Animation

Pose Library

- Scene independent pose library
- Thumbnail view
- Blend poses
- Matching Name and Selection Filters

Character Solver

- Character Definition Tag allows rig-independent definition of character components
- Automatic rig extraction based on name templates
- Custom Character Definition Presets
- Character Solver transfers motion between rigs based on character definitions, regardless of hierarchy or joint rotations
- Extensive preset library of high-quality motion capture presets

Delta Mush

- Delta Mush smoothing of joint-based animation
- Tag-based control of smoothing parameters

Character Object - Toon Rig and Face Rig

- Toon Rig in Character Object offers easy-to-use rig supporting scaling and bendy limbs
- Face Rig in Character Object allows users to easily create a joint-based facial rig

Workflow Enhancements

- Attribute Manager Filtering
 - Animated Attributes
 - Keyframe Selection
 - Animatable Attributes
 - Xpresso Driver / Driven
 - Overridden in current take
- Keyframing Changes
 - Auto-Key Workflow
 - Paste in Place
 - Copy / Paste Ease Curve
 - Record All Animated / Record Hierarchy Commands
 - Delete Keys for all selected objects Command
 - Animation Context Menu on HUD
- Preview / Project Time Changes
 - Preserve Project Time with Merge and X-Ref / Allow Keyframes outside the project time
 - Increase Preview Time with Project
 - In / Out Commands to define preview range
 - Set Range to Markers
 - Go to Previous / Next Marker Range
- Timeline Changes
 - Timeline Filtering
 - Auto-Frame F-Curve
 - Show Pos/Scale/Rot F-Curve Commands
 - Improvements to defaults and object / track display behavior
- Marker Enhancements

- Create Markers based on range / BMP
- Marker HUD
- Markers created with random color
- Deformer Enhancements
 - Auto-orient deformers based on geometry
 - Easily adjust deformer orientation to align with object axes
 - Viewport Enhancements including indicators of action and direction
 - UX Enhancements including sliders for strength / angle
- Exchange Enhancements
 - FBX option to export marker ranges as takes
 - FBX option to export only bound joints
- Other Enhancements
 - Set Pos / Reset Pose commands in weight tag
 - Invert Vertex Map checkbox

UV Enhancements

- for perpetual users, all the great enhancements in S22
- Display and manipulate UVs of multiple selected objects (for shared texture workflows)
 - Rasterized and Geometric Packing of multiple objects into a single UV space
- Grid in Texture UV Editor
- Snap UV elements and UV Transform Tool to Vertex, Edge, Mid-Point, Grid and Pixel
- Align Island based on edge selection
- Straighten point / edge selection
- Rectangularize polygon selection
- Path Selection within UV Editor
- Grow / Shrink Selection within UV Editor
- Quantization Palette
- Display UV Distortion in 3D View

Magic Bullet Looks

- Look applied in real-time to the viewport
- Look applied to final rendering as a post effect
- Option allowing for saving the unprocessed rendering result as a multipass
- Optical Touch Looks Preset library designed to make 3D renders look great

Viewport

- Improved screen space reflections
- Optimized display of node-based geometry
- Light Source Optimization and General Performance Enhancements
- Removed Redraw Limit

Scene Nodes (Preview)

High-performance node-based object system, available as a technical preview.

Operator Nodes

Distribution Nodes

- Linear, Linear Transformed
- Radial, Spiral

Cinema 4D R23 - Complete Feature List

- Grid, Grid Offset (Honeycomb)
- Vertex, Edge, Polygon Center
- Mandelbrot, Mandelbulb
- Custom Distribution Group

Effector / Field Nodes

Geometry Nodes

- Get / Set Geometry and Topology
- Point, Edge, Polygon Info
- 3D Primitives
- Selection Nodes
- Bounding Box
- Geometry Clone
- Extrude, Lathe, Loft, Sweep
- Extrude, Inset, Bevel, Subdivide
- Optimize, Connect, Chamfer, Align Normals, Reverse Normals, Delete, Melt
- Remove Ngons, Remove Non Manifold, Triangulate, Retriangulate, Untriangulate

Legacy Import

- Legacy Object Import
- Sample Legacy Light
- Vertex Map Tag Import

Materials

- Material assignment
- Material parameterization

Flow Control Nodes

- Loop Carried Value
- Memory
- Range

Array Nodes

Node Editor

- General UI Enhancements for Scene and Material Nodes
- Node filtering
- Node Detail Levels
- Comments

Remesh Generator

Exchange

USD Support

- Import / Export Models, Cameras, Lights in usd, usda, usdc
- Export usdz

OBJ Performance and Feature Enhancements

- Import/export Support for PBR material definition used by Adobe Dimensions and other applications
- OBJ Sequence Export
- OBJ Sequence Import
- Vertex Color Import / Export (Z-Brush / Meshlab)
- Point Cloud Import

Cinema 4D R23 – Complete Feature List

- Z-Brush Spline Import
- Flip UVs
- Unicode Support
- More Presets: 3ds max, Adobe Dimension, Blender, Maya, ZBrush, Trapcode

FBX (listed in Animation Workflow)

- Export Takes from Timeline Markers
- Export Bound Joints only

Python 3

- Update from Python 2.7.14 to Python 3.7.7
- Increased performance for Python expressions, scripts and plugins
- Encrypt Python plugins via the command line

Moves by Maxon

• Import and use Facial and Body Capture data from Moves iOS app (fully integrated)

General Workflow Enhancements

- Display alpha channel in Picture Viewer as a checker grid
- Insert Caret showing drag destination within Object Manager
- Instances can be made editable
- Updated Intel Open Image Denoiser to 1.2.1 / improved performance and better results
- Viewport Selection Tools now use Intel Embree technology for better performance and accuracy

Customer Journey

- Maxon One
- Subscription Management page