

## **visage|SDK™ 5.5**

visage|SDK™ is the most powerful and comprehensive C++ Software Development Kit for Virtual Character animation. It provides extensive support for both interactive and off-line animation of multiple characters with fully integrated real time lip-sync, speech synthesis, body animation and much more.

Whether you are building a standalone application involving interactive virtual characters, a game component, a plugin for a mainstream 3D software package, web or mobile service, a research project, or virtually any product involving virtual characters, visage|SDK™ will provide ready-made solutions and greatly reduce development time and effort.

visage|SDK™ is based on the MPEG-4 Face and Body Animation (MPEG-4 FBA) and is brought to you by some of the people who developed this International Standard.

### **Technical features**

- Real-time or off-line character animation driven by SAPI-5 speech synthesis, with on-the-fly rendering of the virtual character and MPEG-4 FBA bitstream output.
- Real-time or off-line lip sync from audio file or microphone, with on-the-fly rendering and MPEG-4 FBA output.
- Multiple interactive characters animated by mixed sources (files, procedural animation, tracking, TTS, lip sync etc.).
- Powerful interfaces for plugging-in own interactive or off-line animation sources and controls.
- Open, fully documented and extensible file format for full body virtual characters with morphing and skinning; support for integrating other file formats.

- OpenGL and DirectX renderers included; can be integrated with other rendering systems.
- Extensive support for exporting the animation data including automatic generation of keyframes.
- Powerful support for building plugins for 3D animation, game software and other applications.
- Animating virtual characters using MPEG-4 Face and Body Animation Parameters (FAPs and BAPs).
- Coding, decoding, merging and other operations on MPEG-4 FBA (Face and Body Animation) bitstreams.
- Building Animatable Face Models from morph target sets.

The high-level functions such as making the virtual character speak using speech synthesis or real-time lip sync are achieved easily with very few lines of code using high-level classes. At the same time, visage|SDK™ provides extremely powerful mechanisms for extending or customizing animation, deformation, rendering and file input/output at almost any level, putting great freedom and power in the hands of the developer.

## **Documentation and samples**

visage|SDK™ is delivered with extensive and very detailed documentation, fully documented example projects for typical applications and ready to use virtual characters, animations and other sample files. All these files and examples, provided with full source code, enable you to effectively start integrating virtual characters into your project almost immediately.

## **Development environment**

MS Visual Studio .NET 2005. Common Language Runtime compilation is supported. Other platforms and environments can be supported on demand.

## Licensing conditions

visage|SDK is licensed in two versions: Standard Edition (SE) and Redistribution Edition (RE). Both are available as either Single Computer or Multiple Computer License Option, allowing the installation and use on either a single computer, or multiple computers within an organization.

visage|SDK SE is intended for prototyping, demonstration and very limited redistribution. Applications built using visage|SDK SE require the visage|SDK Runtime License Key, which is issued for a particular computer. For each computer on which such applications will run, a unique Runtime License Key is necessary. To allow easy short-term installations (e.g. for trade shows, demonstrations etc.) Temporary Runtime License Key is offered under favorable conditions. This key expires after one month.

visage|SDK RE is intended for product distribution, and it is delivered with a Redistributable Runtime License Key. This key can be distributed with any application developed using visage|SDK RE, and allows such applications to run on any computer without any specific registration or installation step.

Standard Edition and Redistribution Edition are otherwise identical, and applications can be recompiled in either edition without any changes.

visage|SDK offers great licensing flexibility by arranging the main functions into packages available for separate licensing, as shown in the following table.

FUNCTION ↓	PACKAGE NAME →	BASE	VTTS	LIPSYNC	FULL
Real-time face and body animation, MPEG-4 FBA support	●				●
SAPI-5 Visual TTS		●			●
Lip sync				●	●