

INTERNATIONAL  
STANDARD

ISO/IEC  
12113

First edition  
2022-07

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**Information technology — Runtime  
3D asset delivery format — Khronos  
glTF™ 2.0**

*Technologies de l'information — Format de livraison d'actifs 3D  
d'exécution — Khronos glTF™ 2.0*

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ISO/IEC 12113:2022(E)

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This document was prepared by Khronos (as glTF™ 2.0 Specification) and drafted in accordance with its editorial rules. It was adopted, under the JTC 1 PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

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# Table of Contents

1. Foreword .....	1
2. Introduction .....	2
2.1. General .....	2
2.2. Document Conventions .....	2
2.2.1. Normative Terminology and References .....	2
2.2.2. Informative Language .....	2
2.2.3. Technical Terminology .....	3
2.2.4. Normative References .....	5
2.2.4.1. External Specifications .....	5
2.2.4.2. Media Type Registrations .....	6
2.3. Motivation and Design Goals (Informative) .....	7
2.4. glTF Basics .....	8
2.5. Versioning .....	8
2.6. File Extensions and Media Types .....	8
2.7. JSON Encoding .....	9
2.8. URIs .....	11
3. Concepts .....	13
3.1. General .....	13
3.2. Asset .....	13
3.3. Indices and Names .....	14
3.4. Coordinate System and Units .....	15
3.5. Scenes .....	15
3.5.1. Overview .....	15
3.5.2. Nodes and Hierarchy .....	16
3.5.3. Transformations .....	17
3.6. Binary Data Storage .....	19
3.6.1. Buffers and Buffer Views .....	19
3.6.1.1. Overview .....	19
3.6.1.2. GLB-stored Buffer .....	21
3.6.2. Accessors .....	22
3.6.2.1. Overview .....	22
3.6.2.2. Accessor Data Types .....	23
3.6.2.3. Sparse Accessors .....	24
3.6.2.4. Data Alignment .....	25
3.6.2.5. Accessors Bounds .....	28
3.7. Geometry .....	28
3.7.1. Overview .....	28
3.7.2. Meshes .....	28

3.7.2.1. Overview .....	28
3.7.2.2. Morph Targets .....	32
3.7.3. Skins .....	35
3.7.3.1. Overview .....	35
3.7.3.2. Joint Hierarchy .....	36
3.7.3.3. Skinned Mesh Attributes .....	37
3.7.4. Instantiation .....	39
3.8. Texture Data .....	41
3.8.1. Overview .....	41
3.8.2. Textures .....	42
3.8.3. Images .....	42
3.8.4. Samplers .....	44
3.8.4.1. Overview .....	44
3.8.4.2. Filtering .....	44
3.8.4.3. Wrapping .....	45
3.8.4.4. Example .....	45
3.8.4.5. Non-power-of-two Textures .....	46
3.9. Materials .....	46
3.9.1. Overview .....	46
3.9.2. Metallic-Roughness Material .....	47
3.9.3. Additional Textures .....	49
3.9.4. Alpha Coverage .....	51
3.9.5. Double Sided .....	52
3.9.6. Default Material .....	52
3.9.7. Point and Line Materials .....	52
3.10. Cameras .....	53
3.10.1. Overview .....	53
3.10.2. View Matrix .....	53
3.10.3. Projection Matrices .....	53
3.10.3.1. Overview .....	53
3.10.3.2. Infinite perspective projection .....	54
3.10.3.3. Finite perspective projection .....	55
3.10.3.4. Orthographic projection .....	55
3.11. Animations .....	55
3.12. Specifying Extensions .....	61
4. GLB File Format Specification .....	63
4.1. General (Informative) .....	63
4.2. Structure .....	63
4.3. File Extension & Media Type .....	63
4.4. Binary glTF Layout .....	63
4.4.1. Overview .....	63

4.4.2. Header .....	64
4.4.3. Chunks .....	64
4.4.3.1. Overview .....	64
4.4.3.2. Structured JSON Content .....	65
4.4.3.3. Binary buffer .....	65
5. Properties Reference .....	66
5.1. Accessor .....	66
5.1.1. accessor.bufferView .....	67
5.1.2. accessor.byteOffset .....	67
5.1.3. accessor.componentType .....	67
5.1.4. accessor.normalized .....	68
5.1.5. accessor.count .....	68
5.1.6. accessor.type .....	68
5.1.7. accessor.max .....	68
5.1.8. accessor.min .....	69
5.1.9. accessor.sparse .....	69
5.1.10. accessor.name .....	69
5.1.11. accessor.extensions .....	69
5.1.12. accessor.extras .....	69
5.2. Accessor Sparse .....	70
5.2.1. accessor.sparse.count .....	70
5.2.2. accessor.sparse.indices .....	70
5.2.3. accessor.sparse.values .....	71
5.2.4. accessor.sparse.extensions .....	71
5.2.5. accessor.sparse.extras .....	71
5.3. Accessor Sparse Indices .....	71
5.3.1. accessor.sparse.indices.bufferView .....	72
5.3.2. accessor.sparse.indices.byteOffset .....	72
5.3.3. accessor.sparse.indices.componentType .....	72
5.3.4. accessor.sparse.indices.extensions .....	73
5.3.5. accessor.sparse.indices.extras .....	73
5.4. Accessor Sparse Values .....	73
5.4.1. accessor.sparse.values.bufferView .....	74
5.4.2. accessor.sparse.values.byteOffset .....	74
5.4.3. accessor.sparse.values.extensions .....	74
5.4.4. accessor.sparse.values.extras .....	74
5.5. Animation .....	74
5.5.1. animation.channels .....	75
5.5.2. animation.samplers .....	75
5.5.3. animation.name .....	76
5.5.4. animation.extensions .....	76

5.5.5. animation.extras .....	76
5.6. Animation Channel .....	76
5.6.1. animation.channel.sampler .....	77
5.6.2. animation.channel.target .....	77
5.6.3. animation.channel.extensions .....	77
5.6.4. animation.channel.extras .....	77
5.7. Animation Channel Target .....	77
5.7.1. animation.channel.target.node .....	78
5.7.2. animation.channel.target.path .....	79
5.7.3. animation.channel.target.extensions .....	79
5.7.4. animation.channel.target.extras .....	79
5.8. Animation Sampler .....	79
5.8.1. animation.sampler.input .....	80
5.8.2. animation.sampler.interpolation .....	80
5.8.3. animation.sampler.output .....	81
5.8.4. animation.sampler.extensions .....	81
5.8.5. animation.sampler.extras .....	81
5.9. Asset .....	81
5.9.1. asset.copyright .....	82
5.9.2. asset.generator .....	82
5.9.3. asset.version .....	82
5.9.4. asset.minVersion .....	82
5.9.5. asset.extensions .....	83
5.9.6. asset.extras .....	83
5.10. Buffer .....	83
5.10.1. buffer.uri .....	83
5.10.2. buffer.byteLength .....	84
5.10.3. buffer.name .....	84
5.10.4. buffer.extensions .....	84
5.10.5. buffer.extras .....	84
5.11. Buffer View .....	84
5.11.1. bufferView.buffer .....	85
5.11.2. bufferView.byteOffset .....	85
5.11.3. bufferView.byteLength .....	85
5.11.4. bufferView.byteStride .....	86
5.11.5. bufferView.target .....	86
5.11.6. bufferView.name .....	86
5.11.7. bufferView.extensions .....	86
5.11.8. bufferView.extras .....	86
5.12. Camera .....	87
5.12.1. camera.orthographic .....	87

5.12.2. camera.perspective .....	88
5.12.3. camera.type .....	88
5.12.4. camera.name .....	88
5.12.5. camera.extensions .....	88
5.12.6. camera.extras .....	88
5.13. Camera Orthographic .....	89
5.13.1. camera.orthographic.xmag .....	89
5.13.2. camera.orthographic.ymag .....	90
5.13.3. camera.orthographic.zfar .....	90
5.13.4. camera.orthographic.znear .....	90
5.13.5. camera.orthographic.extensions .....	90
5.13.6. camera.orthographic.extras .....	90
5.14. Camera Perspective .....	91
5.14.1. camera.perspective.aspectRatio .....	91
5.14.2. camera.perspective.yfov .....	91
5.14.3. camera.perspective.zfar .....	92
5.14.4. camera.perspective.znear .....	92
5.14.5. camera.perspective.extensions .....	92
5.14.6. camera.perspective.extras .....	92
5.15. Extension .....	92
5.16. Extras .....	93
5.17. glTF .....	93
5.17.1. glTF.extensionsUsed <a href="https://standards.iehl.ai/catalog/standards/sis/8ab23875-c04b-4e9f-b17e-156d2df6d2/iso-iec-12113-2022">https://standards.iehl.ai/catalog/standards/sis/8ab23875-c04b-4e9f-b17e-156d2df6d2/iso-iec-12113-2022</a> .....	94
5.17.2. glTF.extensionsRequired <a href="https://standards.iehl.ai/catalog/standards/sis/8ab23875-c04b-4e9f-b17e-156d2df6d2/iso-iec-12113-2022">https://standards.iehl.ai/catalog/standards/sis/8ab23875-c04b-4e9f-b17e-156d2df6d2/iso-iec-12113-2022</a> .....	94
5.17.3. glTF.accessors .....	94
5.17.4. glTF.animations .....	94
5.17.5. glTF.asset .....	94
5.17.6. glTF.buffers .....	95
5.17.7. glTF.bufferViews .....	95
5.17.8. glTF.cameras .....	95
5.17.9. glTF.images .....	95
5.17.10. glTF.materials .....	95
5.17.11. glTF.meshes .....	95
5.17.12. glTF.nodes .....	96
5.17.13. glTF.samplers .....	96
5.17.14. glTF.scene .....	96
5.17.15. glTF.scenes .....	96
5.17.16. glTF.skins .....	96
5.17.17. glTF.textures .....	96
5.17.18. glTF.extensions .....	96
5.17.19. glTF.extras .....	97

5.18. Image . . . . .	97
5.18.1. image.uri . . . . .	98
5.18.2. image.mimeType . . . . .	98
5.18.3. image.bufferView . . . . .	98
5.18.4. image.name . . . . .	98
5.18.5. image.extensions . . . . .	98
5.18.6. image.extras . . . . .	99
5.19. Material . . . . .	99
5.19.1. material.name . . . . .	100
5.19.2. material.extensions . . . . .	100
5.19.3. material.extras . . . . .	100
5.19.4. material.pbrMetallicRoughness . . . . .	100
5.19.5. material.normalTexture . . . . .	100
5.19.6. material.occlusionTexture . . . . .	101
5.19.7. material.emissiveTexture . . . . .	101
5.19.8. material.emissiveFactor . . . . .	101
5.19.9. material.alphaMode . . . . .	101
5.19.10. material.alphaCutoff . . . . .	102
5.19.11. material.doubleSided . . . . .	102
5.20. Material Normal Texture Info . . . . .	102
5.20.1. material.normalTextureInfo.index . . . . .	103
5.20.2. material.normalTextureInfo.texCoord . . . . .	103
5.20.3. material.normalTextureInfo.scale . . . . .	103
5.20.4. material.normalTextureInfo.extensions . . . . .	103
5.20.5. material.normalTextureInfo.extras . . . . .	104
5.21. Material Occlusion Texture Info . . . . .	104
5.21.1. material.occlusionTextureInfo.index . . . . .	104
5.21.2. material.occlusionTextureInfo.texCoord . . . . .	104
5.21.3. material.occlusionTextureInfo.strength . . . . .	105
5.21.4. material.occlusionTextureInfo.extensions . . . . .	105
5.21.5. material.occlusionTextureInfo.extras . . . . .	105
5.22. Material PBR Metallic Roughness . . . . .	105
5.22.1. material.pbrMetallicRoughness.baseColorFactor . . . . .	106
5.22.2. material.pbrMetallicRoughness.baseColorTexture . . . . .	106
5.22.3. material.pbrMetallicRoughness.metallicFactor . . . . .	106
5.22.4. material.pbrMetallicRoughness.roughnessFactor . . . . .	107
5.22.5. material.pbrMetallicRoughness.metallicRoughnessTexture . . . . .	107
5.22.6. material.pbrMetallicRoughness.extensions . . . . .	107
5.22.7. material.pbrMetallicRoughness.extras . . . . .	107
5.23. Mesh . . . . .	108
5.23.1. mesh.primitives . . . . .	108

5.23.2. mesh.weights .....	108
5.23.3. mesh.name .....	108
5.23.4. mesh.extensions .....	109
5.23.5. mesh.extras .....	109
5.24. Mesh Primitive .....	109
5.24.1. mesh.primitive.attributes .....	110
5.24.2. mesh.primitive.indices .....	110
5.24.3. mesh.primitive.material .....	110
5.24.4. mesh.primitive.mode .....	110
5.24.5. mesh.primitive.targets .....	111
5.24.6. mesh.primitive.extensions .....	111
5.24.7. mesh.primitive.extras .....	111
5.25. Node .....	111
5.25.1. node.camera .....	113
5.25.2. node.children .....	113
5.25.3. node.skin .....	113
5.25.4. node.matrix .....	113
5.25.5. node.mesh .....	114
5.25.6. node.rotation .....	114
5.25.7. node.scale .....	114
5.25.8. node.translation .....	114
5.25.9. node.weights .....	114
5.25.10. node.name .....	114
5.25.11. node.extensions .....	115
5.25.12. node.extras .....	115
5.26. Sampler .....	115
5.26.1. sampler.magFilter .....	115
5.26.2. sampler.minFilter .....	116
5.26.3. sampler.wrapS .....	116
5.26.4. sampler.wrapT .....	116
5.26.5. sampler.name .....	117
5.26.6. sampler.extensions .....	117
5.26.7. sampler.extras .....	117
5.27. Scene .....	117
5.27.1. scene.nodes .....	118
5.27.2. scene.name .....	118
5.27.3. scene.extensions .....	118
5.27.4. scene.extras .....	118
5.28. Skin .....	118
5.28.1. skin.inverseBindMatrices .....	119
5.28.2. skin.skeleton .....	119

5.28.3. skin.joints . . . . .	119
5.28.4. skin.name . . . . .	120
5.28.5. skin.extensions . . . . .	120
5.28.6. skin.extras . . . . .	120
5.29. Texture . . . . .	120
5.29.1. texture.sampler . . . . .	121
5.29.2. texture.source . . . . .	121
5.29.3. texture.name . . . . .	121
5.29.4. texture.extensions . . . . .	122
5.29.5. texture.extras . . . . .	122
5.30. Texture Info . . . . .	122
5.30.1. textureInfo.index . . . . .	122
5.30.2. textureInfo.texCoord . . . . .	123
5.30.3. textureInfo.extensions . . . . .	123
5.30.4. textureInfo.extras . . . . .	123
6. Acknowledgments (Informative) . . . . .	124
6.1. Editors . . . . .	124
6.2. Khronos 3D Formats Working Group and Alumni . . . . .	124
6.3. Special Thanks . . . . .	124
Appendix A: JSON Schema Reference (Informative) . . . . .	126
A.1. JSON Schema for Accessor . . . . .	126
A.2. JSON Schema for Accessor Sparse . . . . .	130
A.3. JSON Schema for Accessor Sparse Indices . . . . .	131
A.4. JSON Schema for Accessor Sparse Values . . . . .	133
A.5. JSON Schema for Animation . . . . .	134
A.6. JSON Schema for Animation Channel . . . . .	135
A.7. JSON Schema for Animation Channel Target . . . . .	136
A.8. JSON Schema for Animation Sampler . . . . .	137
A.9. JSON Schema for Asset . . . . .	139
A.10. JSON Schema for Buffer . . . . .	140
A.11. JSON Schema for Buffer View . . . . .	141
A.12. JSON Schema for Camera . . . . .	143
A.13. JSON Schema for Camera Orthographic . . . . .	145
A.14. JSON Schema for Camera Perspective . . . . .	146
A.15. JSON Schema for Extension . . . . .	147
A.16. JSON Schema for Extras . . . . .	148
A.17. JSON Schema for glTF . . . . .	149
A.18. JSON Schema for glTF Child of Root Property . . . . .	153
A.19. JSON Schema for glTF Id . . . . .	154
A.20. JSON Schema for glTF Property . . . . .	155
A.21. JSON Schema for Image . . . . .	156

A.22. JSON Schema for Material .....	158
A.23. JSON Schema for Material Normal Texture Info .....	161
A.24. JSON Schema for Material Occlusion Texture Info .....	162
A.25. JSON Schema for Material PBR Metallic Roughness .....	163
A.26. JSON Schema for Mesh .....	165
A.27. JSON Schema for Mesh Primitive .....	166
A.28. JSON Schema for Node .....	169
A.29. JSON Schema for Sampler .....	172
A.30. JSON Schema for Scene .....	175
A.31. JSON Schema for Skin .....	176
A.32. JSON Schema for Texture .....	177
A.33. JSON Schema for Texture Info .....	178
Appendix B: BRDF Implementation .....	179
B.1. General .....	179
B.2. Material Structure .....	179
B.2.1. Metals .....	179
B.2.2. Dielectrics .....	180
B.2.3. Microfacet Surfaces .....	181
B.2.4. Complete Model .....	182
B.3. Sample Implementation (Informative) .....	183
B.3.1. Overview .....	183
B.3.2. Specular BRDF .....	183
B.3.3. Diffuse BRDF .....	184
B.3.4. Fresnel .....	184
B.3.5. Metal BRDF and Dielectric BRDF .....	185
B.3.6. Discussion .....	185
B.3.6.1. Masking-Shadowing Term and Multiple Scattering .....	185
B.3.6.2. Schlick's Fresnel Approximation .....	185
B.3.6.3. Coupling Diffuse and Specular Reflection .....	186
B.4. References .....	187
Appendix C: Animation Sampler Interpolation Modes .....	188
C.1. Overview .....	188
C.2. Step Interpolation .....	188
C.3. Linear Interpolation .....	188
C.4. Spherical Linear Interpolation .....	188
C.5. Cubic Spline Interpolation .....	189

# Chapter 1. Foreword

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# Chapter 2. Introduction

## 2.1. General

This document, referred to as the “glTF Specification” or just the “Specification” hereafter, describes the glTF file format.

glTF is an API-neutral runtime asset delivery format. glTF bridges the gap between 3D content creation tools and modern graphics applications by providing an efficient, extensible, interoperable format for the transmission and loading of 3D content.

## 2.2. Document Conventions

The glTF Specification is intended for use by both implementers of the asset exporters or converters (e.g., digital content creation tools) and application developers seeking to import or load glTF assets, forming a basis for interoperability between these parties.

Specification text can address either party; typically, the intended audience can be inferred from context, though some sections are defined to address only one of these parties.

Any requirements, prohibitions, recommendations, or options defined by [normative terminology](#) are imposed only on the audience of that text.

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### 2.2.1. Normative Terminology and References

The key words **MUST**, **MUST NOT**, **REQUIRED**, **SHALL**, **SHALL NOT**, **SHOULD**, **SHOULD NOT**, **RECOMMENDED**, **MAY**, and **OPTIONAL** in this document are to be interpreted as described in [BCP 14](#).

These key words are highlighted in the specification for clarity.

References to external documents are considered normative if the Specification uses any of the normative terms defined in this section to refer to them or their requirements, either as a whole or in part.

### 2.2.2. Informative Language

Some language in the specification is purely informative, intended to give background or suggestions to implementers or developers.

If an entire chapter or section contains only informative language, its title is suffixed with “(Informative)”. If not designated as informative, all chapters, sections, and appendices in this document are normative.

All Notes, Implementation notes, and Examples are purely informative.

## 2.2.3. Technical Terminology

The glTF Specification makes use of linear algebra terms such as **axis**, **matrix**, **vector**, etc. to identify certain math constructs and their behaviors as defined in the [International Electrotechnical Vocabulary](#).

The glTF Specification makes use of common engineering and graphics terms such as **image**, **buffer**, **texture**, etc. to identify and describe certain *glTF* constructs and their attributes, states, and behaviors. This section defines the basic meanings of these terms in the context of the Specification. The Specification text provides fuller definitions of the terms and elaborates, extends, or clarifies the definitions. When a term defined in this section is used in normative language within the Specification, the definitions within the Specification govern and supersede any meanings the terms may have in other technical contexts (i.e. outside the Specification).

### **accessor**

An object describing the number and the format of data elements stored in a binary buffer.

### **animation**

An object describing the keyframe data, including timestamps, and the target property affected by it.

### **back-facing**

See facingness. **iTeh STANDARD PREVIEW (standards.iteh.ai)**

### **buffer**

An external or embedded resource that represents a linear array of bytes.

[ISO/IEC 12113:2022](#)

### **buffer view** <https://standards.iteh.ai/catalog/standards/sist/8ab23875-c04b-4e9f-b17e-b6d56d2df6d2/iso-iec-12113-2022>

An object that represents a range of a specific buffer, and optional metadata that controls how the buffer's content is interpreted.

### **camera**

An object defining the projection parameters that are used to render a scene.

### **facingness**

A classification of a triangle as either front-facing or back-facing, depending on the orientation (winding order) of its vertices.

### **front-facing**

See facingness.

### **image**

A two dimensional array of pixels encoded as a standardized bitstream, such as [PNG](#).

### **indexed geometry**

A mesh primitive that uses a separate source of data (index values) to assemble the primitive's topology.