

ISO/IEC 3721:2023-09 (E)

Information technology - Computer graphics, image processing and environmental data representation - Information model for mixed and augmented reality content - Core objects and attributes

Contents		Page
Foreword		iv
Introduction		v
1 Scope		1
2 Normative references		1
3 Terms, definitions and abbreviated terms		1
3.1 Terms and definitions		1
3.2 Abbreviated terms		3
4 Overview		4
5 Principles and Requirements		5
6 MAR content model		6
6.1 Concept		6
6.2 Use case diagram		7
6.3 MAR content and its scene structure		7
6.4 Major MAR system objects that are associated with the MAR content objects ^[6]		8
6.4.1 Sensor		8
6.4.2 Real World Capturer::Sensor		9
6.4.3 Tracker::Sensor		9
6.4.4 Recognizer::Sensor		10
7 MAR content classes		10
7.1 Overall class/object structure		10
7.2 MARSNode		12
7.3 TransformGroup::MARSNode		13
7.3.1 VirtualTG::TransformGroup::MARSNode		14
7.3.2 RealTG::TransformGroup::MARSNode		14
7.4 Spatial_Mapper::MARSNode		15
7.5 Event_Mapper::MARSNode		16
7.6 MARObject::MARSNode		17
7.6.1 VirtualObject::MARObject::MARSNode		18
7.6.2 RealObject::MARObject::MARSNode		19
7.7 Behaviour::MARSNode		22
7.8 MetaInfo::MARSNode		23
8 Example usage scenarios		24
8.1 Marker based video see-through AR		24
8.2 Location (GNSS) based video see-through AR		24
8.3 Marker based AR for glass display		25
8.4 Location based AR for glass display		26
8.5 2D screen augmentation over a glass display		27
8.6 Augmented virtuality with (multiple) live actor extracted and imported live from a chroma-keying set-up		27
9 Conformance		28
Bibliography		29