dcConverter

November 27, 2014

`dcConverter` *Function to convert an object between graph classes*

Description

`dcConverter` is supposed to convert an object between classes 'Onto' and 'igraph', or between 'Dnetwork' and 'igraph', or between 'Cnetwork' and 'igraph'.

Usage

```
dcConverter(obj, from = c("Onto", "igraph", "Dnetwork", "Cnetwork"),
to = c("igraph", "Onto", "Dnetwork", "Cnetwork"), verbose = TRUE)
```

Arguments

`obj`	an object of class "Onto", "igraph", "Dnetwork" or "Cnetwork"
`from`	a character specifying the class converted from. It can be one of "Onto", "igraph", "Dnetwork" and "Dnetwork"
`to`	a character specifying the class converted to. It can be one of "Onto", "igraph", "Dnetwork" and "Dnetwork"
`verbose`	logical to indicate whether the messages will be displayed in the screen. By default, it sets to true for display

Value

an object of class "Onto", "igraph", "Dnetwork" or "Cnetwork"

Note

Conversion is also supported between classes 'Onto' and 'igraph', or between 'Dnetwork' and 'igraph', or between 'Cnetwork' and 'igraph'

See Also

`dcRDataLoader`, `Onto-class`, `Dnetwork-class`, `Cnetwork-class`

Examples

```
# 1) conversion between Onto and igraph
# 1a) load onto.GOMF (as Onto object)
on <- dcRDataLoader(onto.GOMF)
on
# 1b) convert the object from Onto to igraph class
ig <- dcConverter(on, from=Onto, to=igraph)
ig
# 1c) convert the object from igraph to Onto class
dcConverter(ig, from=igraph, to=Onto)

# 2) conversion between Dnetwork and igraph
# 2a) computer a domain semantic network (as Dnetwork object)
g <- dcRDataLoader(onto.GOMF)
Anno <- dcRDataLoader(SCOP.sf2GOMF)
dag <- dcDAGannotate(g, annotations=Anno, path.mode="shortest_paths",
verbose=FALSE)
alldomains <- unique(unlist(nInfo(dag)$annotations))
domains <- sample(alldomains,5) # randomly sample 5 domains
dnetwork <- dcDAGdomainSim(g=dag, domains=domains,
method.domain="BM.average", method.term="Resnik", parallel=FALSE,
verbose=FALSE)
dnetwork
# 2b) convert the object from Dnetwork to igraph class
ig <- dcConverter(dnetwork, from=Dnetwork, to=igraph)
ig
# 2c) convert the object from igraph to Dnetwork class
dcConverter(ig, from=igraph, to=Dnetwork)
```