

QGIS Application - Feature request #12200

Move layers within ToC using PyQGIS

2015-02-13 04:49 AM - Joseph Liam

Status:	Closed	
Priority:	Normal	
Assignee:		
Category:		
Pull Request or Patch supplied:	No	Resolution:
Easy fix?:	No	Copied to github as #: 20389
Description		
<p>Based on a post on GIS StackExchange (http://gis.stackexchange.com/questions/134284/how-to-move-layers-in-qgis), it seems the only method to move layers to another position in ToC (Table of Contents) via PyQGIS is to:</p> <ol style="list-style-type: none">1. Clone the layer2. Insert clone at the desired position3. Remove the original <p>This process is decribed in the following posts:</p> <ul style="list-style-type: none">- http://www.lutraconsulting.co.uk/blog/2014/07/06/qgis-layer-tree-api-part-1/- http://www.lutraconsulting.co.uk/blog/2014/07/25/qgis-layer-tree-api-part-2/ <p>It also mentions that each layer in the ToC contains an index which defines the position within the ToC. Therefore, inserting a cloned layer into an index already owned by another layer will cause problems.</p> <p>Possible solution:</p> <p>When moving a layer into a desired index (i.e. 3), make all layers with an index ≥ 3 to have their index increase by 1. This would make the original layer that was at index 3 to have index 4; original layer with index 4 to have index 5 and so on...</p>		

History

#1 - 2015-02-13 10:11 AM - Martin Dobias

I think I fail to see the problem here...

There is nothing like indexes being owned by layer nodes. Indexes just mirror the order how nodes are stored in an array. It works exactly the same as when you work with a simple python list. Think of list `lst=[10,11,12]`. How do you move value 11 up or down in such list? To move it up: `del lst[1]; lst.insert(0, 11)`. To move it down: `del lst[1]; lst.insert(2, 11)`. It is exactly the same when moving nodes in a layer tree, you just need to clone the objects.

Maybe the confusion comes from the fact the blog post suggest to first insert new node before removing the old node - while it is a bit more practical to do it in reverse? (first delete old node, then insert new one) It is perfectly fine to reverse the operations, the advantage is that the index of the deleted node does not change.

#2 - 2016-05-24 12:15 PM - Alexander Bruy

- Status changed from Open to Closed

Closed, as there is no problem here. Please reopen if necessary

