This guide contains information about the documentation for the AVS 5 product from Advanced Visual Systems Inc. It is organized into the following sections.

**AVS DOCUMENTATION ON-LINE**
- About the on-line files
- Printing the on-line files
- AVS documentation in print

WHERE TO START
- If you are a previous user of AVSS
- If you are a new user of AVSS

**INFORMATION ON THE INDIVIDUAL MANUALS**
- AVS 5 update
- User's guide
- Tutorial guide
- Developer's guide
- Module reference
- Applications guide
- Animating AVS data visualizations
- AVS/Graph user's guide
- Technical overview
- Chemistry developer's guide
- UCD Builder user's guide
- Developers AVS release notes and installation guide
- UNIX release notes and installation guide
- LINUX release notes and installation guide

**CONTACTING ADVANCED VISUAL SYSTEMS**
- Advanced Visual Systems International Offices
- Newsgroup
- International AVS Centre (IAC)
- Advanced Visual Systems Product Distributors
AVS Documentation On-line

The following documentation is included in this set of Portable Document Format (pdf) files:

More information | Open Document | Tutorial Guide
More information | Open Document | Developer's Guide
More information | Open Document | Module Reference
More information | Open Document | Applications Guide
More information | Open Document | Animating AVS Data Visualizations
More information | Open Document | AVS5 Update
More information | Open Document | Chemistry Developer’s Guide
More information | Open Document | AVS/Graph User's Update
More information | Open Document | Technical Overview

Clicking on the links in the More Information column will take you to the Information on the Individual Manuals area of this document. Clicking on the links in the Open Document column will open the manual.

If you do not have a copy of the Adobe Acrobat Reader, you can download it at no cost from Adobe’s web site at http://www.adobe.com/prodindex/acrobat/readstep.html.

About the On-line Files

Each file contains the complete contents of the book. For your convenience, the Table of Contents for each book contains links to the chapters and major sections within each chapter. A red dashed box surrounding the text signifies a link.

In addition, each of the books contains bookmarks that are also links to the chapters and the major sections within the chapters.

You can also use the Acrobat Reader’s text-searching capabilities to find specific information you may be looking for.

Printing the On-line Files

When printing these .pdf files, you must set the postscript level to Level 1 in the print dialog box. If the Level 2 Only button is selected, some of the images contained in these files will not print properly.

AVS Documentation in Print

All of the guides in this pdf collection are available in bound versions. Please contact your local sales office for information on obtaining the books. Contact information appears at the end of this document.
Where to Start

This document and the on-line versions of the AVS documentation have been designed to help you find the information you are looking for quickly and easily.

If You Are a Previous User of AVS5

Information on newer functionality, operating system levels, and features of the AVS product not directly discussed in the documentation set is addressed in the *UNIX Release Notes and Installation Guide*. Please consult this guide first for the most recent information on the product. If you know which volume of the documentation contains the information you are looking for, you can directly access the pdf version from the links to each individual volume on page 2 of this document.

If You Are a New User of AVS5

After reviewing the *UNIX Release Notes and Installation Guide*, the following manuals will provide you with basic information about installing, licensing, exploring, and running AVS5.

- Technical Overview
- User’s Guide
- Tutorial Guide

If you need additional examples or information, the International AVS Centre at Manchester University is a good source. Contact information for the IAC, and for Advanced Visual Systems Technical Support, is listed below.
Information on the individual manuals

**AVS 5 Update**
The AVS 5 Update was first published at the introduction of AVS version 5. It describes improvements to the AVS interface, data types, Image Viewer, Geometry Viewer, and new facilities for module and application developers made at the time of the release. It also provides summary tables that list new and upgraded modules.

**User's Guide**
The User’s Guide was published with the release of AVS version 4. This volume is a basic introduction to the AVS product through hands-on demonstrations included with the product. Each of the viewers is examined in detail, and a large number of commands, script writing, and viewing techniques are explained.

**Tutorial Guide**
The Tutorial Guide was also published with the release of AVS version 4. This volume includes a basic introduction to the AVS software product; an overview of data visualization techniques; data importation techniques; and information on the basic functionality of the product.

**Developer’s Guide**
The Developer’s Guide was published with the release of AVS version 4. This manual describes what a programmer needs to know to write AVS modules. The manual assumes an elementary understanding of the concept of a data flow network and a working knowledge of either the C or the FORTRAN programming languages. It also assumes familiarity with AVS on the user level.

**Module Reference**
The Module Reference was updated with the release of AVS version 5. This manual provides functional specifications and descriptions of all of the AVS modules in alphabetical order.

**Applications Guide**
The Applications Guide was published with the release of AVS version 4. This manual contains in-depth descriptions of data importation through the AVS Data Interchange Application, the AVS Module Generator, and the AVS Data Viewer.

**Animating AVS Data Visualizations**
Animating AVS Data Visualizations was published with the release of AVS version 4. This manual describes how to use the AVS Animation Application and its associated components to create computer based and video based animations of AVS data visualizations. This manual is intended for AVS users and programmers who wish to generate animation sequences of AVS data visualizations and record them to disk files for display on workstations and record the image sequences on film or video hardware.

**AVS/Graph User’s Guide**
The AVS/Graph User’s Guide was published with the release of AVS version 5.02. It provides information on the use of the AVS/Graph module, which allows users of the AVS product to plot their data using a variety of advanced charting and graphing techniques.

**Technical Overview**
The Technical Overview was published with the release of AVS version 4. This manual provides a broad technical description of data visualization, and of the AVS product.
Chemistry Developer’s Guide

The Chemistry Developer’s Guide was updated in 1992 with the release of AVS version 4. The Molecule Data Type (MDT) addresses the general needs of classical, substructure, and quantum chemistry fields. The Chemistry Developers Kit (CDK) consists of a set of Fortran and C libraries to facilitate use of the MDT, and a collection of modules, networks, and test data to demonstrate its use. This manual describes what a programmer needs to know to write an AVS chemistry module using the Molecule Data Type.

UCD Builder User’s Guide

The UCD Builder User’s Guide is the documentation for a series of unsupported modules for the AVS product.

Developers AVS Release Notes and Installation Guide

The Developers AVS Release Notes document was updated with the release of AVS version 5.5. The Developers AVS product is designed to provide application developers with the ability to develop and deploy AVS based applications to their users. Although these applications will use various AVS capabilities, end users will often be unaware that the application they are using is built on top of AVS.

UNIX Release Notes and Installation Guide

The UNIX Release Notes document was updated with the release of AVS version 5.5. This document describes AVS 5.4 as it runs on UNIX workstations. This manual includes enhancements; improvements; licensing information; information common or important to all platforms, including how AVS works under X windows and common programming considerations; and platform specific information for supported platforms, including system prerequisites, release notes, and recent improvements and known limitations.

LINUX Release Notes and Installation Guide

The LINUX Release Notes document was updated with the release of AVS version 5.5. This document describes AVS 5.4 as it runs on LINUX workstations. This manual includes enhancements; improvements; licensing information; system prerequisites; release notes; and recent improvements and known limitations.
Contacting Advanced Visual Systems

The best source of technical support information about our products is at the Advanced Visual Systems Technical Support web site (http://help.avs.com). The general web site (http://www.avs.com) also has information you may find of help. Both sites are frequently updated with content on the company, our products, support services, FAQs, technical papers, and a variety of other information of interest. You can also contact any Advanced Visual Systems office or distributor for assistance; the listing below is also available on the web site. You can request a license through the web site, or through any of the Advanced Visual Systems offices listed below.

Advanced Visual Systems International Offices

**USA**
300 Fifth Avenue
Waltham, MA 02451
800-428-7001 TEL
781-890-8287 FAX
E-mail: sales@avs.com
Support: support@avs.com

**Denmark**
Roejelskaer 11, 1st Floor
2840 Holte, Denmark
45-45-474400 TEL
45-45-474495 FAX
E-mail: sales-info@avs.dk
Support: support@avs.dk

**France**
Espace CLICHY
18, Rue Mozart
92587 CLICHY, France
33-1 41 06 69 00 TEL
33-1 47 31 22 22 FAX
E-mail: info@avsfrance.com
Support: support@avsfrance.com

**Germany**
Frankfurter Str. 58
65520 Bad Camberg, Germany
49-6434-902236 TEL
49-6434-902239 FAX
E-mail: hilfe@avs.com

**Italy**
Strada 4 Palazzo A4, Malanofiori
20090 Assago, Milano, Italy
39-02-8920-2175 TEL
39-02-824-3205 FAX
E-mail: info@avs.it
Support: support@avs.it

**UK**
Montrose House
Chertsey Boulevard
Hamworth Lane, Chertsey
Surrey, England KT16 9JX
44-1932-581600 TEL
44-1932-581601 FAX
E-mail: sales@avsuk.com
Support: support@avsuk.com

Newsgroup

The USENET newsgroup, comp.graphics.apps.avs, provides a means for communicating with other users of Advanced Visual Systems products.

**International AVS Centre (IAC)**

The AVS Users Group is hosted at the IAC. The IAC provides many services for users of the AVS and AVS/Express products from Advanced Visual Systems, including user-contributed modules available free using the ftp utility. To contact the IAC:

International AVS Centre
Manchester Visualization
Manchester Computing
The University, Oxford Road
Manchester M13 9PL
United Kingdom

Email: avs@iavsc.org
Web Site: http://www.iavs.org
FTP: ftp.iavsc.org
Phone: +44 161 275 6095
Fax: +44 161 275 6040
**Advanced Visual Systems Product Distributors**

This list of distributors may be able to assist you with limited support, or direct you to the best source of technical support from an AVS office.

<table>
<thead>
<tr>
<th>Barcelona, Spain</th>
<th>People's Republic of China</th>
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<tr>
<td><strong>ADDLINK Software Científico S.L.</strong></td>
<td><strong>RGL, LLC Beijing Office</strong></td>
</tr>
<tr>
<td>c/ Roselló 205</td>
<td><strong>Rm 1018, International Enterprises Business</strong></td>
</tr>
<tr>
<td>08008 Barcelona, España</td>
<td><strong>Building</strong></td>
</tr>
<tr>
<td>E-mail: Juan Manuel SolTheta</td>
<td><strong>No. 20 Zhichun Rd., Haidian District, Beijing</strong></td>
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<tr>
<td>(<a href="mailto:jmsole@addlink.es">jmsole@addlink.es</a>)</td>
<td>(100088)</td>
</tr>
<tr>
<td>34-93-4154904 TEL</td>
<td>8610-62025599 TEL</td>
</tr>
<tr>
<td>34-93-4157268 FAX</td>
<td>8610-62019111 FAX</td>
</tr>
<tr>
<td><strong>ADDLINK covers Spain and Portugal</strong></td>
<td><strong>E-mail: <a href="mailto:Rockies@public.bta.net.cn">Rockies@public.bta.net.cn</a></strong></td>
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<tr>
<td><strong>Decom Valencia S.L.</strong></td>
<td><strong>SuperLink Technology Corp.</strong></td>
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<tr>
<td>Avenida del Saler, n. 10</td>
<td><strong>13F-4, 77 Shin-Tai-Wu Rd. Sec. 1</strong></td>
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<tr>
<td>Entresuelos L1-L2 (Torre 3)</td>
<td><strong>Shi-Chih, Taipei Hsien 221</strong></td>
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<tr>
<td>34-96-3348274 TEL</td>
<td><strong>Taiwan, R.O.C.</strong></td>
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<tr>
<td>34-96-3341409 FAX</td>
<td>886-2-2698-3456 TEL</td>
</tr>
<tr>
<td>E-mail : Andres Alcolea (<a href="mailto:aalcolea@decom.es">aalcolea@decom.es</a>)</td>
<td>886-2-2698-3535 FAX</td>
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<tr>
<td></td>
<td><strong>E-mail: <a href="mailto:stc@tpts1.seed.net.tw">stc@tpts1.seed.net.tw</a></strong></td>
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<tr>
<td><strong>Visual Solutions GmbH</strong></td>
<td><strong>KGT Inc.</strong></td>
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<tr>
<td>Vorder Brach</td>
<td><strong>2-8-8 Shinjuku, Shinjuku-ku</strong></td>
</tr>
<tr>
<td>CH-8494 Bauma/Zürich</td>
<td><strong>Tokyo 160-0022, Japan</strong></td>
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<tr>
<td>Switzerland</td>
<td>81-3-3225-0742 TEL</td>
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<tr>
<td>41-(0)52-386-35-25 TEL</td>
<td>81-3-3225-0740 FAX</td>
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<td>41-(0)52-386-35-26 FAX</td>
<td><strong>E-mail: <a href="mailto:sumori@tt.kubota.co.jp">sumori@tt.kubota.co.jp</a></strong></td>
</tr>
<tr>
<td>E-mail: <a href="mailto:visual_solutions@compuserve.com">visual_solutions@compuserve.com</a></td>
<td><strong>Japan</strong></td>
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<th>Republic of Korea</th>
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<tr>
<td><strong>Visualisation Systems Pty. Ltd.</strong></td>
<td><strong>Neat Information Telecommunication, Inc.</strong></td>
</tr>
<tr>
<td>35 Horace Sreet</td>
<td><strong>10th Floor, WooYoung Venture Building</strong></td>
</tr>
<tr>
<td>St. Ives. 2075, Australia</td>
<td><strong>#1330-13 SeoCho-Dong, SeoCho-Gu, Seoul</strong></td>
</tr>
<tr>
<td>61-2-9413-1477 TEL</td>
<td><strong>137-070 Korea</strong></td>
</tr>
<tr>
<td>61-2-9983-0555 FAX</td>
<td>82-2-583-2222 TEL</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:sales@vs.com.au">sales@vs.com.au</a></td>
<td>82-2-583-2313 FAX</td>
</tr>
<tr>
<td></td>
<td><strong>E-mail: <a href="mailto:yhjeong@neat.co.kr">yhjeong@neat.co.kr</a></strong></td>
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<tr>
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<tr>
<td><strong>Visual Numerics (Pty) Ltd</strong></td>
<td><strong>Ankor Computers Ltd.</strong></td>
</tr>
<tr>
<td>P.O. Box 11033</td>
<td><strong>Atidim-Advanced Technologies Park</strong></td>
</tr>
<tr>
<td>Vorna Valley</td>
<td><strong>Neve-Sharet, Tel-Aviv, Israel</strong></td>
</tr>
<tr>
<td>1686 R.S.A.</td>
<td>+972-3-6450791 TEL</td>
</tr>
<tr>
<td>27-11-466-0319 TEL</td>
<td>+972-3-647445 FAX</td>
</tr>
<tr>
<td>27-11-466-0320 FAX</td>
<td><strong>E-mail: <a href="mailto:rafis@ankor.co.il">rafis@ankor.co.il</a></strong></td>
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