

GROMACS - Bug #3233

clang-format incorrectly aligning altered function arguments

12/11/2019 09:00 AM - Pascal Merz

Status: New	
Priority: Normal	
Assignee:	
Category:	
Target version:	
Affected version - extra info:	Difficulty: uncategorized
Affected version: 2020-beta3	

Description

In <https://gerrit.gromacs.org/c/gromacs/+/14758>, I changed

```
StatePropagatorData::StatePropagatorData(int numAtoms,
FILE* fplog,
const t_commrec* cr,
t_state* globalState,
int nstxout,
int nstvout,
int nstfout,
int nstxout_compressed,
bool useGPU,
FreeEnergyPerturbationElement* freeEnergyPerturbationElem
ent,
const t_inputrec* inputrec,
const t_mdatoms* mdatoms) :
```

to

```
StatePropagatorData::StatePropagatorData(int numAtoms,
FILE* fplog,
const t_commrec* cr,
t_state* globalState,
int nstxout,
int nstvout,
int nstfout,
int nstxout_compressed,
bool useGPU,
FreeEnergyPerturbationElement* freeEnergyPerturbationElem
ent,
const TopologyHolder* topologyHolder,
bool canMoleculesBeDistributedO
verPBC,
bool writeFinalConfiguration,
int nfile,
const t_filenm* filenm,
const t_inputrec* inputrec,
const t_mdatoms* mdatoms) :
```

clang-format does, however, insist to indent this as

```
StatePropagatorData::StatePropagatorData(int numAtoms,
FILE* fplog,
const t_commrec* cr,
t_state* globalState,
int nstxout,
int nstvout,
int nstfout,
int nstxout_compressed,
```

```
ent,
    bool useGPU,
    FreeEnergyPerturbationElement* freeEnergyPerturbationElem
ent,
    const TopologyHolder* topologyHolder,
    bool canMoleculesBeDistributedOverPBC,
    bool writeFinalConfiguration,
    int nfile,
    const t_filenm* filenm,
    const t_inputrec* inputrec,
    const t_mdatoms* mdatoms) :
```

History

#1 - 12/13/2019 12:41 PM - Eric Irrgang

For clarification, is this a discrepancy between different versions of clang-format, or between clang-format and some other tool that you have used?

In this case, it looks like the long-line logic was allowed to override the alignment logic. It seems to me like clang-format made a reasonable choice, so before proposing solutions to this issue, can you clarify the behavior that you think we should target?

Would it be consistent with GROMACS style to have a line break before the first function parameter and de-indent the parameter list to a standard +4?

Note that clang-format is advertised to function well with line-by-line usage, but that is obviously in conflict with alignment behaviors. It seems like heuristics in support of the two stylistic trends are not yet a solved problem.