

MPEG-4 Visual Tools used by Visual Object Types	Visual Object Types															
	Simple	Core	Main	Advanced Simple	Fine Granularity Scalable	Simple Scalable	N-Bit	Animated 2-D Mesh	Basic Animated Texture	Still Scalable Texture	Simple Face	Advanced Real Time Simple	Advanced Coding Efficiency	Advanced Scalable Texture	Core Scalable	
Visual Tools																
Basic I-VOP P-VOP AC/DC Prediction 4-MV, Unrestricted MV	X	X	X	X	X	X	X	X				X	X		X	
Error Resilience: Slice Resynchronization Data Partitioning Reversible VLC	X	X	X	X	X	X	X	X				X	X		X	
Short Header	X	X	X	X	X		X	X				X	X		X	
B-VOP		X	X	X	2	X	X	X					X		X	
P-VOP with OBMC (Texture)																
Method 1 / Method 2 Quantization		X	X	X	X		X	X					X		X	
P-VOP based temporal scalability Rectangular Arbitrary Shape		X	X				X	X					X		X	
Binary Shape		X	X				X	X	X				X		X	
Grey Shape			X										X			
Interlace			X	1	1								X			
Sprite			X													
Temporal Scalability (Rectangular)						X									X	
Spatial Scalability (Rectangular)						X									X	
N-Bit							X									
Scalable Still Texture								X	X	X					X	
2D Dynamic Mesh with uniform topology								X	X							
2D Dynamic Mesh with Delaunay topology								X								
Facial Animation Parameters											X					
Body Animation Parameters																
Dynamic Resolution Conversion												X				
NEWPRED												X				
Global Motion Compensation				X									X			
Quarter-pel Motion Compensation				X									X			
SA-DCT													X			
Error Resilience for Visual Texture Coding															X	
Wavelet Tiling															X	
Scalable Shape Coding for Still Texture															X	
Object Based Spatial Scalability																X
Fine Granularity Scalability					X											
FGS Temporal Scalability					X											

MPEG-4 Visual Object Types used by Profiles	Visual Object Types															
	Simple	Core	Main	Advanced Simple	Fine Granularity Scalable	Simple Scalable	N-Bit	Animated 2-D Mesh	Basic Animated Texture	Still Scalable Texture	Simple Face	Advanced Real Time Simple	Advanced Coding Efficiency	Advanced Scalable Texture	Core Scalable	Simple Face Body Animation
Visual Profiles																
Simple	X															
Simple Scalable	X					X										
Core	X	X														
Main	X	X	X							X						
N-bit	X	X					X									
Hybrid	X	X						X	X	X	X					
Basic Animated Texture									X	X	X					
Scaleable Texture										X						
Simple Face Animation											X					
Advanced Real Time Simple	X											X				
Core Scalable	X	X				X									X	
Advanced Coding Efficiency	X	X											X			
Advanced Core	X	X													X	
Advanced Scalable Texture															X	
Simple Face Body Animation																X
Advanced Simple	X			X												
Fine Granularity Scalable	X			X	X											

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1 - Interlace for L4 and L5 only.

2 - B-VOP not allowed in base layer when FGS temporal scalability is used.

Some MPEG-4 Visual Profiles					
Visual Profile	Level	Typical Visual Session Size	Max bitrate (Kbit/s)	Max Objects	Object Types
Simple	L0	QCIF	64	1	Simple
	L1	QCIF	64	4	Simple
	L2	CIF	128	4	Simple
	L3	CIF	384	4	Simple
Core	L1	QCIF	384	4	Simple, Core
	L2	CIF	2000	16	Simple, Core
Main	L2	CIF	2000	16	Simple, Core, Main
	L3	D1	15000	32	Simple, Core, Main
	L4	1920 x 1088	38400	32	Simple, Core, Main
Adv. Simple	L0	QCIF	128	1	Simple, Adv. Simple
	L1	QCIF	128	4	Simple, Adv. Simple
	L2	CIF	384	4	Simple, Adv. Simple
	L3	CIF	768	4	Simple, Adv. Simple
	L4	½ D1	3000	4	Simple, Adv. Simple
	L5	D1	8000	4	Simple, Adv. Simple