

NAME

hwloc-patch – Apply a topology difference to an existing XML topology

SYNOPSIS

hwloc-patch [*options*] [*<topology.xml>* / *refname*] [*<diff.xml>* / -] *<output.xml>*

hwloc-patch [*options*] [*<topology.xml>* / *refname*] [*<diff.xml>* / -]

OPTIONS

-R --reverse

Reverse the sense the difference file.

--version Report version and exit.

-h --help Display help message and exit.

DESCRIPTION

hwloc-patch loads the difference between two topologies from a XML file (or from the standard input) and applies it to an existing topology, generating a new, modified one.

The XML difference may have been computed earlier with hwloc-diff or hwloc-compress-dir.

If *<output.xml>* is given, the new, modified topology is stored in that new file. Otherwise, *<topology.xml>* is modified in place.

If **refname** is given instead of *<topology.xml>*, the input topology filename is automatically guessed by reading the *refname* field of the XML diff file. By default hwloc-diff generates XML diffs with the right reference topology filename (without any path prefix).

If - is given instead of *<diff.xml>*, the topology difference is read from the standard input.

NOTE: If some application-specific userdata were been exported to the input XMLs, they will be ignored and discarded from the output because hwloc has no way to understand and patch them.

NOTE: It is highly recommended that you read the hwloc(7) overview page before reading this man page. Most of the concepts described in hwloc(7) directly apply to the hwloc-patch utility.

EXAMPLES

hwloc-patch's operation is best described through several examples.

Apply a XML topology difference file to an existing topology:

```
$ hwloc-patch fourmi023.xml diff.xml fourmi023-new.xml
```

Apply a XML topology difference file whole *refname* field contains the right input topology:

```
$ hwloc-patch refname diff.xml fourmi023-new.xml
```

Apply a XML topology from the standard input:

```
$ cat diff.xml | hwloc-patch fourmi023.xml - fourmi023-new.xml
```

Directly compute the difference between two topologies and apply it to another one, in place:

```
$ hwloc-diff fourmi023.xml fourmi024.xml | hwloc-patch fourmi025.xml -
```

RETURN VALUE

Upon successful execution, hwloc-patch outputs the modified topology. The return value is 0.

hwloc-patch also returns nonzero if any kind of error occurs, such as (but not limited to) failure to parse the command line.

SEE ALSO

hwloc(7), lstopo(1), hwloc-diff(1), hwloc-compress-dir(1)