NAME

hwloc-diff – Compute differences between two XML topologies

SYNOPSIS

hwloc-diff [*options*] *<input1.xml> <input2.xml>*

hwloc-diff [*options*] *<input1.xml> <input2.xml> <output.xml>*

OPTIONS

−−refname <name>

Use <name> as the identifier for the reference topology in the output XML difference. It is meant to tell which topology should be used when applying the resulting difference. hwloc-patch may use that name to automatically load the relevant reference topology XML. By default, <input1.xml> is used without its full path.

−−version Report version and exit.

−h −−help Display help message and exit.

DESCRIPTION

hwloc-diff computes the difference between two XML topologies and stores the result into <output.xml> if any, or dumps it to stdout otherwise.

The output difference may later be applied to another topology with hwloc-patch.

hwloc-compress-dir may be used for computing the diffs between all XML files in a directory.

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 compare 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-diff utility.

EXAMPLES

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

Compute the difference between two XML topologies and output it to stdout:

```
$ hwloc-diff fourmi023.xml fourmi024.xml
Found 11 differences, exporting to stdout
<?xml version="1.0" encoding="UTF-8"?>
...
```

Output the difference to file diff.xml instead:

```
$ hwloc-diff fourmi023.xml fourmi024.xml diff.xml
Found 11 differences, exporting to diff.xml
```

When the difference is too complex to be represented:

```
$ hwloc-diff fourmi023.xml avakas-frontend1.xml
Found 1 differences, including 1 too complex ones.
Cannot export differences to stdout
```

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

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

RETURN VALUE

Upon successful execution, hwloc-diff outputs the difference. The return value is 0.

If the difference is too complex to be represented, an error is returned and the output is not generated.

hwloc-diff 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-patch(1), hwloc-compress-dir(1)