

WASP3D- CHARACTER GENERATOR (CG)

WASP3D CG is a complete character generator with many more features, functionalities and flexibility than traditional CG systems. The character generation process does not require a graphic artist for routine operations as user-friendly features like spell check, emoticons, and grammar check make it easy for the operator to accommodate last minute changes while going on-air. The WASP3D CG system offers design capabilities for creating 3D graphics and animation and can tightly integrate with newsroom, NLE and automation systems.

WASP3D CG utilizes the powerful WASP3D render engine to produce broadcast quality 3D text in real-time and supports Unicode fonts as well. Randomly used graphics templates (crawls, clocks, timers, in and out etc.) are built-in and can be triggered "on the fly" by entering data either manually or integrated with automated data feeds. The WASP3D CG system can be configured to control a dual channel output.



SMART, EFFICIENT & POWERFUL REAL-TIME RENDERING.

The WASP3D render engine combines the power of real-time output with unparalleled graphical versatility and extraordinary features. The Direct X™ based core of the WASP3D engine harnesses a vast array of advanced effects and technologies developed for the gaming industry and relays this to the quality of 3D Broadcast graphics. Complex physical phenomena such as Surface Reflections, Refraction, Shadows (Cast and Receive), Gravity, Wind, Deflection dynamics etc. that were only available in popular online systems and took hours to days to render out are now possible within a real-time environment.

The WASP3D engine design is extremely powerful and efficient in handling 3D mesh data, be it primitive models created within the software itself or by importing from third party applications such as 3DS Max, Maya etc. and being able to handle highly detailed geometry complete with materials, lighting and texture mapping coordinate information in real-time.





KEY FEATURES:

- Easy creation of 3D graphic templates for live or post production.
- 4K & HD real-time creation and animation environment.
- User-friendly interface with easy to use 'drag and drop' options.
- Real-time graphics including crawls (both directions), rolls, bugs and tickers that can be rendered simultaneously.
- Speedy creation of 2D/3D DVE effects (Squeeze backs, OB windows etc.) in real-time environment.
- Powerful 3D characters and text with format options like underline, shadows, normal, bold, italic, highlight, expand, compress, tilt, rotate, transparencies, borders etc. The attributes can be changed character by character. Scaling of text lines can be changed in both horizontal and vertical directions for adjusting itself as per length of the sentences.
- Easy creation of counters (with count-up and count-down display) and analogue and digital clocks in variable sizes and positions.
- Allows creation of multiple layers and multi-line text on a single page.
- Built-in, key-frame based animation effects for rich looking 3D text and logos.
- Equipped with features like spell check, cut/paste tools, etc.
- True 3D environment, providing unlimited objects. The playout allows for z-ordering the scenes into multiple layers.
- 3D Particle System with custom 3D Objects that can be specified as particles, emitters and absorbers obeying Physics Dynamics RT effects.
- Two dedicated Program and an independent Preview channels (Key & Fill) for better playout control.
- Video safe area marking facility available.
- All "plug-ins" included in software license.
- MOS compliant using the WASP3D MOS gateway.
- Social Media Services Integration using WASP3D's Social Media Tree.
- Scriptless, Unified Basic Templating for routine tasks or scripted using familiar Microsoft Visual programming tools such as .Net, #C or VB.net.
- Ability to render to disk in most standard formats.
- Data driven real time tickers including live video or clip in the ticker.

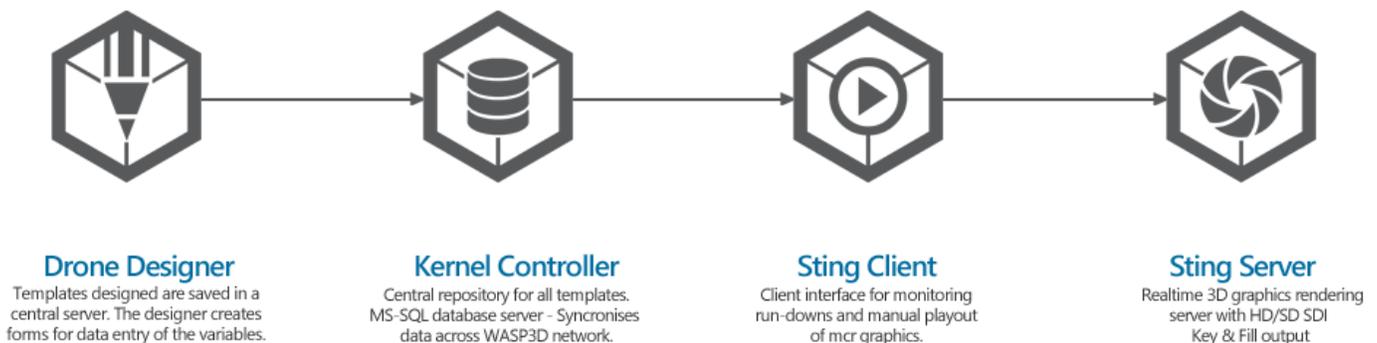




- Use virtually ANY codec available for the Microsoft Windows platforms.
- Playlist control through various methods including touch screens, tablets and numerical key pads.
- Parametric control and modification of 3D objects and primitives.
- Available WAX module for media asset management for archiving, sharing and distributing of multimedia files.
- Integration with various third party data sources from excel and text files, RSS, ODBC and many others that can be translated into visually appealing pie charts, bars etc. Compatible with virtually any data type available to Microsoft SQL Server.
- Supports most of the available file formats including TGA, JPEG, BMP, TIFF etc., animation and video file formats.
- Supports Unicode fonts and all MS fonts.
- Real-time editing that enables making last minute changes without disturbing other templates.
- Genlock facility available.

WORKFLOW:

WASP3D-CG workflow components can exist as a single box or in a distributed networked collaborative environment as illustrated below:



TECHNICAL SPECIFICATIONS:

OS	All Microsoft Windows platforms/PC based. Windows 7 64bit
Architecture	Modular, scalable growth meets any size television network.
Modules required for CG	Sting Server Real-time engine, Kernel Controller, Sting Client.
Video formats & codecs	AVI, MOV, WMV, MXF, MPG, MPEG, SWF. QuickTime Matrox MPEG2, IFrame Apple ProRes 4:4:4:4 Avid DNxHD, Panasonic dvcpro, dvcpro50, dvcproHD, AVC Intra; Sony XD cam MPEG2, xd CAM hd. Any codec supported in Windows.
3D Model formats	FBX, 3Ds, Rhino3D (.3DM) & Microsoft DirectX.(X) mesh files along with their materials & UV mapping. 3d Nurb Files as .FBX .3dm
Image formats	BMP, JPG, JPEG, PNG, HDR, DDS, DIB, PFM, PPM and TGA
Audio formats	MP3, WAV supported in animations and triggers.
Other formats	PDF, Adobe Illustrator (.AI) splines and (.shp) shape; others. Multi-lingual, Unicode True-Type fonts, Open type and Type 1
Transitions	Inter-scene triggering of transitions between graphics. Ability to modify triggering of transitions without modifying template. Scene-to-scene transitions without any scripts or code writing.
Tickers	Unlimited number of tickers, data driven, multidirectional. Live video or clip in the ticker. Seamless continuous tickers. Ticker travel along a spline path.
Customization	Programming/Scripting SDK available. Production specific, custom scene level user interface & data entry forms or applications. Scriptless UBT for user customization and ability to customize individual scene Controls for non-skilled production or engineering staff. Supports multiple communications protocols including CII, TCP/ip, GPI, MOS and others.
Hardware Platforms	Flexible hardware configurations all based upon commodity PC architecture and industry standard graphics cards.
Video Standards	SD-SDI: 525i NTSC, 625i PAL, SD/HD/2K to 60 fps HD-SDI: 1080i, 1080PsF, 720p, 1080p
I/O support	SDI PGM output (Key & Fill) and SDI independent preview channel (Key & Fill). Inputs: up to 6 assignable inputs or unlimited through router control"
Audio	16 channels AES/EBU, 16 channels embedded 4 stereo inputs, 8 stereo outputs
Audio Processing	Ability to reproduce stereo clips->16. Channels mix in bus->32.
Video Processing	Supported mix layers-> up to 4 in 1080i; 1 for 1080p Scalar 2D-> 1080i (2) 1080p (1) Digital Video Effects 2D-> 1080i (2) 1080p (1); 3D 1080p (1)
Genlock Reference Input	Black burst or SDI, 75, BNC
Processing	10 bits 4:4:4:4. 1D LUT up to 2K output up/downscaler with filtering up to 2K output Mixer/keyer in the processing pipeline Programmable up/downscaler for format adjustments
Data Formats	SD 10-bit, 270 Mb/s ITU-R Bt.601 SMPTE 259M-C SD 10-bit, 270 Mb/s ITU-R Bt.656-4 HD 10-bit, 1.485 Gb/s ITU-R Bt. 709 SMPTE 292M SD/HD/2K to 60 fps - 525i TNSC, 625i PAL 1080i, 1080PsF, 720p, 1080p

This is a partial specification list. Complete feature and specification list in WASP3D workflow documentation for Sting Client on air playout, Drone Designer Tech Specs and Character generation spec sheets. Subject to change without notice.