CommandOverrider

The CommandOverrider allows you to override and customize Redis commands.

1. Pass the CommandOverrider to the `GearsBuilder.CreateGearsBuilder()` function in your Java code.
2. Call the `register()` function.
3. Run `RG.JEXECUTE` to register your code.

Note: If you register code that uses CommandOverrider, its reader value is "CommandReader" when you run the `RG.DUMPREGISTRATIONS` command, not "CommandOverrider".

Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>command</td>
<td>string</td>
<td>The command to override</td>
</tr>
<tr>
<td>prefix</td>
<td>string</td>
<td>Only override the command for keys that start with this string</td>
</tr>
</tbody>
</table>

Output records

Outputs a record with the command's name and arguments.

Example

The following example shows how to override the `HSET` command so that it also adds a `last_modified` timestamp for "user:" hashes.

Add some user data as a hash:

```
redis> HSET user:1 name "morgan" posts 201
(integer) 2
```

Example code:
// Create the reader that will pass data to the pipe
CommandOverrider overrider = new CommandOverrider();
// Override the HSET command
overrider.setCommand("HSET");
// Only override HSET for keys that start with "user:"
overrider.setPrefix("user:");

// Create the data pipe builder
GearsBuilder.CreateGearsBuilder(overrider).map(r -> {
    // Extract the key from the command arguments
    String keyName = new String((byte[]) r[1], StandardCharsets.UTF_8);

    // Add a last_modified timestamp to the user's profile
    GearsBuilder.execute("HSET", keyName, "last_modified",
                        Long.toString(System.currentTimeMillis()));

    // Get the original HSET arguments
    ArrayList<String> commandArray = new ArrayList<String>();
    for (int i = 1; i < r.length; i++) {
        commandArray.add(new String((byte[]) r[i], StandardCharsets.UTF_8));
    }

    // Run the original HSET command
    GearsBuilder.callNext(commandArray.toArray(new String[0]));
    return "OK";
}).register();

After you register the previous code with the RG.JEXECUTE command, try to update the user's data with HSET to test it:

redis> HSET user:1 posts 234
"OK"

Now the user's profile should have the updated value for posts and a last_modified timestamp:

redis> HGETALL user:1
1) "name"
2) "morgan"
3) "posts"
4) "234"
5) "last_modified"
6) "1643237927663"

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