Overview

Component Application Architecture (CAA) and its Rapid Application Development Environment (RADE) enables users to integrate their know-how into specialized CATIA and ENOVIA applications while federating their existing legacy systems into ENOVIA 3D com. CAA is rapidly becoming the preferred development environment for companies interested in growing their 3D Product Lifecycle Management (PLM) solutions portfolio.

CAA RADE V5 provides a workbench to develop Windows NT®, Windows® 2000, Windows XP, and UNIX® 3D PLM applications. With V5.8, C++ and JAVA developers can make more effective use of industry-standard tools to interactively create new user interfaces, create and extend CATIA geometry and features, and modify and extend the ENOVIA data model. Methodology guides, online documentation, and best practices imbedded in the tools help speed the development of CAA applications.

CAA RADE V5 extends the life and value of existing legacy systems so they can be fully linked to ENOVIA Portal. Its environment supports management of software assets and concurrent development for a variety of client platforms over a WAN. Teamwork management tools automate the CAA application build process, improving overall application quality while reducing build and test time.

V5.8 expands the development environment by providing:

- Two new configurations for C++ and Java™-based development
  - CAA — Teamwork
    Release Management
    Configuration (5691-TRC)
    helps automate and integrate the software release processes across UNIX,


- CAA — Multi-Workspace
  Application Building
  Configuration (5691-ABC)
  accepts additional CAA add-on products that allow IT and Quality Assurance teams to manage their software releases.

- Three new add-on products
- Windows 2000 build-time support
- Other functional enhancements

Key Prerequisites

Depending on the tools used:

- Microsoft® Windows NT or Windows 2000 Visual C++
- Mortice Kern Software MKS Toolkit V6.1
- Workstation capable of using Windows NT or Windows 2000
- Hard drive with 4 GB minimum free space
- Minimum of 512 MB system memory

Consideration should also be given to intended run-time environment, applications being developed, their target platforms, and operating systems.

Planned Availability Date

February 15, 2002

At a Glance

CAA RADE V5.8 delivers:

- A full-feature toolkit to support the application development lifecycle for both ENOVIA V5 and CATIA V5
- New CAA — Teamwork Release Manager to automate and integrate the release processes across UNIX, Windows NT, and now Windows 2000-based applications
- New CAA — C++ API Documentation Generator to allow automatic generation of C++ reference documentation for CAA-based applications
- New modeling capabilities to customize or/and create CATIA features
- A new state chart wizard for interactive generation of CATIA dialogs
- WebSphere™ support with CAA — Web Application Generator for Legacy Database
- Run-time support for Windows XP
- Multi-site support with CAA Source Code Manager

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Concurrent software development environment

Single-source development tools: build once, run on service pack levels.

Integrated suite of tools to speed the software development life cycle

Familiar Windows user environment and automation programming interfaces available on both Windows NT and UNIX platforms

Object-Oriented C++ and Java programming

An industry-standard environment (Web multi-OS, multi-RDBMS, middleware)

CAA RADE V5.8 provides the scalable application architecture for these next-generation products and the tools needed to take full advantage of them.

CAA V5 APIs

Component-based APIs, built upon the V5 open-standard architecture, are delivered with their related interactive products. These APIs are for use with the CAA RADE V5 tools. Refer to the respective CATIA or ENOVIA announcement for a detailed functional description.

CAA RADE V5 Tools

Developed from many of the same tools used to create CATIA and ENOVIA V5, CAA RADE V5 provides the user a fast new development environment with features such as:

- Interactive and visual development tools based on industry standards
- Integrated suite of tools to speed the software development life cycle
- Single-source development tools: build once, run on multiple operating systems
- Concurrent software development environment

Note: For proper operation, both the CAA RADE V5 tools and APIs must be at the same version, release and service pack levels.

New in V5.8

Two entirely new products are being introduced. Both are included in the CAA — Multi-Workspace Application Building Configuration (5691-ABC) and Teamwork Release Management Configuration (5691-TRC).

In addition, two new standard configurations are being introduced:

- CAA — Multi-Workspace Application Building Configuration (5691-ABC)
- CAA — Teamwork Release Management Configuration (5691-TRC)

Details of these new offerings are provided below. For a full description of the other CAA RADE V5 products and configurations available, refer to the PLM Salesguide at:


New CAA RADE V5.8 Products

CAA — Data Model Customizer (DMC)

CAA — Data Model Customizer provides design modeling tools for customizing data object in both CATIA V5 and ENOVIA V5. Using the same interface, developers can create and extend objects from different ENOVIA and CATIA modelers. Operating in a standard and productive graphical environment thanks to best-in-class Unified Modeling Language (UML) industry-standard design modeling tool.

This product offers a fast and easy way to embed company knowledge into CATIA and ENOVIA V5. Access to its functions and commands is provided through the CAA — C++ Interactive Dashboard product. With Release 8, two new modelers are provided for Engineering Change Order (ECO) and Engineering Change Request (ECR). This product delivers a new state chart wizard that allows interactive generation of CATIA dialogs.

This product is included in CDC, and available as an add-on to CDV.

CAA — C++ Unit Test Manager (CUT)

This product enables users to check development compliance with design scenarios and to ensure regression-free modifications, scenarios pertinence, including debug/non debug replay, replay environment concatenation, automatic result comparisons, timeout performance replay. CAA — C++ Unit Test Manager, under Windows NT with Rational Purify, offers memory management test replay to help locate memory leaks, ensuring leak-free code and minimizing run time errors.

This environment, it also allows the user to track the percentage of source code tested, ensuring full coverage during automatic test replays.

This product is included in CDC and available as an add-on to CDV, TRC, and ABC.

CAA — C++ Source Checker (CSC)

CAA — C++ Source Checker helps improve the overall quality of the CAA V5 application. Used early, at the source stage in the application development cycle, it facilitates source validation against C++ coding rules to ensure improved object code stability and fewer defects. It operates on both Windows NT and UNIX platforms interchangeably.

CSC is included in CDC and available as an add-on to CDV, TRC, ABC.

CAA — Teamwork Release Manager (TRM)

CAA — Teamwork Release Manager facilitates the control of complex software releases. Its client workbench provides an environment where IT and Quality Assurance (QA) tasks can be scheduled and automated.
based on project, and available resources. These tasks span the whole range of development activities, including compile, link edit, code replay and quality control. TRM includes tools that allow graphic visualization of the status of each task during development. Capable of prioritizing and distributing task assignments across the network, it reduces the overall time required to build the release.

TRM is a new CAA RADE product. It is a component of TRC and cannot be ordered separately.

CAA — C++ API Documentation Generator (CDG)

CAA — C++ API Documentation Generator seamlessly integrates with the CAA — Teamwork Release Manager product, allowing rapid generation of C++ API reference documentation with a single command. The generator produces a set of HTML files directly integrated in the V5 tree, composed of the framework list, interfaces, and classes list leading to the documentation page.

CDG is a new CAA RADE Product. It is a component of TRC and cannot be ordered separately.

New CAA RADE V5.8 Configurations

CAA — Multi-Workspace Application Building Configuration (5691-ABC)

Intended for IT and QA departments, this configuration delivers the CAA — Multi-Workspace Application Builder (MAB) product. Teamed with the CAA — Teamwork Release Management Configuration (5691-TRC), it provides sufficient IT & QA development tools to build the release independently of the product platform used by the developers. It consists of:

- CAA — Multi-Workspace Application Builder Product

Optional add-on products available for this configuration:

- CAA — C++ Unit Test Manager (CUT)
- CAA — Java Unit Test Manager (JUT)
- CAA — C++ Source Checker (CSC)
- CAA — Source Code Manager (SCM)

CAA — Teamwork Release Management Configuration (5691-TRC)

Providing the interactive workbench necessary to build a CAA application release on a dedicated seat. Different strategies can be used to take full advantage of its features and functions:

- Used with other QA products and tools on a single development seat.
- Used with the CAA — Multi-Workspace Application Builder product, installed at different seats on different platforms. This allows IT and QA personnel to use distributed resources over the network to build their release. When further augmented with additional QA products (such as CAA — C++ Unit Test Manager or CAA — C++ Source Checker) the release process can operate at full scale over the network without disturbing developer resources.

Products included in this configuration:

- CAA — Teamwork Release Manager
- CAA — C++ API Documentation Generator
- CAA — Multi-Workspace Application Builder Product

Optional add-on products available for this configuration:

- CAA — C++ Unit Test Manager (CUT)
- CAA — Java Unit Test Manager (JUT)
- CAA — C++ Source Checker (CSC)
- CAA — Source Code Manager (SCM)

Euro Currency

These programs are not impacted by euro currency.

Product Positioning

CAA RADE V5 provides an integrated set of tools and resources to support the development process from initial specification to final product packaging. For CATIA and ENOVIA V5 solutions, it is positioned as Next Generation middleware for implementing 3D PLM best practices and business processes through process-centric applications.

CAA RADE V5 stands alone as the only system addressing the customization of these applications using a unified architecture. Unlike competitive products, which currently only address part of their respective portfolios for customization, CAA RADE V5 covers the broad line of both CATIA and ENOVIA V5 products.

C++ and Java are not the only programming languages available to customize V5 products. CAA RADE V5 allows the use of VB Automation, which takes advantage of the V5 native architecture for the highest level of openness within CATIA V5, including both productivity and capability tools.

Product Differentiators

Completeness

CAA RADE V5 offers the ability to seamlessly integrate with both CATIA and ENOVIA V5 products.

Unified V5 Architecture

Rather than separately targeting CAD/CAM/CAE market or PDMII market, CAA RADE V5 offers a unique environment to develop highly integrated programs across them all. Component reusability helps improve code quality and reduce development time.

Scalability Across Different Platforms

CAA RADE V5 tools provide a single build environment from which to generate run-time applications for both UNIX and Windows NT. True cross-platform portability is assured.

Full Process Coverage for Application Development

CAA RADE V5 delivers a full featured set of products to cover the broad range of tasks associated with a world-class development process.

Hardware and Software Support Services

SmoothStart™/Installation Services

SmoothStart/Installation Services will not be provided for these products.
Reference Information

For announcement details from the previous release of CAA RADE (V5.7), refer to Software Announcement 201-190, dated June 26, 2001.

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Other CAA RADE V5 Products

In addition to the products being announced in this release, CAA RADE V5 includes the following products and configurations:

CAA — C++ Interactive Dashboard Product (CID) — Available as a component of CDC and CDV configurations, CID provides a Rapid Application Development Environment on Windows NT® for building C++ applications. It provides a single point access to the C++ development tools that support the full development cycle, from design and development through test, deployment, and maintenance. Its tight integration with Microsoft™ Visual Studio C++ makes it easy to learn and master. It provides a single point of access to all products delivered with CAA RADE V5.

While operating only on Windows NT or Windows® 2000, CAA — C++ Interactive Dashboard Product allows automatic code building for UNIX® platforms.

Using the same robust development methodology used by Dassault Systemes, the software development community can now take advantage of years of expertise in design, development, test, and release which goes into every CATIA and ENOVIA product.

Note: Microsoft Visual Studio C++ is a product of Microsoft Corporation, and must be purchased separately.

CAA — Multi-Workspace Application Builder Product (MAB) — Delivered as an integral component of all configurations, MAB provides a consistent and integrated environment in which to compile, link-edit, and build a V5 application, using the same methods and tools that Dassault Systemes uses to create its V5 products. Industry-standard compilers and linkers for languages such as C, C++, and Java™ are used with consistent processes and methods that are independent of the target platform. With its ability to handle multiple workspace compilation, link and run-time creation, it provides a most efficient way to manage dependencies between separate workspaces.

Under Windows NT, CAA — Multi-Workspace Application Builder Product capabilities and command access can be imbedded within the integrated Microsoft Visual C++ Studio, along with the CAA — C++ Unit Test Manager, creating a single integrated environment to write, compile, build, and test applications.

Fully supported on Windows NT and UNIX operating system platforms, CAA — Multi-Workspace Application Builder Product is accessible via command line commands through DOS on Windows NT and SHELL on UNIX.

CAA — Data Model Customizer Product (DMC) — A component of CDC and an optional add-on to CDV, this product allows a developer to graphically extend any attributes and entities from ENOVIA product definition modeler, document management modeler, Engineering Change Order (ECO) and Engineering Change Request (ECR) modelers. Using the industry-standard Unified Modeling Language (UML) version of Rational Rose, an ENOVIA object model can be revised to include needed customer or company data. The product allows:

- Automatic generation of the UML diagram
- Creation and update of the resulting ENOVIA XML metadata dictionary
- Automatic generation of SQL orders to create database schemas
- Operate in both test mode for developers and true creation mode for db administrators

Using the same design pattern, developers can also extend CATIA features from existing one or even create new features. This product delivers a graphical and interactive builder of state charts for CATIA dialog engine command.

Access to CAA — Data Model Customizer Product functions and commands are provided through the CAA — C++ Interactive Dashboard Product.

CAA — C++ Unit Test Manager Product (CUT) — A component of CDC, and an optional add-on to CDV, TRC and ABC, this product facilitates test and quality control tasks critical to the efficient development of quality software. With this product, developers can:

- Check development compliance with design scenarios. Ensure regression-free modifications, scenarios pertinence, including debug/non debug replay, replay environment concatenation, automatic result comparisons, and timeout performance replay.
- Find memory leaks to ensure leak-free code using memory management and run-time test replay. Note: This feature is available on Windows NT workstations running Rational Purify.
- Ensure full test coverage. All routines are tested during automatic test replays.

Note: This feature is available only under Windows NT, using Rational PureCoverage.

This product is perfectly adapted for testing applications in a V5 development project. Under Windows NT, its capabilities and command access is imbedded within the CAA — C++ Interactive Dashboard product.

The Automatic run-time batch test replay environment provides a way to eliminate run-time regressions for both current and future applications by capitalizing and replaying test objects on programming code during the life cycle development. Features include debug/non debug automatic replay, automatic result comparison, adjustable replay time limit, and publication of test results through text files compatible with standard Web or office tools.

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Note: Rational PureCoverage and Rational Purify are products of Rational Software Corporation and must be ordered separately.

CAA — Web Application Generator for Legacy Database Product (LWG) — An all-in-one application workbench, this product is a component of LDC. It supports the integration of product-centric information systems with other information systems through the ENOVIA Portal. The end user can now transparently access information in a customizable and easy to use Web-top environment.

Under Windows NT, this integrated development environment allows consistent schema discovery of existing databases, generation of hierarchical data drivers for tree-browsing in ENOVIA Portal and the generation of Web user interfaces.

Using its powerful Visual Data Editor, an existing production database can be analyzed to derive its schema (list of tables and views, columns, relationships, and constraints). Many popular databases are supported.

Other powerful functions include:
- The Visual Database Editor
- The HTML page builder
- The Hierarchical data builder wizard
- Full text search database enabler wizard
- WebSphere™ support

CAA — Java Interactive Dashboard Product (JID) — A component of the CAA — Java Base Development Configuration and not separately orderable, this product provides an integrated development environment for customizing the ENOVIA 3d com products and creating CAA-based Java applications for Windows NT and UNIX.

Under Windows NT, combined with the CAA — Multi-Workspace Application Builder Product, CAA — Java Unit Test Manager, and CAA — Source Code Manager, it provides the ultimate high-technology environment to support large scale Java application development with a high degree of security and industrial robustness.

It serves as a single, coordinated access point for other tools delivered with CAA RADE V5, and VisualAge® for Java.

Note: VisualAge for Java is a product of IBM Corporation, and must be purchased separately.

CAA — Java Unit Test Manager Product (JUT) — This product is available as an optional add-on to the following:
- CAA — Java Base Development Configuration (5691-JDV)
- CAA — Teamwork Release Management Configuration (5691-TRC)
- CAA — Multi-Workspace Application Building Configuration (5691-ABC)

It facilitates test and quality control tasks critical to the efficient development of quality, regression-free Java-based software. Its features include:
- Automatic Java run-time batch test replay with programmable time limits; Structured file results are generated for publication through Web or office tools such as Microsoft Excel.
- Automatic result comparison: Customize events and failure criteria within test objects.
- Automatic replay environment for Java: Under Windows NT, and using Rational PureCoverage, view actual code tested during the object tests replay, including lines of code and called methods.

In addition, its capabilities and commands can be embedded within the integrated CAA — Java Interactive Dashboard Product.

CAA — C++ Source Checker Product (CSC) — Is a component of the CAA — C++ Extended Development Configuration (5691-CDC) and is available as an add-on to CAA — Teamwork Release Management (5691-TRC) and CAA — Multi-Workspace Application Building (5691-ABC) Configurations. It brings advanced C++ coding rule validation and test capabilities to the source stage of the application development cycle. Catching defects early ensures better stability, overall quality, and faster time to production for CAA V5 applications. Features include:
- Analysis of memory-related bugs in areas including application memory management, call back mechanism usage, exception handling, and C++ programming rules.
- Analyze usage of C++ null pointers.
- Memory leakage debugging for Object Modeler.
- Full-function C++ source parser.
- HTML-based report generator provides hyperlinks to faulty C++ source, allowing deep analysis from framework to faulty C++ source line and word.

It operates on both Windows NT and UNIX platforms.

CAA — Source Code Manager Product (SCM) — Available only as an optional add-on to:
- CAA — C++ Base Development Configuration (5691-CDV)
- CAA — C++ Extended Development Configuration (5691-CDC)
- CAA — Java Base Development Configuration (5691-JDV)
- CAA — Teamwork Release Management (5691-TRC)
- CAA — Multi-Workspace Application Building (5691-ABC)

This product is a software configuration management tool for ENOVIA and CATIA V5 application development. It provides organizational and control tools for the management of teams developing source code on Windows NT and UNIX platforms. Its features include:
- A permanent, secure data repository for source components.
- Collaborative and integrated code distribution.
- Integration with the CAA C++ and Java Dashboard products. Access all code management tasks through a common toolbar menu.
- High-return concurrent development within the same workspace: simultaneous content changes are resolved. Product includes conflict management and workflow management tools ensuring source integrity between code components. These capabilities are widened across different development sites, thus reinforcing the concurrent development environment.
Version and configuration control: To transparently track changes to each source file, directory, and component, keep track of any workspace version and get access to a previous configuration.

Multi-platform workspace management: Allows collaboration across UNIX and Windows NT platforms. Ensure serviceability and quality for application being delivered on both platforms.

Scalability: From small teams to large development organizations; a LAN/WAN-enabled centralized repository with multi-base capabilities.

Other CAA RADE V5 Configurations

CAA — C++ Base Development Configuration (5691-CDC)

This configuration provides in one package the essential tools for implementing CAD/CAM/CAE/PDMII software applications. It integrates capabilities to design, implement, build, and test applications through an easy to use industry-standard user interface. It consists of:

- CAA — C++ Interactive Dashboard Product
- CAA — Multi-Workspace Application Builder Product

CAA — C++ Development Configuration (5691-CDC)

This configuration expands upon the tools provided in CDV for implementing CAD/CAM/CAE/PDMII software applications. It integrates capabilities to design, implement, build, and test applications through an easy to use industry-standard user interface. It consists of:

- CAA — C++ Interactive Dashboard Product
- CAA — Multi-Workspace Application Builder Product
- CAA — Data Model Customizer Product
- CAA — Unit Test Manager Product
- CAA — C++ Source Checker

CAA — Legacy Data Integration Development Configuration (5691-LDC)

This configuration provides tools for legacy system access, allowing easy connection to legacy data. It consists of:

- CAA — Multi-Workspace Application Builder Product
- CAA — Web Application Generator for Legacy Database Product

CAA — Java Base Development Configuration (5691-JDV)

This configuration provides in one package all the necessary tools for implementing CAD/CAM/CAE/PDMII Java software and ENOVIA V5 client applications. As with its C++ development counterpart, it integrates design, implement, build, and test applications through an industry-standard user interface. It consists of:

- CAA — Java Interactive Dashboard Product
- CAA — Multi-Workspace Application Builder Product

In addition, two add-on products are available for this configuration:

- CAA — Java Unit Test Manager Product
- CAA — Source Code Manager Product

Technical Information

Hardware Requirements

Build-Time Hardware Requirements for CAA RADE V5.8

Hardware requirements are identical to those for CATIA V5 or ENOVIA V5, depending on the applications being developed, with the following exceptions:

Required Components and Features

- Disk Drive: An internal or external disk drive of at least 4 GB is required to store program executables, program data, usage environment, and paging space.
- Memory: At least 512 MB of real memory is recommended for all applications.

Note: Windows 95/98 are not supported.

Software Requirements

Run-Time Software Requirements for CAA V5 APIs

Run-time software requirements for CAA V5 APIs are the same as those described in the applicable CATIA V5 and ENOVIA V5 announcements except that applications developed with CAA — C ++ Development Configuration (5691-CDC) will not run on Windows 95 or 98.

Build-Time Software Requirements

Refer to the Program Directory for the referenced product or contact your IBM Support Center for appropriate corrective service to apply to the software described in the following topics.

The following products run on Windows NT and UNIX:

- CAA — Source Code Manager (SCM)
- CAA — JAVA Unit Test Manager (JUT)
- CAA — C++ Source Checker (CSC)
- CAA — C++ Unit Test Manager (CUT)
- CAA — Multi-Workspace Application Builder (MAB)
- CAA — C++ API Documentation Generator (CDG)
- CAA — Teamwork Release Manager (TRM)

The following products require Windows NT:

- CAA — JAVA Interactive Dashboard (JID)
- CAA — C++ Interactive Dashboard (CID)
- CAA — Data Model Customizer (DMC)
- CAA — Web Application Generator for Legacy Database (LWG)

The following products run on Windows NT or Windows 2000:

- CAA — C++ Interactive Dashboard (CID)
- CAA — Data Model Customizer (DMC)
- CAA — Web Application Generator for Legacy Database (LWG)
- CAA — Source Code Manager (SCM)
- CAA — C++ Source Checker (CSC)
- CAA — C++ Unit Test Manager (CUT)
- CAA — Multi-Workspace Application Builder (MAB)
- CAA — C++ API Documentation Generator (CDG)
- CAA — Teamwork Release Manager (TRM)
Software Requirements in a Windows NT or Windows 2000 Environment

The following components at the minimum indicated level are required:

- Microsoft Windows NT Workstation Version 4.0 (with Service Packs 4, 5 or 6a), or Windows 2000 Professional with the following components:
  - Microsoft Windows NT 4.0 and Windows 2000 deliver an implementation of OpenGL libraries. These libraries may be updated depending on selected graphic adapter, when installing the graphic adapter and associated drivers. Recommendations related to driver levels based on certified configurations are available on the IBM PLM Solutions Web site:
  - Localized version of the operating system may be required when selected installation locale differs from Latin 1.
- Compiler: Microsoft Visual C++ Version 6 SP3 for C and C++
  When installing Microsoft Visual C++ Version 6, the Unicode option MUST be selected.

Build-Time Requirements in an AIX® Environment

The following components at the minimum indicated level are required:

- AIX V4.3.3
  - C Set++ for AIX Application Runtime at level 4.0.2 (C Set++ Application Runtime is shipped with AIX Operating System)
  - AIX XL FORTRAN Runtime Environment, V5.1.0 or V5.1.1 (5765-C11 or 5801-AAR-7070, part number 04L2123, depending on geographic area), or at level 7.1.0 (5765-E03, with PTF for APAR IY16351)
  - OpenGL and GL3.2 Runtime Environment (delivered with AIX 4.3 Operating Systems)
  - CDE (Common Desktop Environment, delivered with the operating system)
  - Compiler: IBM C and C++ for AIX Compilers Version 3.6.4.2 or 3.6.6 (ibmccx), C++ Compiler 3.6.6 is shipped as the batch compiler with VisualAge C++ Professional for AIX V4 (5765-D52 or part number 30L8178, product 5765-D52 feature 0001, depending on geographical area)

Build-Time Requirements in an HP-UX Environment

The following components at the minimum indicated level are required:

- HP-UX Version 10.20 A.C.E. 4 (Workstation Additional Core Enhancements for HP-UX 10.20 — June 1999), including:
  - ANSI C++ Runtime Environment (aC++, delivered with HP-UX 10.20 A.C.E. 4)
  - HP FORTRAN Runtime environment (delivered with the operating system)
  - HP-UX 700 OpenGL 3D API Runtime Environment
  - CDE (Common Desktop Environment, delivered with the operating system)
  - Localized version of the operating system may be required when selected installation locale differs from ISO code pages
  - C compiler A.10.32.03
  - C++ compiler aC++ A.01.21 (B3911DB)

Note: Because of binary incompatibilities between HP-UX 10.20 and HP-UX 11.0, support of HP-UX 11.0 is limited to a strict run-time environment.

Build-Time Requirements in an SGI IRIX Environment

The following components at the minimum indicated level are required:

- IRIX 6.5.3m, including:
  - C, C++, and Fortran77 standard execution environment (delivered with the operating system)
  - OpenGL (delivered with IRIX execution environment)
  - IRIX Interactive Desktop (delivered with the operating system)
  - WorldView is required when selected installation locale differs from ISO-1
- C, C++, MiPSPro Compiler 7.2.1 (n32 ABI)

Build-Time Requirements in a Sun Solaris Environment

The following components at the minimum indicated level are required:

- Sun Solaris 2.6.0, or Solaris 7, including:
  - C and C++ runtime environment (delivered with the operating system)
  - OpenGL runtime environment (delivered with the operating system)
  - Fortran runtime environment is delivered with CATIA V5
  - Common Desktop Environment (CDE, delivered with the operating system)
  - Localized version may be required when selected installation locale differs from ISO-1
- C, C++, SUN WorkShop Compilers 4.2

Specific Software Requirements

Note: All CAA RADE V5 products are offered through orderable configurations or as add-ons. No product in these configurations can be ordered separately.

- CAA — Data Model Customizer Product, CAA — Web Application Generator for Legacy Database Product and CAA — C++ Interactive Dashboard Product require the prior installation of CAA — Multi-Workspace Application Builder Product.
- CAA — C++ Interactive Dashboard Product requires:
  - Microsoft Visual C++ 6.0 product SP3
  - Microsoft Internet Explorer (delivered with Windows NT 4.0 or Windows 2000), at minimum level 5.0
IBM License Use Management (LUM), is required to serve concurrent licenses across a network. A LUM configuration file (i4ls.ini) is required on CAA RADE clients to access concurrent licenses from these servers.

LUM, at minimum level 4.5.5 is required on UNIX or Windows NT license servers.

LUM, at minimum level 4.5.8 is required on Windows 2000 license servers.

LUM, at minimum level 4.6.0 is required when High Availability Licensing (HAL) offered by LUM is used.

LUM may be obtained, at no charge, from:

http://www-4.ibm.com/software/is/lum/

Macro Replay Capabilities are part of CATIA V5 offering.

**Software Installation:** On Windows, the process of installation and de-installation makes use of Windows-compliant tools such as Install Shield, simplifying the task for those familiar with Windows procedures and concepts. These procedures have also been ported to the UNIX environment in order to preserve a common V5 installation interface for all supported operating systems.

**Documentation:** Online guides are provided with CAA RADE V5, including:

- Reference documentation for class, interface, global function, macro, enumeration and header files.
  - C++ objects — Extended Component Application Architecture (CAA)
  - Java objects — Extended Component Application Architecture (CAA)
  - Scripting objects — Standard Component Application Architecture (CAA)

- RADE tool documentation

- V5 C++, Java and Automation programming and methodology documentation
  - Methodology guides
  - Programming guides for CATIA and ENOVIA APIs, by domain, including use cases, technical articles, and quick reference guides
  - Programming guides for architecture fundamentals (Portal, PPR Hub, Enterprise Architecture)
  - CAA code samples

These guides are part of the complete online documentation provided on CD. Totally Web-oriented, using standard HTML and graphics formats, it is readily accessible using a standard Web browser. Navigation help includes the ability to do full-text search.
Licensing Model

CAA RADE V5 delivers identical licensing mechanisms on UNIX and Windows environments, based on LUM. The following licensing principles apply:

- The use of a given CAA RADE V5 configuration requires a license for it. Licenses are acquired and released for the total configuration. The product within a configuration cannot be shared.
- In all cases, licenses are acquired at the beginning of the process, and released at its termination.

A customer application program being developed using CATIA or ENOVIA APIs will behave at run time with the very same licensing mechanism than as any other CATIA or ENOVIA interactive product. In this respect, the same rules will remain. In particular, CATIA — Object Manager (CO1, COM, or CO3) will be required for all run time application programs.

The same principles apply when testing and debugging custom applications within the RADE tools.

CAA RADE V5 can be used in two licensing modes, either Nodelock or with concurrent usage of licenses on a network.

Nodelock Usage: The use of local display of the hardware configuration is mandatory for use of CAA RADE V5 in Nodelock mode.

There are no limits to the number of CAA RADE V5 processes that may be launched for a given license. For example, a user may run multiple link-editing tasks with a single license.

Concurrent Usage: A user on one machine and one display uses one license per configuration or product used, regardless of the number of processes. If the display changes, then an additional license is taken for the corresponding process.

Licenses for CAA RADE V5 configurations are acquired and released for the total configuration. The functions within a configuration cannot be shared.

Planning Information

Direct Customer Support: Direct customer support is provided under the PLM Enhanced Support Offering (ESO). This fee service enhances the customer’s productivity by providing voice and electronic access to the PLM Support Center. The ESO help desk will answer questions pertaining to the installation, administration, use, and handling of suspected software defects for eligible products.

Additional information about the ESO and other available PLM services offerings is available by visiting the CATIA/ENOVIA TechSupport Web page at:

http://techsupport.services.ibm.com/engineering/support

On the left side, click on “Service and Support offerings” and then on the next frame expand “Support Offerings” and select “CATIA/ENOVIA Enhanced Support Offering.”

Packaging: Each shipment of CAA RADE V5.8 will include:

- Product CDs (LCD4-5345) containing:
  - Application code for all OS platforms
  - Program Directory
- Licensed Program Specifications (GI11-2625)
- License Registration Memorandum (GI11-2624)
- Current User Memorandum (GI11-2634)
- Licensing IBM PLM Solutions Software (GI11-3619)

Security, Auditable, and Control

The announced program uses the security and auditability features of the operating system software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Customer Financing

IBM Global Financing offers attractive financing to credit-qualified commercial and government customers and Business Partners in more than 40 countries. IBM Global Financing is provided by the IBM Credit Corporation in the United States. Offerings, rates, terms, and availability may vary by country. Contact your local IBM Global Financing organization. Country organizations are listed on the Web at:

http://www.financing.ibm.com

Ordering Information

Current Licensees

Current licensees of CAA RADE V5 will receive this update from IBM Software Delivery and Fulfillment automatically.

Shipment of this release is scheduled to be completed by April 15, 2002.

New Licensees

Orders for new licenses will be accepted now.

Shipment will begin on the planned availability date.

Basic License: To order a basic license, specify:

- The desired configuration program number (for example, 5691-CDC).
- Feature number 9001 for asset registration, quantity 1.
- The total number of users and desired payment method (for example, PLC/ALC, YLC), using feature numbers as shown below.
- Desired Workstation Platform feature numbers.

Note: In addition, an order for the System Program Order (5628-CAA) must be placed with the appropriate feature numbers to ship the media.

New Configurations and Add-On Products

- Configurations:
  - CAA — Teamwork Release Management Configuration (5691-TRC)
  - CAA — Multi-Workspace Application Building Configuration (5691-ABC)
Add-On Products (AOP):
- CAA — Data Model Customizer (DMC)
- CAA — C++ Unit Test Manager (CUT)
- CAA — C++ Source Checker (CSC)

Billing Feature Numbers for New/Updated Configurations and Add-On Products (AOP)

Note: For order quantities exceeding 250, contact your marketing representative.

5691-TRC Configuration

0011 TRC Product Primary License Charge (PLC)
0006 TRC Annual License Charge (ALC)
0001 TRC Yearly License Charge (YLC)

1145 CUT AOP PLC
1146 CUT AOP ALC
1147 CUT AOP YLC

1142 JUT AOP PLC
1143 JUT AOP ALC
1144 JUT AOP YLC

1136 CSC AOP PLC
1137 CSC AOP ALC
1138 CSC AOP YLC

1139 SCM AOP PLC
1140 SCM AOP ALC
1141 SCM AOP YLC

5691-ABC Configuration

0011 ABC Product PLC
0006 ABC ALC
0001 ABC YLC

1127 CUT AOP PLC
1128 CUT AOP ALC
1129 CUT AOP YLC

1133 JUT AOP PLC
1134 JUT AOP ALC
1135 JUT AOP YLC

1130 CSC AOP PLC
1131 CSC AOP ALC
1132 CSC AOP YLC

1124 SCM AOP PLC
1125 SCM AOP ALC
1126 SCM AOP YLC

5691-CDV Configuration

1118 DMC AOP PLC
1119 DMC AOP ALC
1120 DMC AOP YLC

1115 CUT AOP PLC
1116 CUT AOP ALC
1117 CUT AOP YLC

1121 CSC AOP PLC
1122 CSC AOP ALC
1123 CSC AOP YLC

Migrations

There are no new migration paths in V5.8.

For license quantities exceeding 250, contact your marketing representative for additional information.

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In addition to the program number and feature information, specify the feature numbers and total users for each intended workstation platform:

<table>
<thead>
<tr>
<th>Workstation</th>
<th>Feature Platform</th>
<th>Feature Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIX</td>
<td>5350</td>
<td></td>
</tr>
<tr>
<td>HP-UX</td>
<td>5351</td>
<td></td>
</tr>
<tr>
<td>SGI IRIX</td>
<td>5352</td>
<td></td>
</tr>
<tr>
<td>Sun Solaris</td>
<td>5354</td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td>5353</td>
<td></td>
</tr>
</tbody>
</table>

Note: The platform feature combined total should equal the total number of users across all solutions.

Academic Program

As of this announcement, no academic program is provided for CAA RADE V5. Contact your IBM representative or authorized IBM Business Partner for further information.

Basic Machine-Readable Material

5628-CAA System Program Order (SPO): To ship machine-readable materials and publications and to register for future updates, one SPO (5628-CAA) must be placed in addition to the basic license orders.

Within the SPO, specify the Media Feature Number for each of the workstation platforms you will be using, and the feature number of the solution products you are ordering, based on the following tables:

<table>
<thead>
<tr>
<th>Workstation Platform</th>
<th>Media Feature Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>All platforms</td>
<td>3410 CD-ROM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5628-CAA Solution Program Name</th>
<th>Solution Program Number</th>
<th>Solution SPO Feature Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAA — C++ Extended Development Configuration</td>
<td>5691-CDC</td>
<td>3500</td>
</tr>
<tr>
<td>CAA — Legacy Data Integration Development Configuration</td>
<td>5691-LDC</td>
<td>3501</td>
</tr>
<tr>
<td>CAA — Base Development Configuration</td>
<td>5691-CDV</td>
<td>3502</td>
</tr>
<tr>
<td>CAA — Java Base Development Configuration</td>
<td>5691-JDV</td>
<td>3503</td>
</tr>
<tr>
<td>CAA — Teamwork Release Management Configuration</td>
<td>5691-TRC</td>
<td>3504</td>
</tr>
<tr>
<td>CAA — Multi-Workspace Application Building Configuration</td>
<td>5691-ABC</td>
<td>3505</td>
</tr>
</tbody>
</table>

Process Charge: The process charge for media has been withdrawn.

Customization Options: Under the 5628-CAA SPO, select the appropriate feature numbers to customize your order to specify the delivery options desired. These features can be specified on the initial or subsequent (MES) orders.
Use of CAA RADE V5 in the Provision of Third-Party Services and in the External Distribution of Complementary Applications

The following provisions ("Additional Supplemental Terms") are in addition to the terms and conditions in the ICA or any equivalent agreement executed by you and IBM (the "Agreement"). You may not use the Program if you do not have a valid Agreement in place with IBM or if you do not accept these Additional Supplemental Terms. Any capitalized terms that are not defined herein are defined in the Agreement.

You are licensed to distribute your applications developed with the CAA RADE Configurations, hereinafter known as “V5 Complementary Applications," to your subcontractors and direct and indirect suppliers solely for performance of work by such subcontractors and suppliers for your benefit. This license includes your right to authorize your subcontractors and direct and indirect suppliers to use, execute, reproduce, display, perform, and distribute internally the V5 Complementary Applications.

The rights and licenses granted in the Agreement and in these Additional Supplemental Terms do not include the right to use the CAA RADE Configurations in the provision of services to a third party. Permission from Dassault Systèmes S.A. is required to do so. In addition, the rights and licenses granted in the Agreement and in these Additional Supplemental Terms do not include the right to use the CAA RADE Configurations to make the V5 Complementary Applications generally available.

For this purpose, generally available shall mean the general release or other distribution of the V5 Complementary Applications as commercially available, directly or through other parties, for use by end-user customers. A CAA Partnership Agreement with Dassault Systèmes S.A. is required to do so.

Educational Allowance: Education allowance does not apply.

Volume Discount: Contact your IBM representative.

Licensed Program Materials Availability
- Restricted materials of IBM: None
- Non-restricted source materials: None
- Object code only (OCO): All

Testing Period: None

Program Services: Program Services for CAA RADE V5 will be available until discontinued by IBM upon six months’ written notice.

Customers may report problems against a given Release of CAA RADE V5 for a limited time only. This service period ends 14 months after the general availability of the second subsequent Release of CAA RADE V5, or a minimum of 22 months of support.

The end of service date for CAA RADE V5.6 will be four months after the general availability date of this release.

For a list of all currently supported releases of CATIA and ENOVIA products, refer to Web site:
http://techsupport.services.ibm.com/engineering/support
Then click on “Release nomenclature and end of service dates” in the “What’s new” column.

If you have not yet obtained an IBM common registration user id, refer to Web site:

http://www.ibm.com/registration/selfreg

Program Services offer a method of reporting code-related problems for CAA RADE V5 licensed software products.

For technical assistance, go to the CATIA/ENOVIA TechSupport Web page at:

http://techsupport.services.ibm.com/engineering/support

Then click on the “Service requests, problem reporting” link.

Problems may be reported electronically, by facsimile, or mail and will be responded to via the same medium used to submit the problem. IBM will respond to customer inquiries within two business days of electronic or facsimile receipt and seven days of mail receipt advising of the problem disposition.

Use one of the following methods to report problems:

- **Mail:**
  IBM Corporation
  Product Lifecycle Management
  2455 South Road P540
  Poughkeepsie, NY 12601-5400
  Attn: ENOVIA/CATIA APAR Coordinator
- **Facsimile:** 845-433-9901
- **E-mail:** catia@us.ibm.com
- **Electronic PMR submission:**
  http://techsupport.services.ibm.com/engineering/support

Electronic support gives the customer the option of submitting code-related problems either by e-mail or through the CATIA/ENOVIA TechSupport Web site using a Problem Management Report (PMR). When using the PMR option, all communications will be through the PMR. It is the customer’s responsibility to monitor and update their problem no less than once a week.

If the problem reported is not known to be a code-related problem, the customer will be informed that IBM will continue to work on it provided the customer has an Enhanced Support Offering (ESO) contract.

Additional information on the ESO and other available PLM services offerings is available by going to the CATIA/ENOVIA TechSupport Web page at:

http://techsupport.services.ibm.com/engineering/support

On the left side, click on “Service and Support Offerings” and then on the next frame expand “Support Offerings” and select “CATIA/ENOVIA Enhanced Support Offering.”

Preventive Service is delivered through the next release of CAA RADE V5. The new release will also include corrections to problems, depending on the time of their submission and their severity.

Corrective Service for CAA RADE V5 releases is delivered through “Service Packs” on a regular basis. A Service Pack includes corrections for Severity 1 problems in production systems reported on this release and all corrections available for all components at the time it is built. Service Packs are provided at the same time for all platforms currently supported. Each Service Pack supersedes the previous one and may be installed on top of the released level or on top of a previous Service Pack. No individual corrections will be delivered between two Service Packs. No update of online documentation will be provided through Service Packs.

Customers may request a correction via a Service Pack for Severity 1 problems. A Severity 1 problem is defined as:

- A problem stopping production — this means the customer is already using the level for which he requests a fix in a production environment.
- A problem preventing migration — in this case, the customer must provide the migration plan.
- A problem halting testing of a given level — in this case, a fix will allow the customer to continue the testing.
- Installation problem — a problem which prevents the customer from installing or using the product.
- Regression — problems reported as regressions may be due to an operation which was being performed erroneously or created incorrect data with a previous release and the current release no longer permits these operations. Therefore, each problem reported as a regression must be evaluated, and true regressions will be handled as Severity 1 problems.

Requests for corrections to a given Release of CAA RADE V5 may be made for ten months after the general availability of the second subsequent release of CAA RADE V5. After that date, no new Service Packs will be built for that release. The final Service Pack will still be available for ordering on CD-ROM via the IBM Support Centers for the duration of the service period of each release. (This service period ends 14 months after the general availability of the second subsequent release of CAA RADE V5, or a minimum of 22 months of support).

**With the availability of this release, the end of corrective service date for CAA RADE V5.7 will be four months after the general availability date of this release; the end of service (EOS) date for CAA RADE V5.6 will be four months after the general availability date of this release.**

For help guides and information on education, visit the CATIA/ENOVIA TechSupport Web page at:

http://techsupport.services.ibm.com/engineering/support

On the left side, click on “Education, certification.”

**IBM Operational Support Services — Support Line:** No

**Other Support:** IBM Support Center

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**Prices**

Contact your IBM representative for pricing information for this announcement.

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