representation by returning JsonSchema.properties
EI	com.provectus.kafka.ui.util.jsonschema.JsonSchema.getRequired() may expose internal representation by returning JsonSchema.required
EI2	com.provectus.kafka.ui.config.ClustersProperties.setClusters(List) may expose internal representation by storing an externally mutable object into ClustersProperties.clusters
EI2	com.provectus.kafka.ui.config.ClustersProperties.setPolling(ClustersProperties$PollingProperties) may expose internal representation by storing an externally mutable object into ClustersProperties.polling
EI2	new com.provectus.kafka.ui.config.ClustersProperties$AuditProperties(String, Integer, Boolean, Boolean, ClustersProperties$AuditProperties$LogLevel, Map) may expose internal representation by storing an externally mutable object into ClustersProperties$AuditProperties.auditTopicProperties
EI2	com.provectus.kafka.ui.config.ClustersProperties$AuditProperties.setAuditTopicProperties(Map) may expose internal representation by storing an externally mutable object into ClustersProperties$AuditProperties.auditTopicProperties
EI2	com.provectus.kafka.ui.config.ClustersProperties$Cluster.setAudit(ClustersProperties$AuditProperties) may expose internal representation by storing an externa mutable object into ClustersProperties$Cluster.audit
EI2	com.provectus.kafka.ui.config.ClustersProperties$Cluster.setKafkaConnect(List) may expose internal representation by storing an externally mutable object into ClustersProperties$Cluster.kafkaConnect
EI2	com.provectus.kafka.ui.config.ClustersProperties$Cluster.setKsqldbServerAuth(ClustersProperties$KsqldbServerAuth) may expose internal representation by storing an externally mutable object into ClustersProperties$Cluster.ksqldbServerAuth
EI2	com.provectus.kafka.ui.config.ClustersProperties$Cluster.setKsqldbServerSsl(ClustersProperties$KeystoreConfig) may expose internal representation by storing an externally mutable object into ClustersProperties$Cluster.ksqldbServerSsl
EI2	com.provectus.kafka.ui.config.ClustersProperties$Cluster.setMasking(List) may expose internal representation by storing an externally mutable object into ClustersProperties$Cluster.masking
EI2	com.provectus.kafka.ui.config.ClustersProperties$Cluster.setMetrics(ClustersProperties$MetricsConfigData) may expose internal representation by storing an externally mutable object into ClustersProperties$Cluster.metrics
EI2	com.provectus.kafka.ui.config.ClustersProperties$Cluster.setProperties(Map) may expose internal representation by storing an externally mutable object into ClustersProperties$Cluster.properties

EI2	com.provectus.kafka.ui.config.ClustersProperties$Cluster.setSchemaRegistryAuth(ClustersProperties$SchemaRegistryAuth) may expose internal representation storing an externally mutable object into ClustersProperties$Cluster.schemaRegistryAuth
EI2	com.provectus.kafka.ui.config.ClustersProperties$Cluster.setSchemaRegistrySsl(ClustersProperties$KeystoreConfig) may expose internal representation by storing an externally mutable object into ClustersProperties$Cluster.schemaRegistrySsl
EI2	com.provectus.kafka.ui.config.ClustersProperties$Cluster.setSerde(List) may expose internal representation by storing an externally mutable object into ClustersProperties$Cluster.serde
EI2	com.provectus.kafka.ui.config.ClustersProperties$Cluster.setSsl(ClustersProperties$TruststoreConfig) may expose internal representation by storing an external mutable object into ClustersProperties$Cluster.ssl
EI2	com.provectus.kafka.ui.config.ClustersProperties$Masking.setFields(List) may expose internal representation by storing an externally mutable object into ClustersProperties$Masking.fields
EI2	com.provectus.kafka.ui.config.ClustersProperties$Masking.setMaskingCharsReplacement(List) may expose internal representation by storing an externally mutable object into ClustersProperties$Masking.maskingCharsReplacement
EI2	com.provectus.kafka.ui.config.ClustersProperties$SerdeConfig.setProperties(Map) may expose internal representation by storing an externally mutable object in ClustersProperties$SerdeConfig.properties
EI2	new com.provectus.kafka.ui.config.auth.AuthenticatedUser(String, Collection) may expose internal representation by storing an externally mutable object into AuthenticatedUser.groups
EI2	new com.provectus.kafka.ui.config.auth.LdapSecurityConfig(LdapProperties) may expose internal representation by storing an externally mutable object into LdapSecurityConfig.props
EI2	com.provectus.kafka.ui.config.auth.OAuthProperties.setClient(Map) may expose internal representation by storing an externally mutable object into OAuthProperties.client
EI2	com.provectus.kafka.ui.config.auth.OAuthProperties$OAuth2Provider.setCustomParams(Map) may expose internal representation by storing an externally mutable object into OAuthProperties$OAuth2Provider.customParams
EI2	com.provectus.kafka.ui.config.auth.OAuthProperties$OAuth2Provider.setScope(Set) may expose internal representation by storing an externally mutable object into OAuthProperties$OAuth2Provider.scope
EI2	new com.provectus.kafka.ui.config.auth.OAuthSecurityConfig(OAuthProperties) may expose internal representation by storing an externally mutable object into OAuthSecurityConfig.properties
EI2	new com.provectus.kafka.ui.config.auth.RbacOAuth2User(OAuth2User, Collection) may expose internal representation by storing an externally mutable object into RbacOAuth2User.groups
EI2	new com.provectus.kafka.ui.config.auth.RbacOidcUser(OidcUser, Collection) may expose internal representation by storing an externally mutable object into RbacOidcUser.groups
EI2	new com.provectus.kafka.ui.config.auth.logout.OAuthLogoutSuccessHandler(OAuthProperties, List, ServerLogoutSuccessHandler) may expose internal representation by storing an externally mutable object into OAuthLogoutSuccessHandler.logoutSuccessHandlers
EI2	new com.provectus.kafka.ui.config.auth.logout.OAuthLogoutSuccessHandler(OAuthProperties, List, ServerLogoutSuccessHandler) may expose internal representation by storing an externally mutable object into OAuthLogoutSuccessHandler.properties
EI2	new com.provectus.kafka.ui.controller.AclsController(AclsService) may expose internal representation by storing an externally mutable object into AclsController.aclsService
EI2	new com.provectus.kafka.ui.controller.ApplicationConfigController(DynamicConfigOperations, ApplicationRestarter, KafkaClusterFactory, ApplicationInfoService) may expose internal representation by storing an externally mutable object into ApplicationConfigController.dynamicConfigOperations
EI2	new com.provectus.kafka.ui.controller.ConsumerGroupsController(ConsumerGroupService, OffsetsResetService) may expose internal representation by storing externally mutable object into ConsumerGroupsController.consumerGroupService
EI2	new com.provectus.kafka.ui.controller.KafkaConnectController(KafkaConnectService) may expose internal representation by storing an externally mutable obje into KafkaConnectController.kafkaConnectService
EI2	new com.provectus.kafka.ui.controller.MessagesController(MessagesService, DeserializationService) may expose internal representation by storing an externall mutable object into MessagesController.messagesService
EI2	new com.provectus.kafka.ui.controller.SchemasController(SchemaRegistryService) may expose internal representation by storing an externally mutable object i SchemasController.schemaRegistryService
EI2	new com.provectus.kafka.ui.controller.TopicsController(TopicsService, TopicAnalysisService, ClusterMapper) may expose internal representation by storing an externally mutable object into TopicsController.topicsService
EI2	com.provectus.kafka.ui.model.BrokerMetrics$BrokerMetricsBuilder.metrics(List) may expose internal representation by storing an externally mutable object in BrokerMetrics$BrokerMetricsBuilder.metrics
EI2	new com.provectus.kafka.ui.model.ConsumerPosition(SeekTypeDTO, String, Map) may expose internal representation by storing an externally mutable object i ConsumerPosition.seekTo
EI2	com.provectus.kafka.ui.model.InternalBrokerConfig$InternalBrokerConfigBuilder.synonyms(List) may expose internal representation by storing an externally mutable object into InternalBrokerConfig$InternalBrokerConfigBuilder.synonyms
EI2	com.provectus.kafka.ui.model.InternalClusterMetrics$InternalClusterMetricsBuilder.brokers(List) may expose internal representation by storing an externally mutable object into InternalClusterMetrics$InternalClusterMetricsBuilder.brokers
EI2	com.provectus.kafka.ui.model.InternalClusterMetrics$InternalClusterMetricsBuilder.internalBrokerDiskUsage(Map) may expose internal representation by stor an externally mutable object into InternalClusterMetrics$InternalClusterMetricsBuilder.internalBrokerDiskUsage
EI2	com.provectus.kafka.ui.model.InternalClusterMetrics$InternalClusterMetricsBuilder.internalBrokerMetrics(Map) may expose internal representation by storing externally mutable object into InternalClusterMetrics$InternalClusterMetricsBuilder.internalBrokerMetrics
EI2	com.provectus.kafka.ui.model.InternalClusterMetrics$InternalClusterMetricsBuilder.lastKafkaException(Throwable) may expose internal representation by storing an externally mutable object into InternalClusterMetrics$InternalClusterMetricsBuilder.lastKafkaException
EI2	com.provectus.kafka.ui.model.InternalClusterMetrics$InternalClusterMetricsBuilder.metrics(List) may expose internal representation by storing an externally mutable object into InternalClusterMetrics$InternalClusterMetricsBuilder.metrics
EI2	com.provectus.kafka.ui.model.InternalClusterMetrics$InternalClusterMetricsBuilder.topics(Map) may expose internal representation by storing an externally mutable object into InternalClusterMetrics$InternalClusterMetricsBuilder.topics
EI2	com.provectus.kafka.ui.model.InternalClusterState.setDiskUsage(List) may expose internal representation by storing an externally mutable object into InternalClusterState.diskUsage
EI2	com.provectus.kafka.ui.model.InternalClusterState.setFeatures(List) may expose internal representation by storing an externally mutable object into InternalClusterState.features
EI2	com.provectus.kafka.ui.model.InternalConsumerGroup$InternalConsumerGroupBuilder.endOffsets(Map) may expose internal representation by storing an externally mutable object into InternalConsumerGroup$InternalConsumerGroupBuilder.endOffsets
EI2	com.provectus.kafka.ui.model.InternalConsumerGroup$InternalConsumerGroupBuilder.members(Collection) may expose internal representation by storing an externally mutable object into InternalConsumerGroup$InternalConsumerGroupBuilder.members
EI2	com.provectus.kafka.ui.model.InternalConsumerGroup$InternalConsumerGroupBuilder.offsets(Map) may expose internal representation by storing an externall mutable object into InternalConsumerGroup$InternalConsumerGroupBuilder.offsets
EI2	com.provectus.kafka.ui.model.InternalConsumerGroup$InternalMember$InternalMemberBuilder.assignment(Set) may expose internal representation by storing externally mutable object into InternalConsumerGroup$InternalMember$InternalMemberBuilder.assignment

EI2	com.provectus.kafka.ui.model.InternalPartition$InternalPartitionBuilder.replicas(List) may expose internal representation by storing an externally mutable objec into InternalPartition$InternalPartitionBuilder.replicas
EI2	com.provectus.kafka.ui.model.InternalSegmentSizeDto$InternalSegmentSizeDtoBuilder.internalTopicWithSegmentSize(Map) may expose internal representati by storing an externally mutable object into InternalSegmentSizeDto$InternalSegmentSizeDtoBuilder.internalTopicWithSegmentSize
EI2	com.provectus.kafka.ui.model.InternalTopic.setClustersProperties(ClustersProperties) may expose internal representation by storing an externally mutable objec into InternalTopic.clustersProperties
EI2	com.provectus.kafka.ui.model.InternalTopic$InternalTopicBuilder.clustersProperties(ClustersProperties) may expose internal representation by storing an externally mutable object into InternalTopic$InternalTopicBuilder.clustersProperties
EI2	com.provectus.kafka.ui.model.InternalTopic$InternalTopicBuilder.partitions(Map) may expose internal representation by storing an externally mutable object in InternalTopic$InternalTopicBuilder.partitions
EI2	com.provectus.kafka.ui.model.InternalTopic$InternalTopicBuilder.topicConfigs(List) may expose internal representation by storing an externally mutable objec into InternalTopic$InternalTopicBuilder.topicConfigs
EI2	com.provectus.kafka.ui.model.InternalTopicConfig$InternalTopicConfigBuilder.synonyms(List) may expose internal representation by storing an externally mutable object into InternalTopicConfig$InternalTopicConfigBuilder.synonyms
EI2	com.provectus.kafka.ui.model.KafkaCluster$KafkaClusterBuilder.connectsClients(Map) may expose internal representation by storing an externally mutable object into KafkaCluster$KafkaClusterBuilder.connectsClients
EI2	com.provectus.kafka.ui.model.KafkaCluster$KafkaClusterBuilder.originalProperties(ClustersProperties$Cluster) may expose internal representation by storing externally mutable object into KafkaCluster$KafkaClusterBuilder.originalProperties
EI2	com.provectus.kafka.ui.model.KafkaCluster$KafkaClusterBuilder.properties(Properties) may expose internal representation by storing an externally mutable object into KafkaCluster$KafkaClusterBuilder.properties
EI2	com.provectus.kafka.ui.model.Metrics$MetricsBuilder.brokerBytesInPerSec(Map) may expose internal representation by storing an externally mutable object in Metrics$MetricsBuilder.brokerBytesInPerSec
EI2	com.provectus.kafka.ui.model.Metrics$MetricsBuilder.brokerBytesOutPerSec(Map) may expose internal representation by storing an externally mutable object into Metrics$MetricsBuilder.brokerBytesOutPerSec
EI2	com.provectus.kafka.ui.model.Metrics$MetricsBuilder.perBrokerMetrics(Map) may expose internal representation by storing an externally mutable object into Metrics$MetricsBuilder.perBrokerMetrics
EI2	com.provectus.kafka.ui.model.Metrics$MetricsBuilder.topicBytesInPerSec(Map) may expose internal representation by storing an externally mutable object int Metrics$MetricsBuilder.topicBytesInPerSec
EI2	com.provectus.kafka.ui.model.Metrics$MetricsBuilder.topicBytesOutPerSec(Map) may expose internal representation by storing an externally mutable object in Metrics$MetricsBuilder.topicBytesOutPerSec
EI2	com.provectus.kafka.ui.model.Statistics$StatisticsBuilder.features(List) may expose internal representation by storing an externally mutable object into Statistics$StatisticsBuilder.features
EI2	com.provectus.kafka.ui.model.Statistics$StatisticsBuilder.lastKafkaException(Throwable) may expose internal representation by storing an externally mutable object into Statistics$StatisticsBuilder.lastKafkaException
EI2	com.provectus.kafka.ui.model.Statistics$StatisticsBuilder.topicConfigs(Map) may expose internal representation by storing an externally mutable object into Statistics$StatisticsBuilder.topicConfigs
EI2	com.provectus.kafka.ui.model.Statistics$StatisticsBuilder.topicDescriptions(Map) may expose internal representation by storing an externally mutable object int Statistics$StatisticsBuilder.topicDescriptions
EI2	com.provectus.kafka.ui.model.connect.InternalConnectInfo$InternalConnectInfoBuilder.config(Map) may expose internal representation by storing an externall mutable object into InternalConnectInfo$InternalConnectInfoBuilder.config
EI2	com.provectus.kafka.ui.model.connect.InternalConnectInfo$InternalConnectInfoBuilder.tasks(List) may expose internal representation by storing an externally mutable object into InternalConnectInfo$InternalConnectInfoBuilder.tasks
EI2	com.provectus.kafka.ui.model.connect.InternalConnectInfo$InternalConnectInfoBuilder.topics(List) may expose internal representation by storing an externally mutable object into InternalConnectInfo$InternalConnectInfoBuilder.topics
EI2	new com.provectus.kafka.ui.model.rbac.AccessContext(Collection, String, Collection, String, Collection, String, Collection, String, Collection, String, String, Collection, Collection, Collection, Collection, String, Object) may expose internal representation by storing an externally mutable object into AccessContext.aclActions
EI2	new com.provectus.kafka.ui.model.rbac.AccessContext(Collection, String, Collection, String, Collection, String, Collection, String, Collection, String, String, Collection, Collection, Collection, Collection, String, Object) may expose internal representation by storing an externally mutable object into AccessContext.applicationConfigActions
EI2	new com.provectus.kafka.ui.model.rbac.AccessContext(Collection, String, Collection, String, Collection, String, Collection, String, Collection, String, String, Collection, Collection, Collection, Collection, String, Object) may expose internal representation by storing an externally mutable object into AccessContext.auditAction
EI2	new com.provectus.kafka.ui.model.rbac.AccessContext(Collection, String, Collection, String, Collection, String, Collection, String, Collection, String, String, Collection, Collection, Collection, Collection, String, Object) may expose internal representation by storing an externally mutable object into AccessContext.clusterConfigActions
EI2	new com.provectus.kafka.ui.model.rbac.AccessContext(Collection, String, Collection, String, Collection, String, Collection, String, Collection, String, String, Collection, Collection, Collection, Collection, String, Object) may expose internal representation by storing an externally mutable object into AccessContext.connectActions
EI2	new com.provectus.kafka.ui.model.rbac.AccessContext(Collection, String, Collection, String, Collection, String, Collection, String, Collection, String, String, Collection, Collection, Collection, Collection, String, Object) may expose internal representation by storing an externally mutable object into AccessContext.consumerGroupActions
EI2	new com.provectus.kafka.ui.model.rbac.AccessContext(Collection, String, Collection, String, Collection, String, Collection, String, Collection, String, String, Collection, Collection, Collection, Collection, String, Object) may expose internal representation by storing an externally mutable object into AccessContext.ksqlActions
EI2	new com.provectus.kafka.ui.model.rbac.AccessContext(Collection, String, Collection, String, Collection, String, Collection, String, Collection, String, String, Collection, Collection, Collection, Collection, String, Object) may expose internal representation by storing an externally mutable object into AccessContext.schemaActions
EI2	new com.provectus.kafka.ui.model.rbac.AccessContext(Collection, String, Collection, String, Collection, String, Collection, String, Collection, String, String, Collection, Collection, Collection, Collection, String, Object) may expose internal representation by storing an externally mutable object into AccessContext.topicActions
EI2	com.provectus.kafka.ui.model.rbac.Permission.setActions(List) may expose internal representation by storing an externally mutable object into Permission.actic
EI2	com.provectus.kafka.ui.model.rbac.Role.setClusters(List) may expose internal representation by storing an externally mutable object into Role.clusters
EI2	com.provectus.kafka.ui.model.rbac.Role.setPermissions(List) may expose internal representation by storing an externally mutable object into Role.permissions
EI2	com.provectus.kafka.ui.model.rbac.Role.setSubjects(List) may expose internal representation by storing an externally mutable object into Role.subjects
EI2	new com.provectus.kafka.ui.serdes.ClusterSerdes(Map, SerdeInstance, SerdeInstance, SerdeInstance) may expose internal representation by storing an externall mutable object into ClusterSerdes.serdes
EI2	new com.provectus.kafka.ui.serdes.SerdeInstance(String, Serde, Pattern, Pattern, ClassLoader) may expose internal representation by storing an externally muta object into SerdeInstance.classLoader

EI2	new com.provectus.kafka.ui.service.ApplicationInfoService(DynamicConfigOperations, BuildProperties, GitProperties) may expose internal representation by storing an externally mutable object into ApplicationInfoService.dynamicConfigOperations
EI2	new com.provectus.kafka.ui.service.BrokerService(StatisticsCache, AdminClientService, DescribeLogDirsMapper) may expose internal representation by storir an externally mutable object into BrokerService.statisticsCache
EI2	new com.provectus.kafka.ui.service.ClusterService(StatisticsCache, ClustersStorage, ClusterMapper, StatisticsService) may expose internal representation by storing an externally mutable object into ClusterService.statisticsCache
EI2	new com.provectus.kafka.ui.service.ConsumerGroupService$ConsumerGroupsPage(List, int) may expose internal representation by storing an externally mutab object into ConsumerGroupService$ConsumerGroupsPage.consumerGroups
EI2	new com.provectus.kafka.ui.service.MessagesService(AdminClientService, DeserializationService, ConsumerGroupService, ClustersProperties) may expose internal representation by storing an externally mutable object into MessagesService.consumerGroupService
EI2	new com.provectus.kafka.ui.service.ReactiveAdminClient$ClusterDescription(Node, String, Collection, Set) may expose internal representation by storing an externally mutable object into ReactiveAdminClient$ClusterDescription.authorizedOperations
EI2	new com.provectus.kafka.ui.service.ReactiveAdminClient$ClusterDescription(Node, String, Collection, Set) may expose internal representation by storing an externally mutable object into ReactiveAdminClient$ClusterDescription.nodes
EI2	com.provectus.kafka.ui.service.ReactiveAdminClient$ConfigRelatedInfo$ConfigRelatedInfoBuilder.features(Set) may expose internal representation by storing externally mutable object into ReactiveAdminClient$ConfigRelatedInfo$ConfigRelatedInfoBuilder.features
EI2	new com.provectus.kafka.ui.service.StatisticsService(MetricsCollector, AdminClientService, FeatureService, StatisticsCache) may expose internal representatio by storing an externally mutable object into StatisticsService.cache
EI2	new com.provectus.kafka.ui.service.StatisticsService(MetricsCollector, AdminClientService, FeatureService, StatisticsCache) may expose internal representatio by storing an externally mutable object into StatisticsService.metricsCollector
EI2	new com.provectus.kafka.ui.service.TopicsService(AdminClientService, StatisticsCache, ClustersProperties) may expose internal representation by storing an externally mutable object into TopicsService.clustersProperties
EI2	new com.provectus.kafka.ui.service.TopicsService(AdminClientService, StatisticsCache, ClustersProperties) may expose internal representation by storing an externally mutable object into TopicsService.statisticsCache
EI2	new com.provectus.kafka.ui.service.analyze.TopicAnalysisService(TopicsService, ConsumerGroupService) may expose internal representation by storing an externally mutable object into TopicAnalysisService.consumerGroupService
EI2	new com.provectus.kafka.ui.service.analyze.TopicAnalysisService(TopicsService, ConsumerGroupService) may expose internal representation by storing an externally mutable object into TopicAnalysisService.topicsService
EI2	com.provectus.kafka.ui.service.ksql.KsqlApiClient$KsqlResponseTable$KsqlResponseTableBuilder.columnNames(List) may expose internal representation by storing an externally mutable object into KsqlApiClient$KsqlResponseTable$KsqlResponseTableBuilder.columnNames
EI2	com.provectus.kafka.ui.service.ksql.KsqlApiClient$KsqlResponseTable$KsqlResponseTableBuilder.values(List) may expose internal representation by storing externally mutable object into KsqlApiClient$KsqlResponseTable$KsqlResponseTableBuilder.values
EI2	new com.provectus.kafka.ui.service.metrics.RawMetric$SimpleMetric(String, Map, BigDecimal) may expose internal representation by storing an externally mutable object into RawMetric$SimpleMetric.labels
EI2	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure.setAuth(DynamicConfigOperations$PropertiesStructure$Auth) may expose internal representation by storing an externally mutable object into DynamicConfigOperations$PropertiesStructure.auth
EI2	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure.setKafka(ClustersProperties) may expose internal representation by storing an externally mutable object into DynamicConfigOperations$PropertiesStructure.kafka
EI2	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure.setWebclient(WebclientProperties) may expose internal representation by storing an externally mutable object into DynamicConfigOperations$PropertiesStructure.webclient
EI2	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure$Auth.setOauth2(OAuthProperties) may expose internal representation by storing an externally mutable object into DynamicConfigOperations$PropertiesStructure$Auth.oauth2
EI2	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure$Auth$AuthBuilder.oauth2(OAuthProperties) may expose internal representation by storing an externally mutable object into DynamicConfigOperations$PropertiesStructure$Auth$AuthBuilder.oauth2
EI2	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure$PropertiesStructureBuilder.auth(DynamicConfigOperations$PropertiesStructure$Au may expose internal representation by storing an externally mutable object into DynamicConfigOperations$PropertiesStructure$PropertiesStructureBuilder.auth
EI2	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure$PropertiesStructureBuilder.kafka(ClustersProperties) may expose internal representation by storing an externally mutable object into DynamicConfigOperations$PropertiesStructure$PropertiesStructureBuilder.kafka
EI2	com.provectus.kafka.ui.util.DynamicConfigOperations$PropertiesStructure$PropertiesStructureBuilder.webclient(WebclientProperties) may expose internal representation by storing an externally mutable object into DynamicConfigOperations$PropertiesStructure$PropertiesStructureBuilder.webclient
EI2	com.provectus.kafka.ui.util.jsonschema.JsonSchema$JsonSchemaBuilder.definitions(Map) may expose internal representation by storing an externally mutable object into JsonSchema$JsonSchemaBuilder.definitions
EI2	com.provectus.kafka.ui.util.jsonschema.JsonSchema$JsonSchemaBuilder.properties(Map) may expose internal representation by storing an externally mutable object into JsonSchema$JsonSchemaBuilder.properties
EI2	com.provectus.kafka.ui.util.jsonschema.JsonSchema$JsonSchemaBuilder.required(List) may expose internal representation by storing an externally mutable obj into JsonSchema$JsonSchemaBuilder.required
MS	com.provectus.kafka.ui.AbstractIntegrationTest.tmpDir isn't final but should be
MS	com.provectus.kafka.ui.model.rbac.provider.Provider$Name.COGNITO isn't final but should be
MS	com.provectus.kafka.ui.model.rbac.provider.Provider$Name.GITHUB isn't final but should be
MS	com.provectus.kafka.ui.model.rbac.provider.Provider$Name.GOOGLE isn't final but should be
MS	com.provectus.kafka.ui.model.rbac.provider.Provider$Name.OAUTH isn't final but should be
MS	ksql.KsqlGrammarLexer.channelNames should be both final and package protected
MS	ksql.KsqlGrammarLexer.modeNames should be both final and package protected
MS	ksql.KsqlGrammarLexer._decisionToDFA should be package protected
MS	ksql.KsqlGrammarLexer.ruleNames should be package protected
MS	ksql.KsqlGrammarLexer.tokenNames should be package protected
MS	ksql.KsqlGrammarParser._decisionToDFA should be package protected
MS	ksql.KsqlGrammarParser.ruleNames should be package protected
MS	ksql.KsqlGrammarParser.tokenNames should be package protected

Performance Warnings

Code	Warning
Bx	Boxed value is unboxed and then immediately reboxed in com.provectus.kafka.ui.model.PartitionDistributionStats.calculateAvgSkew(Integer, double)
Bx	Boxed value is unboxed and then immediately reboxed in com.provectus.kafka.ui.model.PartitionDistributionStats.lambda$incr$4(Node, Integer)
SIC	The class com.provectus.kafka.ui.KafkaConnectServiceTests$1 could be refactored into a named _static_ inner class

SIC	The class com.provectus.kafka.ui.KafkaConnectServiceTests$2 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.KafkaConnectServiceTests$3 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.serdes.CustomSerdeLoader$ChildFirstClassloader$1 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.serdes.builtin.AvroEmbeddedSerde$1 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.serdes.builtin.ProtobufFileSerde$1 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.serdes.builtin.ProtobufFileSerde$2 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.serdes.builtin.ProtobufFileSerde$ProtoSchemaLoader$1 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.serdes.builtin.ProtobufRawSerde$1 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.service.ConfigTest$1 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.service.KafkaConnectService$1 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.service.LogDirsTest$1 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.service.LogDirsTest$2 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.service.LogDirsTest$3 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.service.SchemaRegistryService$1 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.service.rbac.extractor.GithubAuthorityExtractor$1 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.service.rbac.extractor.GithubAuthorityExtractor$2 could be refactored into a named _static_ inner class
SIC	The class com.provectus.kafka.ui.util.DynamicConfigOperations$1 could be refactored into a named _static_ inner class
SS	Unread field: com.provectus.kafka.ui.KafkaConnectServiceTests.connectName; should this field be static?
SS	Unread field: com.provectus.kafka.ui.emitter.OffsetsInfoTest.topic; should this field be static?
SS	Unread field: com.provectus.kafka.ui.emitter.SeekOperationsTest.topic; should this field be static?
UPM	Private method com.provectus.kafka.ui.service.ksql.KsqlApiClientTest.assertLastKsqTutorialQueryResult(KsqlApiClient) is never called
UPM	Private method com.provectus.kafka.ui.service.ksql.KsqlApiClientTest.execCommandSync(KsqlApiClient, String[]) is never called
UPM	Private method com.provectus.kafka.ui.service.ksql.KsqlApiClientTest.ksqlClient() is never called
WMI	com.provectus.kafka.ui.service.metrics.JmxMetricsFormatter.constructMetricsList(ObjectName, MBeanAttributeInfo[], Object[]) makes inefficient use of keySet iterator instead of entrySet iterator

Dodgy code Warnings

Code	Warning
DB	com.provectus.kafka.ui.util.jsonschema.AvroJsonSchemaConverter.convertType(Schema) uses the same code for two switch clauses
DLS	Dead store to bytes in com.provectus.kafka.ui.serdes.builtin.Int32SerdeTest.serializeAndDeserializeInt32Max(Serde$Target)
DLS	Dead store to bytes in com.provectus.kafka.ui.serdes.builtin.Int32SerdeTest.serializeAndDeserializeInt32Min(Serde$Target)
DLS	Dead store to bytes in com.provectus.kafka.ui.serdes.builtin.Int32SerdeTest.serializeAndDeserializeWithZeroValue(Serde$Target)
NP	Possible null pointer dereference in com.provectus.kafka.ui.util.DynamicConfigOperations.writeYamlToFile(String, Path) due to return value of called method
NP	Possible null pointer dereference in com.provectus.kafka.ui.util.DynamicConfigOperations.writeYamlToFile(String, Path) due to return value of called method
RCN	Redundant nullcheck of parentRes, which is known to be non-null in com.provectus.kafka.ui.serdes.CustomSerdeLoader$ChildFirstClassloader.getResources(String)
RCN	Redundant nullcheck of thisRes, which is known to be non-null in com.provectus.kafka.ui.serdes.CustomSerdeLoader$ChildFirstClassloader.getResources(String)
REC	Exception is caught when Exception is not thrown in com.provectus.kafka.ui.emitter.MessagesProcessing.lambda$send$0(FluxSink, ConsumerRecord)
REC	Exception is caught when Exception is not thrown in com.provectus.kafka.ui.service.ksql.response.ResponseParser.parseErrorResponse(WebClientResponseException)
REC	Exception is caught when Exception is not thrown in com.provectus.kafka.ui.service.metrics.JmxMetricsRetriever.withJmxConnector(String, KafkaCluster, Consumer)
REC	Exception is caught when Exception is not thrown in com.provectus.kafka.ui.util.KafkaServicesValidation.validateTruststore(ClustersProperties$TruststoreConfig)
REC	Exception is caught when Exception is not thrown in com.provectus.kafka.ui.util.KafkaVersion.parse(String)
SF	Switch statement found in ksql.KsqlGrammarParser.aliasedRelation() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.alterOption() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.assertStatement() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.booleanExpression(int) where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.functionArgument() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.groupBy() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.hoppingWindowExpression() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.number() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.partitionBy() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.predicate(ParserRuleContext) where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.predicated() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.primaryExpression(int) where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.relation() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.selectItem() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.sessionWindowExpression() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.statement() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.testStatement() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.tumblingWindowExpression() where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.type(int) where default case is missing
SF	Switch statement found in ksql.KsqlGrammarParser.valueExpression(int) where default case is missing
UrF	Unread public/protected field: ksql.KsqlGrammarParser$ArithmeticBinaryContext.left
UrF	Unread public/protected field: ksql.KsqlGrammarParser$ArithmeticBinaryContext.operator
UrF	Unread public/protected field: ksql.KsqlGrammarParser$ArithmeticBinaryContext.right

UrF	Unread public/protected field: ksql.KsqlGrammarParser$ArithmeticUnaryContext.operator
UrF	Unread public/protected field: ksql.KsqlGrammarParser$BetweenContext.lower
UrF	Unread public/protected field: ksql.KsqlGrammarParser$BetweenContext.upper
UrF	Unread public/protected field: ksql.KsqlGrammarParser$ComparisonContext.right
UrF	Unread public/protected field: ksql.KsqlGrammarParser$ConcatenationContext.left
UrF	Unread public/protected field: ksql.KsqlGrammarParser$ConcatenationContext.right
UrF	Unread public/protected field: ksql.KsqlGrammarParser$DereferenceContext.base
UrF	Unread public/protected field: ksql.KsqlGrammarParser$DereferenceContext.fieldName
UrF	Unread public/protected field: ksql.KsqlGrammarParser$DistinctFromContext.right
UrF	Unread public/protected field: ksql.KsqlGrammarParser$JoinRelationContext.left
UrF	Unread public/protected field: ksql.KsqlGrammarParser$LikeContext.escape
UrF	Unread public/protected field: ksql.KsqlGrammarParser$LikeContext.pattern
UrF	Unread public/protected field: ksql.KsqlGrammarParser$LogicalBinaryContext.left
UrF	Unread public/protected field: ksql.KsqlGrammarParser$LogicalBinaryContext.operator
UrF	Unread public/protected field: ksql.KsqlGrammarParser$LogicalBinaryContext.right
UrF	Unread public/protected field: ksql.KsqlGrammarParser$QueryContext.from
UrF	Unread public/protected field: ksql.KsqlGrammarParser$QueryContext.having
UrF	Unread public/protected field: ksql.KsqlGrammarParser$QueryContext.where
UrF	Unread public/protected field: ksql.KsqlGrammarParser$SearchedCaseContext.elseExpression
UrF	Unread public/protected field: ksql.KsqlGrammarParser$SimpleCaseContext.elseExpression
UrF	Unread public/protected field: ksql.KsqlGrammarParser$SubscriptContext.index
UrF	Unread public/protected field: ksql.KsqlGrammarParser$SubscriptContext.value
UrF	Unread public/protected field: ksql.KsqlGrammarParser$WhenClauseContext.condition
UrF	Unread public/protected field: ksql.KsqlGrammarParser$WhenClauseContext.result
UwF	SchemaRegistryServiceTests.subject not initialized in constructor and dereferenced in com.provectus.kafka.ui.SchemaRegistryServiceTests.lambda$shouldReturnNotEmptyResponseWhenGetAllSchemas$2(SchemaSubjectDTO)
UwF	Permission.actions not initialized in constructor and dereferenced in com.provectus.kafka.ui.model.rbac.Permission.transform()
UwF	Role.permissions not initialized in constructor and dereferenced in com.provectus.kafka.ui.model.rbac.Role.validate()
UwF	SchemaRegistrySerde.schemaRegistryClient not initialized in constructor and dereferenced in com.provectus.kafka.ui.serdes.builtin.sr.SchemaRegistrySerde.lambda$getSchemaById$9(int)
UwF	SchemaRegistrySerde.schemaRegistryClient not initialized in constructor and dereferenced in com.provectus.kafka.ui.serdes.builtin.sr.SchemaRegistrySerde.lambda$getSchemaBySubject$10(String)
UwF	SchemaRegistrySerde.schemaRegistryFormatters not initialized in constructor and dereferenced in com.provectus.kafka.ui.serdes.builtin.sr.SchemaRegistrySerde.lambda$deserializer$17(String, RecordHeaders, byte[])
UwF	SchemaRegistrySerde.schemaRegistryUrls not initialized in constructor and dereferenced in com.provectus.kafka.ui.serdes.builtin.sr.SchemaRegistrySerde.convertSchema(SchemaMetadata, ParsedSchema)
UwF	SendAndReadTests$SendAndReadSpec.msgToSend not initialized in constructor and dereferenced in com.provectus.kafka.ui.service.SendAndReadTests$SendAndReadSpec.doAssert(Consumer)

Details

BX_UNBOXING_IMMEDIATELY_REBOXED: Boxed value is unboxed and then immediately reboxed

A boxed value is unboxed and then immediately reboxed.

CT_CONSTRUCTOR_THROW: Be wary of letting constructors throw exceptions.

Classes that throw exceptions in their constructors are vulnerable to Finalizer attacks

A finalizer attack can be prevented, by declaring the class final, using an empty finalizer declared as final, or by a clever use of a private constructor.

See SEI CERT Rule OBJ-11 for more information.

DB_DUPLICATE_SWITCH_CLAUSES: Method uses the same code for two switch clauses

This method uses the same code to implement two clauses of a switch statement. This could be a case of duplicate code, but it might also indicate a coding mistake.

DLS_DEAD_LOCAL_STORE: Dead store to local variable

This instruction assigns a value to a local variable, but the value is not read or used in any subsequent instruction. Often, this indicates an error, because the value computed is never used.

Note that Sun's javac compiler often generates dead stores for final local variables. Because SpotBugs is a bytecode-based tool, there is no easy way to eliminate these false positives.

DP_CREATE_CLASSLOADER_INSIDE_DO_PRIVILEGED: Classloaders should only be created inside doPrivileged block

This code creates a classloader, which needs permission if a security manage is installed. If this code might be invoked by code that does not have security permissions, then the classloader creation needs to occur inside a doPrivileged block.

DP_DO_INSIDE_DO_PRIVILEGED: Method invoked that should be only be invoked inside a doPrivileged block

This code invokes a method that requires a security permission check. If this code will be granted security permissions, but might be invoked by code that does not have security permissions, then the invocation needs to occur inside a doPrivileged block.

DM_CONVERT_CASE: Consider using Locale parameterized version of invoked method

A String is being converted to upper or lowercase, using the platform's default encoding. This may result in improper conversions when used with international characters. Use the

- String.toUpperCase(Locale l)
- String.toLowerCase(Locale l)

versions instead.

DM_EXIT: Method invokes System.exit(...)

Invoking System.exit shuts down the entire Java virtual machine. This should only been done when it is appropriate. Such calls make it hard or impossible for your code to be invoked by other code. Consider throwing a RuntimeException instead.

DM_DEFAULT_ENCODING: Reliance on default encoding

Found a call to a method which will perform a byte to String (or String to byte) conversion, and will assume that the default platform encoding is suitable. This will cause the application behavior to vary between platforms. Use an alternative API and specify a charset name or Charset object explicitly.

EI_EXPOSE_REP: May expose internal representation by returning reference to mutable object

Returning a reference to a mutable object value stored in one of the object's fields exposes the internal representation of the object. If instances are accessed by untrusted code, and unchecked changes to the mutable object would compromise security or other important properties, you will need to do something different. Returning a new copy of the object is better approach in many situations.

EI_EXPOSE_REP2: May expose internal representation by incorporating reference to mutable object

This code stores a reference to an externally mutable object into the internal representation of the object. If instances are accessed by untrusted code, and unchecked changes to the mutable object would compromise security or other important properties, you will need to do something different. Storing a copy of the object is better approach in many situations.

MS_SHOULD_BE_FINAL: Field isn't final but should be

This `public static` or `protected static` field is not final, and could be changed by malicious code or by accident from another package. The field could be made final to avoid this vulnerability.

MS_FINAL_PKGPROTECT: Field should be both final and package protected

A mutable static field could be changed by malicious code or by accident from another package. The field could be made package protected and/or made final to avoid this vulnerability.

MS_PKGPROTECT: Field should be package protected

A mutable static field could be changed by malicious code or by accident. The field could be made package protected to avoid this vulnerability.

NP_NULL_ON_SOME_PATH_FROM_RETURN_VALUE: Possible null pointer dereference due to return value of called method

The return value from a method is dereferenced without a null check, and the return value of that method is one that should generally be checked for null. This may lead to a `NullPointerException` when the code is executed.

OBL_UNSATISFIED_OBLIGATION: Method may fail to clean up stream or resource

This method may fail to clean up (close, dispose of) a stream, database object, or other resource requiring an explicit cleanup operation.

In general, if a method opens a stream or other resource, the method should use a try/finally block to ensure that the stream or resource is cleaned up before the method returns.

This bug pattern is essentially the same as the OS_OPEN_STREAM and ODR_OPEN_DATABASE_RESOURCE bug patterns, but is based on a different (and hopefully better) static analysis technique. We are interested is getting feedback about the usefulness of this bug pattern. For sending feedback, check:

- contributing guideline
- mailinglist

In particular, the false-positive suppression heuristics for this bug pattern have not been extensively tuned, so reports about false positives are helpful to us.

See Weimer and Necula, *Finding and Preventing Run-Time Error Handling Mistakes* (PDF), for a description of the analysis technique.

OS_OPEN_STREAM: Method may fail to close stream

The method creates an IO stream object, does not assign it to any fields, pass it to other methods that might close it, or return it, and does not appear to close the stream on all paths out of the method. This may result in a file descriptor leak. It is generally a good idea to use a `finally` block to ensure that streams are closed.

RCN_REDUNDANT_NULLCHECK_OF_NONNULL_VALUE: Redundant nullcheck of value known to be non-null

This method contains a redundant check of a known non-null value against the constant null.

REC_CATCH_EXCEPTION: Exception is caught when Exception is not thrown

This method uses a try-catch block that catches Exception objects, but Exception is not thrown within the try block, and RuntimeException is not explicitly caught. It is a common bug pattern to say try { ... } catch (Exception e) { something } as a shorthand for catching a number of types of exception each of whose catch blocks is identical, but this construct also accidentally catches RuntimeException as well, masking potential bugs.

A better approach is to either explicitly catch the specific exceptions that are thrown, or to explicitly catch RuntimeException exception, rethrow it, and then catch all non-Runtime Exceptions, as shown below:

```
try {
    ...
} catch (RuntimeException e) {
    throw e;
} catch (Exception e) {
    ... deal with all non-runtime exceptions ...
}
```

RV_RETURN_VALUE_IGNORED: Method ignores return value

The return value of this method should be checked. One common cause of this warning is to invoke a method on an immutable object, thinking that it updates the object. For example, in the following code fragment,

```
String dateString = getHeaderField(name);
dateString.trim();
```

the programmer seems to be thinking that the trim() method will update the String referenced by dateString. But since Strings are immutable, the trim() function returns a new String value, which is being ignored here. The code should be corrected to:

```
String dateString = getHeaderField(name);
dateString = dateString.trim();
```

SF_SWITCH_NO_DEFAULT: Switch statement found where default case is missing

This method contains a switch statement where default case is missing. Usually you need to provide a default case.

Because the analysis only looks at the generated bytecode, this warning can be incorrect triggered if the default case is at the end of the switch statement and the switch statement doesn't contain break statements for other cases.

SIC_INNER_SHOULD_BE_STATIC_ANON: Could be refactored into a named static inner class

This class is an inner class, but does not use its embedded reference to the object which created it. This reference makes the instances of the class larger, and may keep the reference to the creator object alive longer than necessary. If possible, the class should be made into a *static* inner class. Since anonymous inner classes cannot be marked as static, doing this will require refactoring the inner class so that it is a named inner class.

SS_SHOULD_BE_STATIC: Unread field: should this field be static?

This class contains an instance final field that is initialized to a compile-time static value. Consider making the field static.

UPM_UNCALLED_PRIVATE_METHOD: Private method is never called

This private method is never called. Although it is possible that the method will be invoked through reflection, it is more likely that the method is never used, and should be removed.

URF_UNREAD_PUBLIC_OR_PROTECTED_FIELD: Unread public/protected field

This field is never read. The field is public or protected, so perhaps it is intended to be used with classes not seen as part of the analysis. If not, consider removing it from the class.

UWF_FIELD_NOT_INITIALIZED_IN_CONSTRUCTOR: Field not initialized in constructor but dereferenced without null check

This field is never initialized within any constructor, and is therefore could be null after the object is constructed. Elsewhere, it is loaded and dereferenced without a null check. This could be either an error or a questionable design, since it means a null pointer exception will be generated if that field is dereferenced before being initialized.

WMI_WRONG_MAP_ITERATOR: Inefficient use of keySet iterator instead of entrySet iterator

This method accesses the value of a Map entry, using a key that was retrieved from a keySet iterator. It is more efficient to use an iterator on the entrySet of the map, to avoid the Map.get(key) lookup.