

# KIP-202 Move merge() from StreamsBuilder to KStream

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## Status

**Current state:** *Accepted*

**Discussion thread:** [here](#)

**JIRA:** [KAFKA-5765](#)

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

## Motivation

Merging multiple KStreams is done via StreamsBuilder's `merge()` (formally KStreamsBuilder's `merge()`). This is quite unnatural and should be done via KStream's `merge()`.

## Public Interfaces

We will add a `merge()` method to the KStream interface.

```
KStream<K,V> merge(KStream<K,V> stream);
```

## Proposed Changes

Originally, the method `merge()` was defined in StreamsBuilder. Through a series of calls, it called a `merge()` method in KStreamImpl separate from the one we are adding.

```
static <K,V> KStream<K,V> merge(InternalStreamsBuilder builder, KStream<K,V>[] streams)
```

In the new structure, we will add a method override with `merge()`:

```
@Override
```

```
public KStream<K,V> merge(KStream<K,V> stream){  
  
    return this.builder.merge(stream); //builder (type:InternalStreamsBuilder) was defined in the AbstractStream  
    superclass  
  
}
```

We will no longer use several variable arguments in one call, rather there will only be one stream that is taken as an input argument.

## Compatibility, Deprecation, and Migration Plan

We will remove the old `merge()` method inside StreamsBuilder. Classes (or systems) calling the old, deprecated method will have to switch to calling the new one

in KStreamImpl.

## Rejected Alternatives

There was plans to use the `merge()` method of the following form:

```
<K,V> KStream<K,V> merge(StreamsBuilder builder, KStream<K,V> ... streams)
```

However, the builder parameter is extra and unnecessary, as the local `InternalStreamsBuilder` is sufficient.