AVS 5.6 RELEASE NOTES

CHAPTER ONE

Release Highlights

This document describes Advanced Visual Systems Inc.'s Application Visualization System (version 5.6) as it runs on UNIX workstations.

AVS5.6 NOTES: As a convenience to the reader, changes made for AVS 5.6 are summarized at the beginning of each chapter in "AVS 5.6 NOTES" blocks.

This release contains a number of operating system updates and bug fixes. The source code for most standard AVS Modules is now included in the standard AVS 5 product as an optional installation package. For more information, see Chapter 3, *AVS 5.6 on UNIX Platforms*, "AVS 5.6 Module Source Package."

This release provides the following enhancements:

Operating System Updates

New native support is provided for Compaq Tru64 UNIX 5.1 and Solaris 2.8 (Solaris 8) and support has been continued for SGI IRIX 6.5 (N32/Mips3 and N64/Mips4). These changes are described in the appropriate chapters below. The IBM and HP platforms are not included in this release.

AVS 5.6 is also available for RedHat Linux 7.0 for the PC as a separately purchased product. Please contact your local sales representative if you are interested in this platform.

For users who require other operating systems, please contact Customer Support (support@avs.com) or your sales office to acquire copies of AVS 5.5 or older releases.

OpenGL Graphics Library Support

Support for OpenGL is provided on all platforms. OpenGL provides improved remote graphics support and takes advantage of newer graphics hardware adapters on a number of systems; it provides a standard cross platform graphics layer for shared enhancements like the expanded stereo support in this release. See Chapter 3, *AVS 5.6 on UNIX platforms* for a general introduction and each platform specific chapter for more information.

Documentation

The AVS 5 documentation set is available online in Adobe PDF files providing the core set of books in a viewable, searchable, and printable format. The set can be installed (**AVS5_DOC** product archive) or read from the CD (*/cdrom/avs5_doc* on most platforms). For more information, see Chapter 2, *AVS 5.6 Installation* for installation options and Chapter 3, *AVS 5.6 on UNIX Platforms* for information on obtaining an Adobe PDF reader for UNIX or Windows platforms.

An important chapter is available in this release note document that provides an overall summary of how to approach debugging modules in AVS 5.6 and prior releases. This chapter draws together information and techniques from throughout the AVS 5 product and is targeted towards both new and experienced module writers.

Licensing

The AVS Animator and its supporting modules no longer require a separate license but are included in the standard AVS package; all users may now freely use the AVS Animator. The BTF renderer also no longer requires a license.

There have been no changes in basic licensing support - Globetrotter's FlexLM 5.12 is still the version used with AVS 5.6 and existing AVS5.x licenses will continue to work with AVS5.6.

NOTE: Existing AVS 5.6 users do **not** require a new license file to use AVS 5.6, nor will they need to make any changes to their "license daemon" programs. Users of AVS 5.3 or earlier releases **will** need to reinstall their "license daemon" programs to use FlexLM 5.12. For more information, see the Chapter 2, *AVS 5.6 Installation*.

Organization

These *Installation and Release Notes* contain the following chapters. A printable PostScript version of this document is available in the *relnotes* subdirectory of AVS's home directory; it is now available in PDF as well.

Chapter 2: AVS 5.6 Installation

Describes how to install AVS on your system, and how to upgrade an existing license. For first-time installers, there is an overview of the licensing mechanism and a description of how to obtain a new license file with the correct values for your platform.

Chapter 3: AVS 5.6 on UNIX Platforms
This introductory chapter provides information common or important to all platforms, including how AVS works under X windows and common programming considerations. This chapter also includes a list of general product improvements for the AVS 5.6 release. All users should review this chapter in addition to the specific chapter for their platform.

Each subsequent chapter describes platform specific information for a particular platform including system prerequisites, release notes, and recent improvements and known limitations. You should review the appropriate chapter for your platform before installing on a new machine.

Chapter 4: AVS 5.6 for Compaq Tru64 UNIX (Alpha)

Chapter 5: AVS 5.6 for Silicon Graphics

Chapter 6: AVS 5.6 for Sun Solaris

Chapter 7: Extended Features
Describes a number of extensions made to AVS 5 in previous releases, including the Cool CD, AVS/Voxel, Japanese Help and additional Demonstration networks and scripts.

Chapter 8: Administering Licenses
Describes how to configure, install, and manage the licensing mechanism. You should read this chapter if you encounter problems installing licensing or wish to customize licensing at your site.

Chapter 9: Debugging in AVS 5
Provides a summary of suggestions and tips on developing and debugging AVS modules; it draws together a number of techniques and features that are available in different areas of the product. Intended for both new and experienced module writers.

AVS 5.6 Media Kit

The AVS 5.6 media kit provided to new users contains one CD with online manuals. The AVS 5.6 CD is provided along with the consolidated release notes covering all current UNIX platforms. Existing AVS 5 users are provided with this media kit as an upgrade from AVS 5.5. Installation of software on this CD is covered in Chapter 2, *Installation*.

For the latest public domain modules and information, users are invited to visit the International AVS Center web site at the University of Manchester at *http://www.iavsc.org*. For more information see Chapter 7, *Extended Features*.

License Requirements

AVS is a licensed software product of Advanced Visual Systems Inc. You obtain the license from Advanced Visual Systems Customer Support or your local distributor, not from your platform vendor. AVS will not run until you have obtained a license.

The *AVS 5.6 Installation* chapter contains a section called "Step 6: Install License." This section explains how to obtain the necessary license file that contains the licensing codes that are correct for your installation. It describes both the "new AVS installation" and the "upgrade an existing AVS installation" cases. Read this section *before* you contact Customer Support or your local distributor. It explains what site and machine-dependent information you must supply to us before we will be able to generate your license code. **Note: AVS 5.6 does not require a new license for existing AVS 5.5 users nor does it require that license daemon's be updated.**

The *Administering Licenses* chapter describes how to install the license(s) and customize the licensing mechanism.

Implementation Overview

This product is a full implementation of Advanced Visual Systems Inc.'s Application Visualization System (Release 5.6) on various UNIX workstations.

Features introduced in recent releases are described in the *Extended Features* chapter in these *Installation and Release Notes*.

AVS is fully described in the following manuals that accompany this product in hardcopy and in the PDF archives on the CD:

- *AVS Technical Overview*
- *AVS User's Guide*
- *AVS Tutorial Guide*
- *AVS Module Reference Manual*
- *AVS Developer's Guide*
- *AVS Application's Guide*
- *AVS 5 Update*
- *AVS/Graph User's Guide*

The AVS Animator, now included in the standard AVS 5.6 package without licensing, is documented in its own manual, *Animating AVS Data Visualizations*. Source code is now provided under *$AVS_PATH/examples/animator*; for more information see Chapter 3, "AVS 5.6 on UNIX Platforms."

The *UCD Builder User's Guide* describes the UCD Builder, an unsupported product delivered on the Cool CD. This product has *not* been updated for the AVS5.6 release. For more information see Chapter 7, *Extended Features*.

The Molecule Data Type, the *libchem* library that manipulates it, and the collection of chemistry and example modules that show how to program with *libchem* are documented in the *Chemistry Developer's Guide* manual. This manual is not included in hardcopy with the AVS release but is available in the online PDF archive.

Note: A few books were not available in PDF format at release time (*AVSGraph User's Guide*, *Technical Overview,* and *UCD Builder's Guide*); contact AVS Customer Support for possible future availability of these book files from our web site.