

KIP-725: Streamlining configurations for WindowedSerializer and WindowedDeserializer.

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Status

Current state: Adopted

Discussion thread:

JIRA: [KAFKA-12313](#)

Please keep the discussion on the mailing list rather than commenting on the wiki (wiki discussions get unwieldy fast).

Motivation

[KIP-659](#) introduced a config `windowSize` to `TimeWindowedDeserializer` which discourages the setting of `windowSize` to `Long.MAX_VALUE` as the default value. However, there is still a possibility of setting the config only for `innerClassSerde` or only for `windowSize`. This KIP aims at standardising the way the serialisers and deserializer object can be created for the usage in console consumer, plain consumer and via the DSL.

Proposed Changes

Here are the changes being proposed in the KIP:

1. **StreamsConfig**
 - a. Deprecate **`default.windowed.key.serde.inner`** and **`default.windowed.value.serde.inner`**.
 - b. Introduce a new config called **`windowed.inner.class.serde`**. This way, the config comes closer to the **`window.size.ms`** config introduced in [KIP-659](#) and it also emphasises that the config isn't really a default one.
2. **ConsoleConsumer**
 - a. It would be mandatory to pass **`windowed.inner.class.serde`** and [window.size.ms](#) config.
3. The following table discusses the proposed changes for the Windowed Serdes and proposed changes based on Client Type.

	Windowed Serde Type	Client Type	Constructor Invoked	Proposed Change
1	TimeWindowedDeserializer	Console Consumer	Default constructor	Ensure both <code>windowSize</code> and Serde class configs are set. Throw error if not.
		Plain Consumer	Default OR Parameterised	Ok to use either as long as the configs supplied don't conflict.
		Kafka Streams	Parameterised	User supplies parameters by constructing a <code>TimeWindowedSerde</code> object. No change
2	TimeWindowedSerializer	Console Producer	Default constructor	Ensure Serde class config is set. Throw error if not.
		Plain Producer	Default OR Parameterised	Ok to use either as long as the configs supplied don't conflict.
		Kafka Streams	Parameterised	User supplies parameters by constructing a <code>TimeWindowedSerde</code> object. No change
3	SessionWindowedDeserializer	Console consumer	Default constructor	Ensure Serde class config is set. Throw error if not.
		Plain consumer	Default OR Parameterised	Ok to use either as long as the configs supplied don't conflict.
		Kafka Streams	Parameterised	User supplies parameters by constructing a <code>SessionWindowedSerde</code> object. No change
4	SessionWindowedSerializer	Console Producer	Default constructor	Ensure Serde class config is set. Throw error if not.

		Plain Producer	Default OR Parameterised	Ok to use either as long as the configs supplied don't conflict.
		Kafka Streams	Parameterised	User supplies parameters by constructing a SessionWindowedSerde object. No change

Public Interfaces

- **StreamsConfig:**
 - Deprecate **default.windowed.key.serde.inner** and **default.windowed.value.serde.inner** in StreamConfig.
 - Introduce a new config called **windowed.inner.class.serde**.

```

    public static final String WINDOWED_INNER_CLASS_SERDE = "windowed.inner.class.serde";
    private static final String WINDOWED_INNER_CLASS_SERDE_DOC = " Serde for the inner
class of a windowed record. Must implement the " +
    "<code>org.apache.kafka.common.serialization.Serde</code> interface. Note that
setting this config in KafkaStreams application would result " +
    "in an error as it is meant to be used only from Plain consumer client.";

    @Deprecated
    public static final String DEFAULT_WINDOWED_KEY_SERDE_INNER_CLASS = "default.
windowed.key.serde.inner";

    @Deprecated
    public static final String DEFAULT_WINDOWED_VALUE_SERDE_INNER_CLASS = "default.
windowed.value.serde.inner";

```

Compatibility, Deprecation, and Migration Plan

This KIP deprecates following 2 configs in StreamConfig : **default.windowed.key.serde.inner** and **default.windowed.value.serde.inner**

Rejected Alternatives

N/A