

Geometry

Exported geometries are stored as a wavefront obj sequence, each obj file corresponds to a single frame, named as “*_####.obj”(e.g. “humanwalk_0015.obj), where “*” is the sequence name and “####” is the frame number, start from 0000.

Sphere Tree

Exported sphere trees are stored as .vsp sequence, following the same name convention as used by the .obj sequence described above.

Each .vsp file describes a sphere tree, formatted as follows:

Version_ID (currently 1)

Num_of_Levels Num_of_Spheres

Sphere_Data

Hierarchy_Data

where the *Sphere_Data* is *Num_of_Spheres* entries, each of which is formatted as follows:

Sphere_Center_x Sphere_Center_y Sphere_Center_z Radius

Notice that the radius field for higher nodes in the hierarchy is undefined and should be updated on-the-fly.

and the *Hierarchy_Data* is defined as follows:

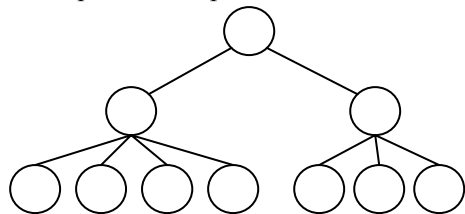
Num_of_Children_0 Num_of_Children_1 ... Num_of_Children_N

It gives the children number of each node, in breadth first iteration order.

e.g. the *Hierarchy_Data*

1 2 4 3 0 0 0 0 0 0

corresponds to a sphere tree which looks like:



Notice that we assume a virtual root for all sphere trees, so the *Hierarchy_Data* always starts with 1.