Software Announcement

IBM United States October 24, 1995

IBM VisualAge for Smalltalk for OS/2, for AIX, and for Windows, Version 3 — With Significant Performance Improvements

VisualAge™,[1] for Smalltalk is a product set of object-oriented, application-development power tools for dealing with today's complex, mission-critical, graphical user interface (GUI), client/server workstation applications. VisualAge for Smalltalk uses a construction-from-parts paradigm, which eases the migration to object-oriented technology. In addition to ready-built components that enable productivity for developers without object-oriented skills, VisualAge for Smalltalk also offers extensibility for those who are building object-oriented skills.

There are separate products for OS/2®, Windows†, and AIX®, and one server product that supports for all three platforms:

- VisualAge for Smalltalk, Standard products are the entry-level, stand-alone products (separately orderable for OS/2 or Windows) for individual developers.
- VisualAge for Smalltalk, Professional products enable stand-alone development on OS/2 and Windows and enable team development on OS/2, AIX, or Windows (when used in combination with the VisualAge for Smalltalk, Professional Server). The Professional products are separately orderable.
- VisualAge for Smalltalk, Professional Server is the server support for the VisualAge for Smalltalk, Professional products and provides a centralized repository of classes for a team of developers. Support for each of the platforms (OS/2, AIX, or Windows) is available through a single VisualAge for Smalltalk, Professional Server license.

Additional, separately orderable function is available through the following products:

- VisualAge for Smalltalk, Distributed for OS/2, for AIX, and for Windows, Version 3.0 (V3.0)
- VisualAge for Smalltalk, Reports for OS/2 and for Windows, V3.0
- VisualAge for Smalltalk, Database for ORACLE** for OS/2, for AIX, and for Windows, V3.0
- VisualAge for Smalltalk, Communications/Transactions for OS/2, for AIX, and for Windows, V3.0
- VisualAge for Smalltalk, IMS™ Connection for OS/2, for AIX, and for Windows, V3.0
- VisualAge for Smalltalk, AS/400® Connection, for OS/2 and for Windows, V3.0

One-Time Charge

VisualAge for Smalltalk, Standard	$1,499
VisualAge for Smalltalk, Professional	3,799
VisualAge for Smalltalk, Professional Server	4,999

Planned Availability Date: November 30, 1995

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[1] IBM's VisualAge products and services are not associated with or sponsored by Visual Edge Software, Ltd.
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IN BRIEF . . .

The VisualAge for Smalltalk Version 3.0 base products include Version 2.0 functions, plus:

- Development and run-time support for AIX (requires VisualAge for Smalltalk, Professional Server)
- Significant performance improvements (run-time and development)
- Significant usability improvements
- VBX support (Windows only)
- New portable controls (notebook, container, slider, spin button) for multiplatform support and portability
- Portable drag/drop support
- Enhanced database support for DB2® for OS/2 2.1, including support for user-defined functions (UDFs), user-defined types (UDTs), and binary large objects (BLOBs)
- Multimedia support and COBOL wrappering, which were separately orderable Version 2.0 products

Separately available function includes:

- Distributed capability for OS/2, for AIX, and for Windows
- Capability to layout reports using the facilities of VisualAge for Smalltalk construction-from-parts paradigm
- Native support for Oracle databases
- Message Queue Series (MQSeries™) and Remote Procedure Call (RPC) support
- Capability to wrap existing IMS transactions for use in the VisualAge for Smalltalk environment
- Capability to access additional AS/400 services, objects, and data, along with additional parts for VisualAge for Smalltalk

Description

The VisualAge for Smalltalk products are written in IBM Smalltalk, a pure object-oriented language. Using this technology, the VisualAge for Smalltalk products provide an architecture and a rich set of application-enabling functions that support application construction from reusable components, including preexisting third generation language (3GL) and fourth generation language (4GL) elements. VisualAge for Smalltalk products provide visual GUI development capabilities, so complex CUA™-compliant screens can be built quickly and easily. These products also provide the protocols that enable the GUI front-ends to run with newly created object-oriented applications or with preexisting applications.

VisualAge for Smalltalk products provide an open architecture via published interfaces. Through this approach, components created by the customer or other third parties can be added easily to the development environment. This approach also encourages others to create GUI development tools and support tools (communications, database access, pre-existing code access, and class libraries) that work with VisualAge for Smalltalk products.

The VisualAge for Smalltalk, Standard products and the VisualAge for Smalltalk, Professional products can be installed stand-alone. However, the Standard products cannot be installed as clients under the VisualAge for Smalltalk, Professional Server. Installing the Professional products under the Professional Server provides team development support with a centralized repository of classes.

Each developer (whether in a stand-alone or team environment) must have either a VisualAge for Smalltalk, Professional license or a VisualAge for Smalltalk, Standard license. One license of VisualAge for Smalltalk, Professional Server is required for each team sharing a centralized repository of classes. The stand-alone developer may prefer VisualAge for Smalltalk, Professional over VisualAge for Smalltalk, Standard since VisualAge for Smalltalk, Professional provides advanced function such as version control and configuration management.

Other functions included in the Version 3.0 base products are:

- Development and runtime support for AIX (requires VisualAge for Smalltalk, Professional Server)
- Performance improvements through tuning and enhancements to the underlying virtual machine
- VBX support (Windows only) that provides the capability to wrap existing VBX controls and use them on the VisualAge for Smalltalk palette
- New portable controls (notebook, container, slider, and spin button) for multiplatform support and portability
- Portable drag/drop support
- Upgraded database support for DB2/2™ 2.1 with support for UDFs, UDTs, and BLOBs
- Usability improvements through improved startup; consistency in dialogs, settings, and font usage; additional parts; improved help; and better and more complete examples
- Enhanced database parts for greater usability and performance
- System Object Model (SOM) and Distributed SOM (DSOM) 2.1 Client support (OS/2 and AIX only)
- Open Database Connectivity (ODBC) support that provides the capability to access data from a variety of databases and file systems that support the ODBC interface
- Multimedia enhancements, including kiosk authoring enablement (OS/2 and Windows only), which includes support for hotspots and scene-to-scene navigation

Additional functions are provided by:

- VisualAge for Smalltalk, Distributed for OS/2, for AIX, and for Windows, V3.0 — provides the capability to develop a VisualAge for Smalltalk application on a single development platform, and split the logic of the application to run on multiple execution platforms. Facilities are provided for remote debugging, performance profiling for optimal distribution, and for other features that make up a robust development environment. This feature is complementary to existing SOM/DSOM support and optimized for Smalltalk.
- VisualAge for Smalltalk, Reports for OS/2 and for Windows, V3.0 — provides the capability to lay out reports using the facilities of the VisualAge for Smalltalk construction-from-parts paradigm.
- VisualAge for Smalltalk, Database for ORACLE for OS/2, for AIX, and for Windows, V3.0 — provides access to Oracle data through native application program interfaces (APIs). (Access to Oracle and other databases through ODBC is also provided in the base products.)
- VisualAge for Smalltalk, Communications/ Transactions for OS/2, for AIX, and for Windows, V3.0 — offers Message Queue Series (MQSeries) support and Remote Procedure Call (RPC) support.
- VisualAge for Smalltalk, IMS Connection for OS/2, for AIX, and for Windows, V3.0 — provides the capability to wrap existing IMS transactions for use in the VisualAge for Smalltalk environment.
- VisualAge for Smalltalk, AS/400 Connection for OS/2 and for Windows, V3.0 — allows access to additional AS/400 services, objects, and data, along with additional parts for VisualAge for Smalltalk.

Application Developer Productivity

Applications developed with any of the VisualAge for Smalltalk V3.0 products for OS/2, for AIX, or for Windows are portable to any of the other supported platforms without rewriting the application code. Using VisualAge for Smalltalk, Professional and VisualAge for Smalltalk, Professional Server, an application developer using an OS/2, Windows, or AIX client can store and reuse application source code in a common source code manager shared on a network. This allows multiple, heterogeneous development clients (OS/2, Windows, or AIX) to access, store, and reuse source code common to all platforms. Once the application is completed, developers can build a platform-specific executable IMAGE file using the target platform development environment. This capability allows developers to create an application once and then easily port it to other platforms.

Enabling New Applications

VisualAge for Smalltalk, IMS Connection for OS/2, for AIX, and for Windows, V3.0 provides VisualAge for Smalltalk programming parts to transparently integrate transaction systems with VisualAge for Smalltalk programs. The IMS Connection provides support for IMS transactions.

Using VisualAge for Smalltalk, Professional, you can design VisualAge applications that take advantage of existing IMS transactions without changing them. S/390® customers can exploit VisualAge technology without compromising the strengths already built into their host transaction systems.

At run time, the IMS Connection middleware transparently accesses the appropriate transactions on the host as the business objects materialize or are made persistent.

Unlike other re-engineering offerings, VisualAge for Smalltalk, IMS Connection for OS/2, for AIX, and for Windows, V3.0 presents minimal risk as transactions need no modification. Its seamless integration into the VisualAge for Smalltalk, Professional composition editor allows intuitive and highly efficient development.

VisualAge for Smalltalk, AS/400 Connection for OS/2 and for Windows, V3.0 provides visual programming parts and client code for accessing a wide range of AS/400 services, objects, and data:

- AS/400 CL commands
- AS/400 programs
- Device and configuration parts
- Data areas (all types)
- Data queues (all types)
- Database files (direct, keyed, and sequential with commitment control)
- Job parts
- Library parts
- Message parts
- Object lists
- Printer parts
- Record descriptions
- Signed-on user parts
- User spaces
- AS/400 Ultimedia® System Facilities parts

These parts can be graphically connected via the VisualAge for Smalltalk composition editor to other parts of an application and packaged for distribution without any run-time charge.

Using the visual construction techniques of VisualAge for Smalltalk, applications can be developed that:

- Access current database files
- Create next-generation client/server applications through data queues, remote program calls, and user spaces
- Easily add AS/400 job, message, user, printed output, and device support into a VisualAge for Smalltalk application
- Incorporate AS/400 managed multimedia into applications with the AS/400 Ultimedia parts

Additional Function

VisualAge for Smalltalk, V3.0 will provide native platform development and execution support for Windows NT and Windows 95. IBM is completing compatibility testing on NT and Win95 and will enter beta test in the first quarter of 1996. This support will enable users of VisualAge for Smalltalk for Windows, V3.0 to develop and deploy applications on Windows NT and Windows 95.

IBM will extend the VisualAge for Smalltalk products by providing a new set of parts for the VisualAge for Smalltalk palette that will enable customers to develop and deploy industrial-strength commercial business applications for the World Wide Web. This new capability will bring the power of IBM's award-winning, object-oriented programming to the Web environment. The combination of these Web parts and the rich data and transaction capability of VisualAge for Smalltalk will add a new dimension to the types of applications developers can deploy on the Web. The VisualAge World Wide Web extensions will enter beta test in first quarter 1996.

IBM will expand the UNIX[2] support of its VisualAge for Smalltalk products to enable users to develop and deploy applications on HP** UNIX. VisualAge for Smalltalk for HP will enter beta test in second quarter 1996.

In the second quarter 1996, IBM will extend the VisualAge for Smalltalk, IMS Connection function to support CICS™.

Open Enterprise: The VisualAge for Smalltalk, V3.0 products support the following PC industry standards: X, Motif, POSIX, and ANSI X3J20, and the de facto industry standards of ODBC, DDE, and VBX. These products also support DRDA™ for AS/400.

Product Positioning

VisualAge for Smalltalk also can be used to develop database applications supporting a wide variety of database systems, including:

- DB2 family of products
  - On the client: DB2/2 for OS/2, DB2/6000™ for AIX, and on Windows using CAE client support
  - Through the connectivity services of DDCS, VisualAge for Smalltalk can access the DB2 family (including DB2 and SQL/DS™) and the AS/400.
- Native Oracle
- Other databases and file systems that support the ODBC interface (including Sybase and SQL Server)

VisualAge for Smalltalk is positioned with VisualGen™ (refer to Software Announcement 295-352, dated July 25, 1995) as a complementary application development tool. VisualGen is a workstation-based, procedural, 4GL tool for COBOL audiences and customers moving from host-based application development to workgroup-based application development. VisualGen targets customers who want to build on existing procedural skills and prefer a single product for developing the client and server portions of applications.

Publications

The following publications can be ordered through PUBORDER or your IBM representative.

Title	Order Number
VisualAge for Smalltalk, Getting Started, Version 3.0	SC34-4535
VisualAge for Smalltalk, User's Guide, Version 3.0	SC34-4518
VisualAge for Smalltalk, User's Reference, Version 3.0	SC34-4519

Title	Order Number
VisualAge for Smalltalk, Programmer′s Guide to Building Parts for Fun and Profit, Version 3.0	SC34-4496
Introduction to Object-Oriented Programming with IBM Smalltalk, Version 3.0	SC34-4491
IBM Smalltalk User′s Guide, Version 3.0	SC34-4536
IBM Smalltalk Programmer′s Reference, Version 3.0	SC34-4493

Displayable Softcopy Publications: The publications listed below are offered in displayable softcopy form. All unlicensed manuals are included. The displayable manuals are part of the basic machine-readable material. The files are shipped on the same media type as the basic machine-readable CD-ROM.

- VisualAge for Smalltalk, Getting Started, Version 3.0
- VisualAge for Smalltalk, User′s Guide, Version 3.0
- VisualAge for Smalltalk, User′s Reference, Version 3.0
- VisualAge for Smalltalk, Features Class Guide and Reference, Version 3.0
- VisualAge for Smalltalk, Distributed Guide and Reference, Version 3.0
- VisualAge for Smalltalk, Multimedia Guide and Reference, Version 3.0
- VisualAge for Smalltalk, Open Database Connectivity Support Drivers Reference, Version 3.0
- VisualAge for Smalltalk, Programmer′s Guide to Building Parts for Fun and Profit, Version 3.0
- VisualAge for Smalltalk, Communications/Transactions Guide and Reference, Version 3.0
- VisualAge for Smalltalk, AS/400 Connection Guide and Reference, Version 3.0
- VisualAge for Smalltalk, IMS Connection Guide and Reference, Version 3.0
- VisualAge for Smalltalk, Reports Guide and Reference, Version 3.0
- Introduction to Object-Oriented Programming with IBM Smalltalk, Version 3.0
- IBM Smalltalk User′s Guide, Version 3.0
- IBM Smalltalk Programmer′s Reference, Version 3.0
- IBM Smalltalk Catalog of Classes, Version 3.0

Also, these displayable manuals can be used with the BookManager® READ licensed programs in any of the supported environments. A Library Reader™ is included with the program product. Terms and conditions for use of the machine-readable files are shipped with the files.

Education Support

Call IBM Education and Training at 800-IBM-TEACH (426-8322) for education catalogs, schedules, and enrollments.

The appropriate curriculum will be updated, as necessary, to include the enhancements described in this announcement.

Details of education support are available through separate education announcements.

Training is available from IBM and other leading object-oriented companies.

IBM Education

- Object-Oriented Application Development — The full life-cycle
  - Course Code: N1936
  - Duration: Five days
  - Private classes available: Yes
  - Contact: 800-IBM-TEACH (426-8322)

  This course teaches students all aspects of the object-oriented application development life-cycle. By combining teaching of theory and extensive hands-on training, this course offers students enough practical experience in object-oriented concepts and techniques and in object-oriented analysis, design, and implementation activities to allow them to develop small but nontrivial applications using IBM VisualAge for Smalltalk.

  The course presents a first introduction to the most important aspects of object-oriented application development and object-oriented technology in general.

  Besides teaching and hands-on training, this course also provides students extensive advice on how to best use object-oriented techniques and on how to set up an object-oriented application development process.

- Building Applications with VisualAge for Smalltalk
  - Course Code: N1762
  - Duration: Five days
  - Private classes available: Yes
  - Contact: 800-IBM-TEACH (426-8322)

  Students learn to create a VisualAge for Smalltalk application from the ground up. Through hands-on labs, students construct applications using parts supplied with VisualAge for Smalltalk and parts they build. Application builders who need to learn to use VisualAge for Smalltalk to build new applications from preexisting parts will find this offering to be most valuable.

- VisualAge for Smalltalk and AS/400 Connection Introduction
  - Duration: Four and a half days
  - Private classes available: Yes
  - Contact: 800-365-4426

  This course provides a hands-on introduction to VisualAge for Smalltalk development, including the VisualAge for Smalltalk, AS/400 Connection. An actual project is assigned at the beginning of the class. Through a series of lectures and laboratory time, students apply the concepts taught in the course to build an object oriented client/server application. On-site education is also available.

- VisualAge for Smalltalk, AS/400 Connection
  - Duration: Four days
  - Contact: 800-365-4426

  This course teaches students how to build AS/400 client/server applications using VisualAge for Smalltalk and the VisualAge for Smalltalk, AS/400 Connection. Students gain a working knowledge of the extensive capabilities of the AS/400 Connection through a series of lectures and lab exercises.

- Team Development with VisualAge for Smalltalk and IBM Smalltalk
  - Course Code: N1945
  - Duration: Two days
  - Contact: 800-IBM-TEACH (426-8322)

  This course covers team programming support provided by VisualAge for Smalltalk, Professional and IBM Smalltalk Professional. It enables students to identify applications and subapplications for a given project. Determination and assignment of specific roles in a team and project administration are other central issues of the course.

- Introduction to Object-Oriented Programming in IBM Smalltalk
  - Course Code: N1816
  - Duration: Five days
  - Contact: 800-IBM-TEACH (426-8322)

  This course is for analysts and programmers who will be responsible for supplying new parts for VisualAge for Smalltalk applications and for their technical managers who want to understand the basics of object-oriented programming in VisualAge for Smalltalk. Students learn the basics of the IBM Smalltalk programming language as it applies to writing scripts and creating parts for use with VisualAge for Smalltalk.

- Advanced Object-Oriented Programming in IBM Smalltalk
  - Course Code: N1817
  - Duration: Five days
  - Private classes available: Yes
  - Contact: 800-IBM-TEACH (426-8322)

  This course is for technical staff involved in IBM Smalltalk programming and VisualAge for Smalltalk part library development. This course provides students with intermediate- to advanced-level expertise in IBM Smalltalk programming. Advanced topics in the IBM Smalltalk programming environment are examined as they apply to creating new parts for use in VisualAge for Smalltalk applications. On-site education is also available.

Additional Education

Other leading third-party, object-oriented companies have developed education offerings for VisualAge for Smalltalk and IBM Smalltalk.

- Bridging from Smalltalk/V to IBM Smalltalk and VisualAge for Smalltalk
  - Source: Knowledge Systems Corporation
  - Course Code: N1820
  - Duration: Three days
  - Contact: 800-IBM-TEACH (426-8322)

  This course is for analysts and programmers who currently use Smalltalk/V but need to make a rapid transition to either the IBM Smalltalk programming environment or the VisualAge for Smalltalk environment as a parts developer.

- Bridging from VisualWorks to IBM Smalltalk and VisualAge
  - Source: Knowledge Systems Corporation
  - Course Code: N1819
  - Duration: Three days
  - Contact: 800-IBM-TEACH (426-8322)

  This course is for analysts and programmers who currently use VisualWorks but need to make a rapid transition to either the IBM Smalltalk programming environment or the VisualAge for Smalltalk environment as a parts developer.

Courses provided by third-party companies are subject to the terms and conditions of those companies.

IBM Smalltalk and VisualAge Resource Catalog

This catalog, published quarterly by IBM, contains information on complementary products, consulting services, education, and support from IBM and from other providers around the world.

For a copy of the catalog and future updates, call 800-IBM-2279 (426-2279) or 919-254-4760.

Technical Information

Specified Operating Environment

Hardware Requirements: The following sections describe the minimum machine requirements for valid operating environments for the VisualAge for Smalltalk, Standard; VisualAge for Smalltalk, Professional; and VisualAge for Smalltalk, Professional Server family of products.

VisualAge for Smalltalk, Standard for OS/2, V3.0

- 33MHz Intel** 80486 IBM or IBM-compatible personal computer (PC) system
- 24MB installed RAM. If you are running other products that provide database or communications services, 32MB of installed RAM are recommended.
- CD-ROM reader (required for installation)
- 35MB hard disk space for installed product. Additional hard disk space is required for certain options:
  - An additional 10MB if SOMobjects Base Toolkit is installed
  - An additional 23MB if available multimedia samples are installed
- 20MB hard disk space for OS/2 swapper file
- VGA graphics monitor. An XGA® or SVGA display system with a minimum resolution of 1024 x 768 pels is recommended.
- Mouse
- For multimedia support, any digital audio adapters, compact disc devices, or videodisc devices supported by Multimedia Presentation Manager®/2™ (MMPM/2), provided with Operating System/2® Version 3.0, contact the manufacturer of your hardware to ensure that you have the latest device drivers.

Note: The digital video player has no additional machine requirements.

VisualAge for Smalltalk, Standard for Windows, V3.0

- 33MHz Intel 80486 IBM or IBM-compatible PC system
- 24MB installed RAM. If you are running other products that provide database or communications services, 32MB of installed RAM are recommended.

- CD-ROM reader (required for installation)
- 35MB hard disk space for installed product. An additional 23MB of hard disk space is required if available multimedia samples are installed.
- 20MB hard disk space for swapper file
- VGA graphics monitor. An XGA or SVGA display system with a minimum resolution of 1024 x 768 pels is recommended.
- Mouse
- For multimedia support, any digital audio adapters, compact disc devices, or videodisc devices supported by Microsoft Windows Version 3.1, contact the manufacturer of your hardware to ensure that you have the latest device drivers.

Note: The digital video player has no additional machine requirements.

VisualAge for Smalltalk, Professional for OS/2, V3.0

- 33MHz Intel 80486 IBM or IBM-compatible PC system
- 24MB installed RAM
- CD-ROM reader
- 25MB hard disk space for the installed client. Additional hard disk space is required for certain options:
  - An additional 10MB if SOMobjects Base Toolkit is installed
  - An additional 23MB if available multimedia samples are installed
  - An additional 85MB (with additional disk space required for growth of the central library) if a local manager is installed on the client
- 20MB hard disk space for OS/2 swapper file
- VGA graphics monitor. An XGA or SVGA display system with a minimum resolution of 1024 X 768 pels is recommended.
- Mouse
- For multimedia support, any digital audio adapters, compact disc devices, or videodisc devices supported by Multimedia Presentation Manager/2 (MMPM/2), provided with Operating System/2 Version 3.0, contact the manufacturer of your hardware to ensure that you have the latest device drivers.

Note: The digital video player has no additional machine requirements.

VisualAge for Smalltalk, Professional for Windows, V3.0

- 33MHz Intel 80486 IBM or IBM-compatible PC system
- 24MB installed RAM
- CD-ROM reader
- 25MB hard disk space for the installed client. Additional hard disk space is required for certain options:
  - An additional 23MB if available multimedia samples are installed
  - An additional 85MB (with additional disk space required for growth of the central library) if a local manager is installed on the client
- 20MB hard disk space for swapper file
- VGA graphics monitor. An XGA or SVGA display system with a minimum resolution of 1024 x 768 pels is recommended.
- Mouse
- For multimedia support, any digital audio adapters, compact disc devices, or videodisc devices supported by Microsoft Windows Version 3.1, contact the manufacturer of your hardware to ensure that you have the latest device drivers.

Note: The digital video player has no additional machine requirements.

VisualAge for Smalltalk, Professional for AIX, V3.0

- RISC System/6000® uniprocessor POWERstation™ or POWERserver™ (including those with PowerPC™ card), or equivalent
- 64MB installed RAM
- CD-ROM reader
- 25MB hard disk space for installed product on client workstations. An additional 10MB hard disk space is required if SOMobjects Base Toolkit is also installed.
- 200MB free disk space for paging space
- Color display supporting X-Window System Version 11 Release 5 and OSF/Motif Version 1.2

  The display must support:

  - Minimum colors: 256
  - Depth: 8 planes
  - Bits in color: 8 bits
  - Dimensions: 1280 x 1024 pixels
  - Resolution: 91 x 92 dots per inch
  - Minimum video adaptor memory: 1MB
- Mouse

VisualAge for Smalltalk, Professional Server for OS/2, for AIX, and for Windows, V3.0

- For Windows or OS/2
  - 33MHz Intel 80486 IBM or IBM-compatible PC system
  - 24MB installed RAM
  - CD-ROM reader
  - Hard disk space for installed product:
    - 85MB, with additional disk space required for growth of the central library
    - An additional 23MB if available multimedia samples are installed
- For AIX
  - RISC System/6000 uniprocessor POWERstation or POWERserver (including those with PowerPC card), or equivalent
  - 64MB installed RAM
  - CD-ROM reader
  - Hard disk space for installed product: 85MB, with additional disk space required for growth of the central library

VisualAge for Smalltalk, AS/400 Connection for OS/2 and for Windows, V3.0

These requirements are in addition to those for VisualAge for Smalltalk, Professional or VisualAge for Smalltalk, Professional Server:

- 3MB hard disk space for each workstation
- 18MB hard disk space for each manager

VisualAge for Smalltalk, Communications/Transactions for OS/2, for AIX, and for Windows, V3.0

These requirements are in addition to those for VisualAge for Smalltalk, Standard; VisualAge for Smalltalk, Professional; or VisualAge for Smalltalk, Professional Server:

- Hard disk space for installed product:
  - On client workstations: 2MB
  - On file server (if using VisualAge for Smalltalk, Professional Server): 5MB

VisualAge for Smalltalk, Database for ORACLE for OS/2, for AIX, and for Windows, V3.0

These requirements are in addition to those for VisualAge for Smalltalk, Standard or VisualAge for Smalltalk, Professional:

- Hard disk space for installed product:
  - On OS/2 and Windows client workstations: 1MB
  - On AIX client workstations: 3MB

VisualAge for Smalltalk, Distributed for OS/2, for AIX, and for Windows, V3.0

These requirements are in addition to those for VisualAge for Smalltalk, Standard or VisualAge for Smalltalk, Professional:

- Hard disk space for installed product:
  - On client workstations: 4MB
  - On file server (if using VisualAge for Smalltalk, Professional Server): 12MB

VisualAge for Smalltalk, Reports for OS/2 and for Windows, V3.0

This feature applies to OS/2 and Windows only. These requirements are in addition to those for VisualAge for Smalltalk, Standard; VisualAge for Smalltalk, Professional; or VisualAge for Smalltalk, Professional Server:

- Hard disk space for installed product:
  - On client workstations: 2MB
  - On file server (if using VisualAge for Smalltalk, Professional Server): 2MB

VisualAge for Smalltalk, IMS Connection for OS/2, for AIX, and for Windows, V3.0

These requirements are in addition to those for VisualAge for Smalltalk, Professional:

- Hard disk space for installed product:
  - On client workstations: 2MB
  - On file server (if using VisualAge for Smalltalk, Professional Server): 2MB

Application Run-Time Environment

- 33MHz Intel 80386 IBM or IBM-compatible PC system
- 8MB to 12MB installed RAM for a typical application; however, installed RAM and hard disk space depend on the size and run-time requirements of the packaged application.
- VGA graphics monitor

Software Requirements: The following sections describe the minimum program requirements for valid operating environments for the VisualAge for Smalltalk, Standard; VisualAge for Smalltalk, Professional; and VisualAge for Smalltalk, Professional Server family of products.

VisualAge for Smalltalk, Standard for OS/2, V3.0

- OS/2 Warp Version 3.0
- For local database support:
  - DATABASE 2™ OS/2 (DB2/2) Version 1.2
  - DB2/2 Version 2.1
- For remote database support only:
  - Client Application Enabler/2 Version 1.2
  - Client Application Enabler for OS/2 Version 2.1
- For host (DB2, SQL/DS, or SQL/400®) database access: IBM Distributed Database Connection Services (DDCS) for OS/2 Version 2.3
- To use the SOMsupport component: SOMobjects Base Toolkit, Version 2.1 for OS/2, CSD Level SM21002, or later (supplied with the product), or SOMobjects Developer Toolkit, Version 2.1 for OS/2, CSD Level SM21002, or later
- For DSOM network access to objects: SOMobjects Workgroup Enabler, Version 2.1 for OS/2 (with its prerequisites)

VisualAge for Smalltalk, Standard for Windows, V3.0

- Microsoft** DOS, Version 6.0, or later. IBM PC-DOS Version 7.0 is recommended for better performance.
- Microsoft Windows, Version 3.11 (enhanced mode).
- For remote database support:
  - Client Application Enabler/DOS Version 1.2
  - Client Application Enabler for Windows Version 2.1
- For host (DB2, SQL/DS, or SQL/400) database access: IBM DDCS for OS/2 Version 2.3

VisualAge for Smalltalk, Professional for OS/2, V3.0

- OS/2 Warp Version 3.0
- For LAN workgroup connectivity, one of the following:
  - OS/2 LAN Server Version 3.0, or later, and LAN Transport Protocol Support (LAPS) component of Network Transport Services/2 (NTS/2)
  - Novell** Netware** Version 3.11, or later
  - FTP TCP/IP for OS/2 Version 3.0 or IBM TCP/IP for OS/2 Version 2.0 with CSDs UN56401, UN57064, and UN60005
- For local database support: DB2/2 Version 1.2 or Version 2.1

- For remote database support only: Client Application Enabler/2 (CAE/2) Version 1.2 or Version 2.1
- For host (DB2, SQL/DS, or SQL/400) database access: DDCS/2 Version 3.0
- To use the SOMsupport component: SOMobjects Base Toolkit Version 2.1 for OS/2, CSD level SM21002, or later (supplied with the product), or SOMobjects Developer Toolkit Version 2.1 for OS/2
- For DSOM network access to objects: SOMobjects Workgroup Enabler Version 2.1 for AIX (with its prerequisites)

VisualAge for Smalltalk, Professional for AIX, V3.0

- AIX Version 4.1.3
- VisualAge for Smalltalk, Professional Server for OS/2, for AIX, and for Windows, V3.0
- For local database support: DATABASE 2 AIX (DB2/6000) Version 1.2 or Version 2.1
- For remote database support only: CAE/6000 Version 1.2 or Version 2.1
- For host (DB2, SQL/DS, or SQL/400) database access: DDCS Version 3.0
- To use the SOMsupport component: SOMobjects Base Toolkit Version 2.1.0.2 for AIX (supplied with the product) or SOMobjects Developer Toolkit Version 2.1.0.2 for AIX
- For DSOM network access to objects: SOMobjects Workgroup Enabler Version 2.1 for AIX (with its prerequisites)

VisualAge for Smalltalk, Professional for Windows, V3.0

- Microsoft DOS Version 6.0, or later. IBM PC-DOS Version 7.0 is recommended for better performance.
- Microsoft Windows Version 3.11 (enhanced mode)
- For LAN workgroup connectivity, one of the following:
  - OS/2 LAN Server Version 3.0, or later, and IBM LAN Support Program Version 1.3
  - Novell NetWare Version 3.11, or later
  - FTP TCP/IP for DOS Version 3.0 or IBM TCP/IP for DOS Version 2.1.1.2
- For remote database support: CAE/DOS Version 1.2 or Version 2.1
- For host (DB2, SQL/DS, or SQL/400) database access: DDCS Version 3.0

VisualAge for Smalltalk, Professional Server for OS/2, for AIX, and for Windows, V3.0

- For OS/2
  - OS/2 Warp Version 3.0
  - VisualAge for Smalltalk, Professional for OS/2, V3.0
  - For LAN workgroup connectivity, one of the following:
    - OS/2 LAN Server Version 3.0, or later, and LAPS component of NTS/2
    - Novell NetWare Version 3.11, or later
- For AIX
  - AIX Version 4.1.3
  - VisualAge for Smalltalk, Professional for AIX, V3.0
- For Windows
  - Microsoft DOS Version 6.0, or later. IBM PC-DOS Version 7.0 is recommended for better performance.
  - Microsoft Windows Version 3.11 (enhanced mode)
  - VisualAge for Smalltalk, Professional for Windows, V3.0
  - For LAN workgroup connectivity, one of the following:
    - OS/2 LAN Server Version 3.0, or later, and IBM LAN Support Program Version 1.3
    - Novell NetWare Version 3.11, or later

VisualAge for Smalltalk, AS/400 Connection for OS/2 and for Windows, V3.0

These requirements are in addition to those for any of the VisualAge for Smalltalk, Professional products.

- For AS/400
  - OS/400® Version 3 Release 1
  - OS/400 Version 3 Release 1 Extended Base Support
  - OS/400 Version 3 Release 1 OS/400 Host Servers
  - Client Access/400 Version 3 Release 1
- For OS/2
  - OS/2 Warp Version 3.0
  - VisualAge for Smalltalk, Professional for OS/2, V3.0
  - Communications Manager/2 1.1 or Communications Manager/400
  - Client Access/400 for OS/2 3.1 or Client Access/400 Optimized for OS/2 3.1
- For Windows
  - Microsoft DOS Version 6.0, or later
  - Microsoft Windows Version 3.1 (enhanced mode)
  - Microsoft Win32s APIs
  - VisualAge for Smalltalk, Professional for Windows, V3.0
  - Client Access/400 for Windows 3.1

VisualAge for Smalltalk, Communications/Transactions for OS/2, for AIX, and for Windows, V3.0

These requirements are in addition to those for any of the VisualAge for Smalltalk, Standard or VisualAge for Smalltalk, Professional products:

- One of the VisualAge for Smalltalk, Standard, V3.0 products (OS/2, AIX, or Windows) or one of the VisualAge for Smalltalk, Professional, V3.0 products (OS/2, AIX, or Windows)

- For Advanced Program-to-Program Communications (APPC) or Common Programming Interface for Communications (CPI-C), one of the following:
  - For OS/2: IBM Communications Manager/2 Version 1.1
  - For Windows: IBM APPC Networking Services for Windows Version 1.0
  - For AIX: IBM SNA Services/6000 Version 2.2
- For CICS OS/2™ External Call Interface (ECI), one of the following:
  - For OS/2: IBM CICS Client for OS/2
  - For Windows: IBM CICS Client for Windows
  - For AIX: IBM CICS for Open Systems Version 2.1
- For NetBIOS, one of the following:
  - For OS/2, one of the following:
    - IBM Network Transport Services/2 Version 1.2
    - IBM Local Area Network Server Version 3.0
  - For Windows: Local Area Network Support Program Version 1.3
  - For AIX: NetBIOS for AIX Version 2.1
- For TCP/IP or Remote Procedure Call (RPC), one of the following:
  - For OS/2: IBM TCP/IP for OS/2 Version 2.0 with PTF U64092
  - For Windows, one of the following:
    - IBM TCP for DOS Version 2.1
    - Other equivalent products supporting the Microsoft Windows Socket API Version 1.1
  - For AIX: No additional requirements over AIX Version 4.1.3
- For Emulator High-Level Language Application Programming Interface (EHLLAPI), one of the following:
  - For OS/2: IBM Communications Manager/2 Version 1.1
  - For Windows: IBM PC3270 Version 3.1
  - For AIX, one of the following:
    - 3270 Host Connection Program Version 2.1
    - IBM X3270 Version 2.2
- For Message Queue Series (MQSeries), one of the following:
  - For OS/2 or Windows: IBM MQSeries Clients Version 2.1
  - For AIX: IBM MQSeries Server Version 2.1

VisualAge for Smalltalk, Database for ORACLE for OS/2, for AIX, and for Windows, V3.0

These requirements are in addition to those for any of the VisualAge for Smalltalk, Standard or VisualAge for Smalltalk, Professional products:

- One of the VisualAge for Smalltalk, Standard, V3.0 products (OS/2, AIX, or Windows) or one of the VisualAge for Smalltalk, Professional, V3.0 products (OS/2, AIX, or Windows)

  Native Oracle access from an OS/2, Windows, or AIX client requires the following:

  - Oracle Version 7.0 (for AIX: Oracle Version 7.1.6.2.0)
  - Oracle client support for Version 7 is required for each client with appropriate SQL*Net communications support for access to the Oracle database.

VisualAge for Smalltalk, Distributed for OS/2, for AIX, and for Windows, V3.0

These requirements are in addition to those for any of the VisualAge for Smalltalk, Standard or VisualAge for Smalltalk, Professional products:

- One of the VisualAge for Smalltalk, Standard, V3.0 products (OS/2, AIX, or Windows) or one of the VisualAge for Smalltalk, Professional, V3.0 products (OS/2, AIX, or Windows)
- For third-party authentication on OS/2 through the GSS API: Network Security Program (NetSP) 1.2 for OS/2
- VisualAge for Smalltalk, Communications/ Transactions for OS/2, for AIX, and for Windows, V3.0

VisualAge for Smalltalk, Reports for OS/2 and for Windows, V3.0

- One of the VisualAge for Smalltalk, Standard, V3.0 products (OS/2 or Windows) or one of the VisualAge for Smalltalk, Professional, V3.0 products (OS/2 or Windows)

VisualAge for Smalltalk, IMS Connection for OS/2, for AIX, and for Windows, V3.0

- One of the VisualAge for Smalltalk, Professional, V3.0 products (OS/2 or Windows)
- VisualAge for Smalltalk, Communications/ Transactions for OS/2, for AIX, and for Windows, V3.0

Application Run-Time Environment

Applications developed with VisualAge for Smalltalk, Standard or VisualAge for Smalltalk, Professional run under OS/2 Warp Version 3.0, Microsoft Windows Version 3.11, or AIX 4.1.3. Other program requirements vary based on the use of database, communications, transactions, SOM/DSOM, and multimedia services.

Compatibility: Migration from Version 2.0 of VisualAge for Smalltalk to Version 3.0 is a simple process that requires, in most cases, no additional coding.

Planning Information

Customer Responsibilities: Customers creating Windows-based applications for redistribution require a license from Microsoft in order to redistribute Win32s DLLs (dynamic link libraries).

Packaging: All programs are distributed on CD-ROM only.

The following publications are provided only on the base program product media:

- VisualAge for Smalltalk, Features Class Guide and Reference, V3.0

- VisualAge for Smalltalk, Distributed Guide and Reference, V3.0
- VisualAge for Smalltalk, Multimedia Guide and Reference, V3.0
- VisualAge for Smalltalk, Open Database Connectivity Support Drivers Reference, V3.0
- VisualAge for Smalltalk, Communications/ Transactions Guide and Reference, V3.0
- VisualAge for Smalltalk, IMS/Connection Guide and Reference, V3.0
- VisualAge for Smalltalk, AS/400 Connection Guide and Reference, V3.0
- VisualAge for Smalltalk, Reports Guide and Reference, V3.0
- IBM Smalltalk Catalog of Classes, V3.0

Each of the following base programs is distributed in a separate package:

- VisualAge for Smalltalk, Standard for OS/2, V3.0
- VisualAge for Smalltalk, Professional for OS/2, V3.0
- VisualAge for Smalltalk, Standard for Windows, V3.0
- VisualAge for Smalltalk, Professional for Windows, V3.0
- VisualAge for Smalltalk, Professional for AIX, V3.0
- VisualAge for Smalltalk, Professional Server for OS/2, for AIX, and for Windows, V3.0

Each package contains:

- IBM International Program Licensing Agreement and License Information on CD-ROM
- Registration and Proof of Purchase card
- Three CD-ROMs
- VisualAge for Smalltalk, Getting Started, V3.0
- VisualAge for Smalltalk, User′s Guide, V3.0
- VisualAge for Smalltalk, User′s Reference, V3.0
- VisualAge for Smalltalk, Programmer′s Guide to Building Parts for Fun and Profit, V3.0
- Introduction to Object-Oriented Programming with IBM Smalltalk, V3.0
- VisualAge for Smalltalk Resource Catalog
- IBM Smalltalk User′s Guide, V3.0
- IBM Smalltalk User′s Reference, V3.0
- IBM Smalltalk Programmer′s Reference, V3.0

Additional Function Separately Orderable as Program Products: The documentation and code for these products is on the base program product media. The product key provided when additional function is ordered is applied against the base product CD-ROM to unlock the additional function.

- VisualAge for Smalltalk, Communications/ Transactions for OS/2, for AIX, and for Windows, V3.0
- VisualAge for Smalltalk, AS/400 Connection for OS/2 and for Windows, V3.0
- VisualAge for Smalltalk, Database for ORACLE for OS/2, for AIX, and for Windows, V3.0
- VisualAge for Smalltalk, Reports for OS/2 and for Windows, V3.0
- VisualAge for Smalltalk, Distributed for OS/2, for AIX, and for Windows, V3.0
- VisualAge for Smalltalk, IMS Connection for OS/2, for AIX, and for Windows, V3.0

Each package contains:

- Registration and Proof of Purchase card
- Product key

The separately orderable VisualAge for Smalltalk Documentation Set, V3.0 includes:

- VisualAge for Smalltalk, Getting Started, V3.0
- VisualAge for Smalltalk, User′s Guide, V3.0
- VisualAge for Smalltalk, User′s Reference, V3.0
- VisualAge for Smalltalk, Programmer′s Guide to Building Parts for Fun and Profit, V3.0
- Introduction to Object-Oriented Programming with IBM Smalltalk, V3.0
- VisualAge for Smalltalk Resource Catalog
- IBM Smalltalk User′s Guide, V3.0
- IBM Smalltalk User′s Reference, V3.0
- IBM Smalltalk Programmer′s Reference, V3.0

Security, Auditability, and Control

VisualAge for Smalltalk, Standard and VisualAge for Smalltalk, Professional use the security and auditability features of the development platform. VisualAge for Smalltalk, Standard logs all changes in a source change log. VisualAge for Smalltalk, Professional, in addition to logging source changes, captures change management and versioning information in a source code repository that can reside on the client machine or, if used in combination with VisualAge for Smalltalk, Professional Server, shared within a network.

User management is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Ordering Information

Orders for new licenses will be accepted now.

Shipments will begin on November 30, 1995.

To order, specify the order type number, feature number, part number, program name, media, and quantity.

Program Package: Program media (CD-ROM) with documentation.

Program Name	Feature Number	Part Number
Order Type 5801-AAR		
VisualAge for Smalltalk, Standard for OS/2, V3.0	0763	62H8160
VisualAge for Smalltalk, Standard for Windows, V3.0	0764	62H8170
VisualAge for Smalltalk, Professional for OS/2, V3.0	0765	62H8180
VisualAge for Smalltalk, Professional for Windows, V3.0	0766	62H8190

Program Name	Feature Number	Part Number
VisualAge for Smalltalk, Professional for AIX, V3.0	0767	62H8200
VisualAge for Smalltalk, Professional Server, V3.0	0768	62H8210
VisualAge for Smalltalk, Communications/ Transactions, V3.0	0769	62H8220
VisualAge for Smalltalk, AS/400 Connection, V3.0	0860	62H8230
VisualAge for Smalltalk, Database for ORACLE, V3.0	0861	62H8240
VisualAge for Smalltalk, Reports, V3.0	0862	62H8250
VisualAge for Smalltalk, Distributed, V3.0	0863	62H8260
VisualAge for Smalltalk, IMS Connection, V3.0	0864	62H8270

Additional License Copies: Authorizes the customer who has a program package to make a single copy of the program media and printed documentation.

The authorization is given by providing the customer a Proof of Entitlement for Additional License — with Certificate, which has its own part number and feature number.

Program Name	Feature Number	Part Number
Order Type 5802-AAR		
VisualAge for Smalltalk, Professional for OS/2, V3.0 Proof of Additional License Certificate	0678	62H8186
VisualAge for Smalltalk, Professional for Windows, V3.0 Proof of Additional License Certificate	0679	62H8196
VisualAge for Smalltalk, Professional for AIX, V3.0 Proof of Additional License Certificate	0680	62H8206

Additional License Copies — Software Advantage Exhibit: Authorization to make additional license copies begins on the start date specified in the Software Advantage Agreement. Proof of Entitlement will be provided monthly.

Program Name	Part Number
Order Type 5802-AAR	
VisualAge for Smalltalk, Standard for OS/2, V3.0 Proof of Additional License without Certificate	62H8163
VisualAge for Smalltalk, Standard for Windows, V3.0 Proof of Additional License without Certificate	62H8173
VisualAge for Smalltalk, Professional for OS/2, V3.0 Proof of Additional License without Certificate	62H8183
VisualAge for Smalltalk, Professional for Windows, V3.0 Proof of Additional License without Certificate	62H8193
VisualAge for Smalltalk, Professional for AIX, V3.0 Proof of Additional License without Certificate	62H8203
VisualAge for Smalltalk, Professional Server, V3.0 Proof of Additional License without Certificate	62H8213
VisualAge for Smalltalk, Communications/Transactions, V3.0 Proof of Additional License without Certificate	62H8223
VisualAge for Smalltalk, AS/400 Connection, V3.0 Proof of Additional License without Certificate	62H8233
VisualAge for Smalltalk, ORACLE, V3.0 Proof of Additional License without Certificate	62H8243
VisualAge for Smalltalk, Reports, V3.0 Proof of Additional License without Certificate	62H8253
VisualAge for Smalltalk, Distributed, V3.0 Proof of Additional License without Certificate	62H8263
VisualAge for Smalltalk, IMS Connection, V3.0 Proof of Additional License without Certificate	62H8273

Documentation: Separate documentation with no media.

Program Name	Feature Number	Part Number
Order Type 5806-AAR		
VisualAge for Smalltalk Documentation Set, Version 3.0	0018	62H8280

Program Package Upgrade: Program media (CD-ROM) with documentation.

Program Name	Feature Number	Part Number
Order Type 5803-AAR		
VisualAge for Smalltalk, Standard for OS/2, V3.0 Version-to-Version Upgrade	0202	62H8161
VisualAge for Smalltalk, Standard for Windows, V3.0 Version-to-Version Upgrade	0203	62H8171

Program Name		Part Number
VisualAge for Smalltalk, Professional for OS/2, V3.0 Version-to-Version Upgrade	0204	62H8181
VisualAge for Smalltalk, Professional for Windows, V3.0 Version-to-Version Upgrade	0205	62H8191
VisualAge for Smalltalk, Professional for AIX, V3.0 Version-to-Version Upgrade	0206	62H8201
VisualAge for Smalltalk, Professional Server, V3.0 Version-to-Version Upgrade	0207	62H8211
VisualAge for Smalltalk, Communications/Transactions, V3.0 Version-to-Version Upgrade	0208	62H8221
VisualAge for Smalltalk, AS/400, V3.0 Version-to-Version Upgrade	0209	62H8231
VisualAge for Smalltalk, Professional for OS/2, V3.0 Standard to Professional Upgrade	0214	62H8182
VisualAge for Smalltalk, Professional for Windows, V3.0 Standard to Professional Upgrade	0215	62H8192
VisualAge for Smalltalk, Professional for AIX, V3.0 Standard to Professional Upgrade	0216	62H8202

Additional License Copy Upgrade: Authorizes the customer who has a program package upgrade to make a single copy of the program media and printed documentation.

The authorization is given by providing the customer a Proof of Entitlement for Additional License — with Certificate, which has its own part number and feature number.

Program Name	Feature Number	Part Number
Order Type 5804-AAR		
VisualAge for Smalltalk, Professional for OS/2, V3.0 Proof of Additional License with Certificate Upgrade	0269	62H8187
VisualAge for Smalltalk, Professional for Windows, V3.0 Proof of Additional License with Certificate Upgrade	0270	62H8197
VisualAge for Smalltalk, Professional for AIX, V3.0 Proof of Additional License with Certificate Upgrade	0271	62H8207

Additional License Copy Upgrade — Software Advantage Exhibit: Authorization to make additional license copies begins on the start date specified in the Software Advantage Agreement. Proof of Entitlement will be provided monthly.

Program Name	Part Number
Order Type 5804-AAR	
VisualAge for Smalltalk, Standard for OS/2, V3.0 Proof of Additional License without Certificate Upgrade	62H8168
VisualAge for Smalltalk, Standard for Windows, V3.0 Proof of Additional License without Certificate Upgrade	62H8178
VisualAge for Smalltalk, Professional for OS/2, V3.0 Proof of Additional License without Certificate Upgrade	62H8188
VisualAge for Smalltalk, Professional for Windows, V3.0 Proof of Additional License without Certificate Upgrade	62H8198
VisualAge for Smalltalk, Professional for AIX, V3.0 Proof of Additional License without Certificate Upgrade	62H8208
VisualAge for Smalltalk, Professional Server,V3.0 Proof of Additional License without Certificate Upgrade	62H8218
VisualAge for Smalltalk, Communications/Transactions, V3.0 Proof of Additional License without Certificate Upgrade	62H8228
VisualAge for Smalltalk, AS/400 Connection, V3.0 Proof of Additional License without Certificate Upgrade	62H8238

Upgrade Protection (New Product): The following Upgrade Protection products are only available under the Software Advantage for Workstations offering:

Program Name	Part Number
Order Type 5809-AAR	
Upgrade Protection for VisualAge OS/2 Standard V3.0 — One-Time Charge (OTC)	62H8165

Program Name	Part Number
Upgrade Protection for VisualAge OS/2 Standard V3.0 — Quarterly Charge (QC)	62H8164
Upgrade Protection for VisualAge Windows Standard V3.0 — OTC	62H8175
Upgrade Protection for VisualAge Windows Standard V3.0 — QC	62H8174
Upgrade Protection for VisualAge OS/2 Professional V3.0 — OTC	62H8185
Upgrade Protection for VisualAge OS/2 Professional V3.0 — QC	62H8184
Upgrade Protection for VisualAge Windows Professional V3.0 — OTC	62H8195
Upgrade Protection for VisualAge Windows Professional V3.0 — QC	62H8194
Upgrade Protection for VisualAge AIX Professional V3.0 — OTC	62H8205
Upgrade Protection for VisualAge AIX, Professional V3.0 — QC	62H8204
Upgrade Protection for VisualAge Professional Server V3.0 — OTC	62H8215
Upgrade Protection for VisualAge Professional Server V3.0 — QC	62H8214
Upgrade Protection for VisualAge Communications/ Transactions V3.0 — OTC	62H8225
Upgrade Protection for VisualAge Communications/ Transactions V3.0 — QC	62H8224
Upgrade Protection for VisualAge AS/400 Connection V3.0 — OTC	62H8235
Upgrade Protection for VisualAge AS/400 Connection V3.0 — QC	62H8234
Upgrade Protection for VisualAge ORACLE V3.0 — OTC	62H8245
Upgrade Protection for VisualAge ORACLE V3.0 — QC	62H8244
Upgrade Protection for VisualAge Reports V3.0 — OTC	62H8255
Upgrade Protection for VisualAge Reports V3.0 — QC	62H8254
Upgrade Protection for VisualAge Distributed V3.0 — OTC	62H8265
Upgrade Protection for VisualAge Distributed V3.0 — QC	62H8264
Upgrade Protection for VisualAge IMS Connection V3.0 — OTC	62H8275
Upgrade Protection for VisualAge IMS Connection V3.0 — QC	62H8274

Upgrade Protection (Entitled Customers): Customers who have previously acquired any of the Software Advantage Upgrade Protection part numbers listed below automatically receive the corresponding Entitled Upgrade part number shortly after planned availability.

Upgrade Protection Part Number	Entitled Upgrade Part Number
33H7040 or 33H7227	62H8161
33H7041 or 33H7228	62H8171
33H7029 or 33H7216	62H8181
33H7030 or 33H7217	62H8191
33H7029, 33H7216, 33H7030, or 33H7217	62H8201
33H7029, 33H7216, 33H7030, or 33H7212	62H8211
33H7035, 33H7222, 33H7034, or 33H7221	62H8221
33H7043, 33H7230, 33H7042, or 33H7229	62H8231

Program Upgrade

The version-to-version program package upgrade option allows currently licensed users of a Version 1.0 or 2.0 VisualAge Standard product to obtain a Version 3.0 Standard product, or a currently licensed user of a Version 1.0 or 2.0 VisualAge Team product to obtain a Version 3.0 Professional product and a Version 3.0 Professional Server product, for a program upgrade charge.

In addition to the version-to-version upgrade, the VisualAge Standard-to-Professional program package upgrade option allows currently licensed users of any Version 1.0 or 2.0 VisualAge Standard product to obtain a Version 3.0 Professional product for a program upgrade charge. The Version 3.0 Professional product may be used in a stand-alone or in a team programming (networked) environment. If you want to move from a Version 1.0 or 2.0 stand-alone environment to a Version 3.0 team programming environment, at least one VisualAge for Smalltalk, Professional Server product must also be licensed.

The program upgrade to VisualAge for Smalltalk, Version 3.0 will be available November 30, 1995. Orders will be accepted after October 24, 1995. These upgrades will be available through IBM Authorized Personal Computer Dealers and Industry Remarketers — Personal Computers certified to market IBM Authorized Advanced Products. The remarketer will require a Proof of License for each upgrade ordered. The original Proof of License is the colored front cover page (inside the hard binder) or the separate Proof of License page in the program package, as identified by IBM to the remarketer.

Customers can also order upgrades through the local IBM office using the IBM Personal Computer/System Program

Upgrade and Certification Order Form included with this announcement. The total quantity of upgrades acquired for a specific program cannot exceed the total quantity of program packages and/or additional licenses previously acquired for that program. Proof of License for upgrade eligibility for additional license upgrades is a copy of this invoice or previously acquired Proof of Entitlement for Additional License — with Certificate. Additional license upgrades can be entered through the local IBM office using the IBM Upgrade and Certification Order Form or ordered through an authorized remarketer.

Terms and Conditions

Licensing: The programs described in this announcement are licensed under the terms and conditions of the IBM International Program License Agreement. A copy of the agreement is included in the program package, on the CD-ROM.

Additional License: Proof of Entitlement must be acquired.

Software Advantage for Workstations-Upgrade Protection: The announced programs are eligible as entitled upgrades. Entitled customers will be provided with a no-charge program package and a Proof of Entitlement authorizing right to copy equal to the number of programs protected. Shipment will follow planned availability.

Limited Warranty: Programs acquired by the customer during the program services period will have a one-year limited warranty, but not beyond May 15, 1997.

Program Services: Program service will be available until May 15, 1997. The statement of service included with the program describes this service. Customers requiring service should call 800-237-5511.

Support Line: For PC-based products, the Personal Systems Support Line applies. For RISC System/6000 products, the AIX Systems Support Line applies.

Getting Started Period: For PC-based products, a 60-day, “getting started” period is provided by the Personal Systems Support Line for the first license within a site, location, or centralized help desk. The 60-day period begins with the first call to the support line. For RISC System/6000 products, a 60-day getting started period is provided by the AIX Support Line for the first installation in an enterprise. The 60-day period begins with the first call to the support line.

Volume Orders: For information regarding volume orders, contact your IBM representative.

The additional licenses and additional license upgrades included in this announcement are eligible for volume discounting under the terms of the Software Advantage for Workstations agreement and exhibit.

Authorization for Copy and Use on Home/Portable Computer: Yes

Program Transfer: Fully transferable

Educational Allowance: A reduced charge is available to qualified education customers. The educational allowance may not be added to any other discount or allowance.

Charges

Program Name	Program Number	OTC	Upgrade Protection Charge
VisualAge for Smalltalk, Standard for OS/2, V3.0			
Program Package	62H8160	$1,499	
Additional License without Certificate	62H8163	1,349	
Program Package Upgrade — Version-to-Version	62H8161	369	
Additional License without Certificate Upgrade	62H8168	329	
Upgrade Protection — OTC	62H8165		$ 405.00
Upgrade Protection — QC	62H8164		50.63
VisualAge for Smalltalk, Standard for Windows, V3.0			
Program Package	62H8170	1,499	
Additional License without Certificate	62H8173	1,349	
Program Package Upgrade — Version-to-Version	62H8171	369	
Additional License without Certificate Upgrade	62H8178	329	
Upgrade Protection — OTC	62H8175		405.00
Upgrade Protection — QC	62H8174		50.63
VisualAge for Smalltalk, Professional for OS/2, V3.0			
Program Package	62H8180	3,799	
Additional License without Certificate	62H8183	3,399	
Additional License with Certificate	62H8186	3,399	
Program Package Upgrade — Version-to-Version	62H8181	949	
Program Package Upgrade — Standard to Professional	62H8182	1,899	
Additional License with Certificate Upgrade	62H8187	849	
Additional License without Certificate Upgrade	62H8188	849	
Upgrade Protection — OTC	62H8185		1,020.00
Upgrade Protection — QC	62H8184		127.50
VisualAge for Smalltalk, Professional for Windows, V3.0			
Program Package	62H8190	3,799	
Additional License without Certificate	62H8193	3,399	
Additional License with Certificate	62H8196	3,399	
Program Package Upgrade — Version-to-Version	62H8191	949	

Program Name	Program Number	OTC	Upgrade Protection Charge
Program Package Upgrade — Standard to Professional	62H8192	$1,899	
Additional License with Certificate Upgrade	62H8197	849	
Additional License without Certificate Upgrade	62H8198	849	
Upgrade Protection — OTC	62H8195		$1,020.00
Upgrade Protection — QC	62H8194		127.50

VisualAge for Smalltalk, Professional for AIX, V3.0

Program Name	Program Number	OTC	Upgrade Protection Charge
Program Package	62H8200	3,799	
Additional License without Certificate	62H8203	3,399	
Additional License with Certificate	62H8206	3,399	
Program Package Upgrade — Version-to-Version	62H8201	949	
Program Package Upgrade — Standard to Professional	62H8202	1,899	
Additional License with Certificate Upgrade	62H8207	849	
Additional License without Certificate Upgrade	62H8208	849	
Upgrade Protection — OTC	62H8205		1,020.00
Upgrade Protection — QC	62H8204		127.50

VisualAge for Smalltalk, Professional Server for OS/2, for AIX, and for Windows, V3.0

Program Name	Program Number	OTC	Upgrade Protection Charge
Program Package	62H8210	4,999	
Additional License without Certificate	62H8213	4,499	
Program Package Upgrade — Version-to-Version	62H8211	1,249	
Additional License without Certificate Upgrade	62H8218	1,099	
Upgrade Protection — OTC	62H8215		1,350.00
Upgrade Protection — QC	62H8214		168.75

VisualAge for Smalltalk, Communications/Transactions for OS/2, for AIX, and for Windows, V3.0

Program Name	Program Number	OTC	Upgrade Protection Charge
Program Package	62H8220	1,349	
Additional License without Certificate	62H8223	1,199	
Program Package Upgrade — Version-to-Version	62H8221	339	
Additional License without Certificate Upgrade	62H8228	309	
Upgrade Protection — OTC	62H8225		360.00
Upgrade Protection — QC	62H8224		45.00

VisualAge for Smalltalk, AS/400 Connection for OS/2 and for Windows, V3.0

Program Name	Program Number	OTC	Upgrade Protection Charge
Program Package	62H8230	$1,899	
Additional License without Certificate	62H8233	1,699	
Program Package Upgrade — Version-to-Version	62H8231	469	
Additional License without Certificate Upgrade	62H8238	419	
Upgrade Protection — OTC	62H8235		$ 510.00
Upgrade Protection — QC	62H8234		63.75

VisualAge for Smalltalk, Database for ORACLE for OS/2, for AIX, and for Windows, V3.0

Program Name	Program Number	OTC	Upgrade Protection Charge
Program Package	62H8240	499	
Additional License without Certificate	62H8243	449	
Upgrade Protection — OTC	62H8245		135.00
Upgrade Protection — QC	62H8244		16.88

VisualAge for Smalltalk, Reports for OS/2 and for Windows, V3.0

Program Name	Program Number	OTC	Upgrade Protection Charge
Program Package	62H8250	749	
Additional License without Certificate	62H8253	669	
Upgrade Protection — OTC	62H8255		201.00
Upgrade Protection — QC	62H8254		25.13

VisualAge for Smalltalk, Distributed for OS/2, for AIX, and for Windows, V3.0

Program Name	Program Number	OTC	Upgrade Protection Charge
Program Package	62H8260	2,999	
without Certificate	62H8263	2,699	
Upgrade Protection — OTC	62H8265		810.00
Upgrade Protection — QC	62H8264		101.25

VisualAge for Smalltalk, IMS Connection for OS/2, for AIX, and for Windows, V3.0

Program Name	Program Number	OTC	Upgrade Protection Charge
Program Package	62H8270	4,999	
Additional License without Certificate	62H8273	4,499	
Upgrade Protection — OTC	62H8275		1,350.00
Upgrade Protection — QC	62H8274		168.75

VisualAge for Smalltalk Documentation Set, V3.0

Program Name	Program Number	OTC	Upgrade Protection Charge
Documentation Set	62H8280	99	

Optional Support Line Charge: $2,495

Additional Licenses Charge: Customers who pay an OTC for additional licenses may copy machine-readable program materials and printed documentation previously acquired from IBM in a program package. One copy may be made for each additional license ordered.

Upgrade Protection: Customers who acquire Upgrade Protection through an OTC or quarterly payment charges (when meeting minimum revenue criteria) will be entitled at no charge to future versions and releases when announced within their Software Advantage agreement period. Following availability of the new program, IBM will provide a program package (including media and documentation) and a Proof of Entitlement authorizing right to copy, distribute, and install equal to the number of programs protected.

Program Upgrade Charge: A program upgrade charge will apply for the two upgrade options available for VisualAge for Smalltalk. Customers who want to upgrade to the VisualAge for Smalltalk, Version 3.0 team development environment must license both the VisualAge for Smalltalk, Professional and the VisualAge for Smalltalk Professional Server products. A license to any VisualAge Team, Version 1.0 or 2.0 product entitles the customer to an upgrade to one of the V3.0 Professional products and one Professional Server.

- Version-to-Version Upgrade
  - Customers who have VisualAge Version 1.0 or 2.0 can upgrade to the equivalent Version 3.0 product. For example, a customer who has the Version 1.0 or 2.0 Standard product can upgrade to Version 3.0 Standard. A customer who has the Version 1.0 or 2.0 Team product may upgrade to Version 3.0 Professional and Professional Server.
  - Customers who have the Communications/ Transactions Feature, Version 1.0 or 2.0, or the AS/400 Feature, Version 2.0 can upgrade to the Version 3.0 Communications/Transactions product or the AS/400 Connection product, respectively.
  - Cross-platform upgrades are acceptable.
- Standard-to-Professional Upgrade
  - Customers who have the Version 1.0 or Version 2.0 VisualAge Standard product and want to maintain a stand-alone environment, can upgrade to VisualAge for Smalltalk, Professional, Version 3.0. For example, a customer who has VisualAge Standard for OS/2, Version 1.0 or 2.0 can upgrade to VisualAge for Smalltalk, Professional for OS/2, Version 3.0 or VisualAge for Smalltalk, Professional for Windows, Version 3.0. If the customer wants to move from a Version 1.0 or 2.0 stand-alone environment to a Version 3.0 team programming (networked) environment, then at least one license to the VisualAge for Smalltalk, Professional Server product is required in addition to the appropriate number of VisualAge for Smalltalk Professional licenses.
  - Cross-platform upgrades are acceptable.

The following are examples of some of the available upgrades:

Version-to-Version Upgrade

Stand-Alone Development Environment

From	To
VisualAge Standard for OS/2, V1.0	VisualAge for Smalltalk, Standard for OS/2, V3.0
-or-	-or-
VisualAge Standard for OS/2, V2.0	VisualAge for Smalltalk, Standard for Windows, V3.0
-or-	
VisualAge Standard for Windows, V2.0	

Team Development Environment

From	To
VisualAge Team for OS/2, V1.0	VisualAge for Smalltalk, Professional for OS/2, V3.0
-or-	-and-
VisualAge Team for OS/2, V2.0	VisualAge for Smalltalk, Professional Server for OS/2, AIX, or Windows, V3.0
-or-	-or-
VisualAge Team for Windows, V2.0	VisualAge for Smalltalk, Professional for Windows, V3.0
	-and-
	VisualAge for Smalltalk, Professional Server for OS/2, AIX, or Windows, V3.0
	-or-
	VisualAge for Smalltalk, Professional for AIX, V3.0
	-and-
	VisualAge for Smalltalk Professional Server for OS/2, AIX, or Windows, V3.0

Separately Orderable Function

From	To
Communications/ Transactions Feature, for OS/2, V1.0 or V2.0	VisualAge for Smalltalk, Communications/ Transactions for OS/2, AIX, or Windows, V3.0
-or-	
Communications/ Transactions Feature, for Windows, V1.0 or V2.0	

From	To
AS/400 Feature, for OS/2, V2.0	VisualAge for Smalltalk, AS/400 Connection for OS/2, AIX, or Windows, V3.0
-or-	
AS/400 Feature, for Windows, V2.0	

Standard-to-Professional Upgrade

From	To
VisualAge Standard for OS/2, V1.0, V2.0, or V3.0	VisualAge for Smalltalk, Professional for OS/2, V3.0
-or-	-or-
VisualAge Standard for Windows, V2.0 or V3.0	VisualAge for Smalltalk Professional for Windows, V3.0

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