PhyloDB Functions

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-- $Id$
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--           2010-2011 David Kidd
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Function	**Description**
pdb_as_newick_label(treeid integer, label text, attrib text, rootdepth boolean)	Returns distanced newick string of labels given a tree_id, the label of the lca and the name of the edge_quaifier_value term containing distances. Set rootdepth TRUE to append depth to the root node, default is FALSE.
pdb_as_newick_label(tree_id integer, label text)	Returns newick string of labels given a tree_id and the label of the lca.
pdb_as_newick(node_id integer)	Returns newick string of quoted node ids.
pdb_as_newick(node_id integer, attrib text, rootdepth boolean)	Returns a distanced newick string of labels given the node_id of the lca and the names of the distanced edge_quaifier_value . Set rootdepth TRUE to append depth to the root node, default is FALSE.
pdb_lca_a_exclude_b(node_id1 integer, nodeid2 integer)	Returns lca of a that does not include b where a and b are node_ids.
pdb_lca_subtree_edge(node_id1 integer, node_id2 integer)	Returns edge_ids for the subtree defined by the lca of a pair of node_ids.

pdb_lca_subtree_edge(tree_id integer, labels text[])	Returns edge_ids of lca subtree defined by node labels of a tree. Usage: SELECT * FROM pdb_num_children(integer, text[]).
pdb_lca_subtree_edge(node_id integer)	Returns edge_ids of lca subtree defined by node id. Usage: SELECT * FROM pdb_num_children(integer[]).
pdb_lca_subtree_edge(node_ids integer[])	Returns edge_ids for the subtree defined by the lca of an array of node_ids.
pdb_lca_subtree_internal_label(tree_id integer, labels text[])	Returns labels of internal nodes for lca subtree given a tree_id and array of labels.
pdb_lca_subtree_internal(tree_id integer,labels text[])	Returns ids of internal nodes for lca subtree given a tree_id and array of labels.
pdb_lca_subtree_label(tree_id integer, labels text[])	Returns labels of nodes for lca subtree given a tree_id and array of labels.
pdb_lca_subtree_tip_label(tree_id integer, labels text[])	Returns node labels of lca subtree defined by a tree_id and the lca of an array node labels.
pdb_lca_subtree_tip(tree_id integer, labels text[])	Returns node ids of lca subtree defined by a tree_id and the lca of an array node labels.
pdb_lca_subtree(tree_id integer, labels text[])	Returns node_ids of lca subtree defined by a tree_id and the lca of an array node labels.
pdb_lca_subtree(node_id integer)	Returns node_ids of lca subtree defined by the node_id.
pdb_lca_subtree(node_ids integer[])	Returns node_ids of lca subtree defined by the lca of an array node_ids.
pdb_lca(node_id integer,node_id integer)	Returns the least common ancestor given a pair of node_ids. Returns NULL if nodes are not in the same tree.
pdb_lca(tree_id integer, node_ids integer[])	Returns the least common ancestor given a tree_id and an array of node_ids. Returns NULL if nodes are not in the same tree.
pdb_lca(tree_id integer, label1 text, label2 text)	Returns the least common ancestor given a tree_id and pair of node_labels. Returns NULL if both labels are not in tree.
pdb_lca(tree_id integer, labels text[])	Returns the least common ancestor given a tree_id and an array of node labels. Labels not in tree are ignored.
pdb_node_children_dist(tree_id integer, label text, term text)	Returns node_id, label, distance given a tree, node label and distance edge_qualifier_value term. Usage: SELECT * FROM biosql.pdb_node_children_dist(tree_id, label, term)
pdb_node_children(parent_node_id integer, child_node_ids integer[])	Returns table of child node_ids given the parent node_id within an array of node_id. Returns null if no children.
pdb_node_children(node_id integer)	Returns table of child node_ids given the parent node_id. Returns null if no children.
pdb_node_id_to_label(node_id integer)	Returns node label for the given id.
pdb_node_id_to_label(node_ids	Returns node labels for the given array of ids.

integer[])	
pdb_node_in_tree(tree_id integer, node_id integer)	Returns TRUE when node is in tree, otherwise FALSE.
pdb_node_in_tree(tree_id integer, node_id integer[])	Returns TRUE when all nodes in array are in tree otherwise false
pdb_node_istip(tree_id integer, label text)	Returns TRUE when label is a tip node, otherwise FALSE.
pdb_node_istip(node_id integer)	Returns TRUE when node_id is a tip node, otherwise FALSE.
pdb_node_label_to_id(tree_id integer, label text)	Returns a node_id given a tree_id and label.
pdb_node_label_to_id(tree_id integer, labels text[])	Returns a table of node_id given a tree_id and array of labels.
pdb_node_qualifier(node_id integer, term text)	Returns edge_qualifier for the given (child) node id and named qualifier
pdb_node_tree(node_id integer)	Returns tree_id of node
pdb_num_children(parent_node_id integer, child_node_ids integer[])	Returns count of child nodes given a parent node id and array of child node ids.
pdb_num_children(tree_id integer, label text, child_node_ids integer[])	Returns count of child nodes given a tree, node label and array of child node ids. Supersedes biosql.n_childern_of_node_in_array(text, integer[])
pdb_num_children(node_ids integer[])	Returns set of records of number of child nodes for each parent node in an array of node ids. Usage: SELECT * FROM pdb_num_children(integer[])
pdb_subtree_ab_exclude_c(node_id1 integer, node_id2 integer, node_id3 integer)	Returns edge ids of lca subtree defined by the maximum spanning clade that includes A and B, but not C.
pdb_tree_ab_exclude_c(labelA text, labelB text, labelC text)	Returns all trees in which the minimum spanning clade of A and B excludes node C.
pdb_tree_ab_include_c(labelA text, labelB text, labelC text)	Returns all trees in which the minimum spanning clade of A and B includes node C.
pdb_tree_delete(tree_id integer)	Deletes a tree (tree, nodes, edges and any qualifier values) for the given tree_id.
pdb_tree_edge_qualifier(tree_id integer)	Returns list of term_ids for a tree.
pdb_tree_edge(tree_id integer)	Returns edge ids of a tree.
pdb_tree_include_label(labels text[])	Returns ids of trees containing nodes with labels within an array of labels.