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3.4.3. Hints and warnings 3.5. Sphere node; 3.5.1. radius; 3.5.2. Hints and warnings; 3.6. Text node; 3.6.1. string; 3.6.2. length; 3.6.3. max Extent; 3.6.4. Hints and warnings; 3.7. Font Style node; 3.7.1. family; 3.7.2. justify; 3.7.3. language; 3.7.4. style; 3.7.5. size and spacing; 3.7.6. horizontal, left To Right, and top To Bottom; 3.7.7. Hints and warnings; 3.7.8. Parameter combinations; 4. Summary; 4.1. Key ideas; 4.2. Related nodes and concepts; 4.3. Next chapter; Chapter 3: Grouping Nodes; 1. What this chapter covers; 2. Concepts; 2.1. Purpose and common functionality
2.2. Units of measurement and coordinate systems 2.3. Coordinate system details; 2.3.1. Which way is up?; 2.3.2. "Right-hand rule" rules!; 2.3.3. Orientation; 2.4. DEF and USE; 2.5. Abstract node types; 2.5.1. X3D Child Node type; 2.5.2. X3D Bounded Object type; 2.5.3. X3D Grouping Node type; 2.5.4. X3D Info Node type; 2.5.5. X3D Url Object abstract interface; 3. Node descriptions; 3.1. Group and Static Group nodes; 3.2. Transform node; 3.2.1. translation; 3.2.2. rotation; 3.2.3. center; 3.2.4. scale; 3.2.5. scale Orientation; 3.2.6. Order of translation, rotation, scaling, and center operations
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Sommario/riassunto

In the early days of the Web a need was recognized for a language to display 3D objects through a browser. An HTML-like language, VRML, was proposed in 1994 and became the standard for describing interactive 3D objects and worlds on the Web. 3D Web courses were started, several best-selling books were published, and VRML continues to be used today. However VRML, because it was based on HTML, is a stodgy language that is not easy to incorporate with other applications and has been difficult to add features to. Meanwhile, applications for interactive 3D graphics have been exploding in areas such