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COMPETITIVE ANALYSIS

Worldwide Software Configuration Management Tools Competitive Analysis, 2003: 2002 Shares and Current Outlook

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IDC OPINION

Although the worldwide market for software configuration management (SCM) tools declined by 3.0% in 2002 to $850 million, results were more positive than our initial market sizing estimate in February. In February, we projected 2002 worldwide revenue of $817 million or a 7.3% decline from 2001. In spite of the difficult economic environment and uncertainty surrounding the geopolitical situation, growing interest in such SCM segments as process-centric change and configuration management and requirements management resulted in a better than anticipated 2002 fourth quarter. Highlights are as follows:

- ☑ IDC believes that the SCM market will return to positive growth in 2003 and then grow steadily thereafter. The basic drivers that have fueled the SCM market in the past (i.e., productivity, quality, and collaboration) will continue to do so in the future as overall economic conditions improve.

- ☑ In the short term, SCM vendors must demonstrate the benefits of their tools and solutions even in the current challenging economic environment. The most successful vendors will be those who are best able to provide demonstrable return on investment (ROI), not only for IT, but the business enterprise as a whole.

- ☑ In the long term, successful SCM vendors will be those that can best meet the market demands for SCM tools that provide full life-cycle support, robust yet flexible process/workflow support, and ease of use.

IN THIS STUDY

This IDC study examines the software configuration management tools (SCM) market for the 2001–2002 period, with vendor revenue trends. Worldwide market sizes are provided for 2002, with trends from 2001. Vendor competitive analysis, with revenue and market shares of the leading vendors, is provided for 2002. This study also provides profiles of leading vendors and identifies the characteristics that vendors will need to be successful in the future.

The vendor shares and competitive analysis contained herein update those found in *Worldwide Software Configuration Management Tools Forecast and Analysis, 2002–2006* (IDC #27290, June 2002).

METHODOLOGY

The IDC Software Research Group (SRG) market sizing and forecasts are presented in terms of "packaged software revenue." Packaged software is defined as programs or codesets of any type commercially available through sale, lease, rental, or as a service. Packaged software revenue typically includes fees for initial and continued right-to-use packaged software licenses. These fees may include, as part of the license contract, access to product support and/or other services that are inseparable from the right-to-use license fee structure, or this support may be priced separately as software maintenance. Upgrades may be included in the continuing right of use or may be priced separately. The revenue counted by IDC is that which is recognized for accounting purposes by the vendor that owns or licenses the intellectual property rights to the software.

Packaged software revenue *excludes* service revenue derived from training, consulting, and system integration that is separate (or unbundled) from the right-to-use license but does include the imputed value of software included in a service that offers software functionality by a different pricing scheme (e.g., the imputed or stated value of software included in an application service provider's [ASP's] or other hosted software arrangement).

It is the total packaged software revenue that is further allocated to markets, geographic areas, and operating environments. For a more detailed definition of packaged software revenue, see *IDC's Software Taxonomy, 2003* (IDC #28820, February 2003). For a more detailed examination of the issues of revenue recognition, see *Software Revenue Recognition Policies and Their Effects on Market Data* (IDC #29458, May 2003).

IDC's industry analysts have been measuring and forecasting IT markets for more than 30 years. IDC's software industry analysts have been delivering analysis and prognostications for packaged software markets for more than 25 years.

The actual strategy incorporates information from five different but interrelated sources, as follows:

☒ Reported and observed trends and financial activity in 2002 as of the end of April 2003, including reported revenue data for public companies trading on North American stock exchanges (CY 1Q02–4Q02 in nearly all cases).

☒ IDC's Software Census interviews. IDC interviews all significant market participants to determine product revenue, revenue demographics, pricing, and other relevant information.

- ☑ Product briefings, press releases, and other publicly available information. IDC's software analysts meet with hundreds of software vendors each year. These briefings provide an opportunity to review current and future product strategies, revenue, shipments, customer bases, target markets, and other key product information.

- ☑ Vendor financial statements and related filings. Although many software vendors are privately held and choose to limit financial disclosures, information from publicly held companies provides a significant benchmark for assessing informal market estimates from private companies. IDC maintains an extensive library of financial and corporate information focused on the IT industry. We further maintain detailed revenue by product area models on more than 1,200 worldwide vendors.

- ☑ IDC demand-side research. This includes thousands of interviews annually and provides a powerful fourth perspective for assessing competitive performance. IDC's user strategy databases offer a compelling and consistent time-series view of industry trends and developments. Direct conversations with technology buyers provide an invaluable complement to the broader survey-based results.

Ultimately, the data presented herein represents IDC's best estimates based on the above data sources as well as reported and observed activity by vendor and further modeling of data that we believe to be true to fill in any information gaps.

In addition, please note the following:

- ☑ The information contained in this study was derived from the IDC Software Market database as of May 7, 2003.

- ☑ All numbers in this document may not be exact due to rounding.

- ☑ For more information on IDC's software definitions, see *IDC's Software Taxonomy, 2003* (IDC #28820, February 2003)

SOFTWARE CONFIGURATION MANAGEMENT TOOLS MARKET DEFINITION

SCM tools are used by application development organizations to provide software revision control and versioning capabilities. More sophisticated functions may also be included, such as process management, change request tracking, requirements management, and distributed team development support.

SCM tools are defined as "development oriented," which means that they are used primarily by and for the application development community. Configuration management tools that are targeted mainly at database administrators and datacenter managers are excluded from the SCM market definition. Defect tracking tools and requirements management tools are included as part of the SCM market revenue; however, defect tracking tools are included in the automated software quality (ASQ) tools market when they are sold primarily as part of a suite of testing tools.

In addition, some integrated computer-aided software engineering tools and frameworks, workbenches, and environments include bundled SCM tool functionality. If the SCM tools are not sold separately, then their revenue is excluded from the SCM market.

SITUATION OVERVIEW

THE SOFTWARE CONFIGURATION MANAGEMENT TOOLS MARKET IN 2002

Although the worldwide market for software configuration management (SCM) tools declined by 3.0% in 2002, results were more positive than our probable case scenario published in November 2002 and, in fact, our initial market sizing estimate this February. In February, we projected 2002 worldwide revenue of $817 million or a 7.3% decline from 2001. In spite of the difficult economic environment and uncertainty surrounding the geopolitical situation, growing interest in such SCM segments as process-centric change and configuration management and requirements management resulted in a better-than-anticipated 2002 fourth quarter. Our final tally for calendar year 2002 is worldwide SCM revenue of $850 million.

PERFORMANCE OF LEADING VENDORS IN 2002

Table 1 displays 2000–2002 worldwide revenue and 2002 growth and market share for SCM tool vendors. **Rational Software** continued as the market revenue leader in 2002, although worldwide SCM revenue declined 11% from 2001. Note that IBM announced the acquisition of Rational Software in December 2002, but since the transaction was not completed until early 2003, Rational 2002 revenue is reported separately from IBM's revenue.

MERANT maintained the number 2 ranking in the SCM space. The renewed focus by the new management team on its core SCM business appears to be succeeding. **SERENA Software** experienced nearly flat SCM revenue in 2002 — not bad results considering the general state of the economy and IT spending.

Computer Associates' adoption of a revised method for recognizing revenue had a significant affect on its SCM revenue in 2001 and 2002 (see *Software Revenue Recognition Policies and Their Effects on Market Data,* IDC #29458, May 2003, for a more complete discussion of IDC's treatment of deferred revenue). The revenue recognition change had a significant negative impact on CA's SCM revenue in 2001. In fact, without the impact of the CA accounting change, the total SCM would have shown small, but positive, growth in 2001. As we stated last year, "CA's new accounting method will serve to boost revenue in 2002 and beyond; 2001 being the year of largest negative impact." 2002 results include the positive impact of recognition of deferred revenue. Readers are urged to use caution in interpreting year-over-year growth rates for CA because they are in part related to the accounting change.

Telelogic was one of the few leading SCM vendors to experience strong growth in 2002. The company reports that its DOORS requirements management product was a major contributor to this success. The **Borland Software** SCM revenue reported in this study is via the acquisition of StarBase in 2002.

TABLE 1

WORLDWIDE SOFTWARE CONFIGURATION MANAGEMENT TOOLS REVENUE BY VENDOR, 2000–2002 ($M)

|	2000	2001	2002	2002 Share (%)	2001–2002 Growth (%)
Rational	310	321	286	33.7	-11.0
MERANT	115	114	102	12.0	-10.8
SERENA Software	94	91	89	10.5	-2.5
Computer Associates Intl. Inc.	113	64	81	9.6	27.9
Telelogic AB	65	57	63	7.4	11.7
Microsoft	31	36	36	4.2	-0.3
Borland Software	44	47	35	4.1	-25.5
MKS	28	24	27	3.2	10.7
Kintana	9	11	11	1.3	1.1
Perforce Software	8	10	10	1.2	0.0
Quest Software	–	3	10	1.2	270.4
Softlab	5	5	6	0.7	17.4
Wise Solutions	2	5	5	0.6	-7.0
IBM	3	4	5	0.6	25.0
McCabe & Associates	1	2	2	0.3	15.0
Visible Systems	–	–	2	0.3	NA
Cybermation	–	1	2	0.2	125.0
Subtotal	828	795	773	90.9	-2.8
Other	80	81	77	9.1	-5.0
Total	908	876	850	100.0	-3.0

Source: IDC, May 2003

PERFORMANCE BY GEOGRAPHIC REGION IN 2002

Figure 1 shows North America continuing as the clear consumer leader in the SCM tools market. In 2002, North America accounted for 60.0% of the worldwide revenue in this market. However, this figure represents a decline in share of 1.3 percentage points from 2001 as the economic slowdown continued in the United States. All other regions gained share slightly, most significantly the rest of the world (ROW) collection of emerging markets (albeit from a relatively small base).

F I G U R E   1

WORLDWIDE SOFTWARE CONFIGURATION MANAGEMENT TOOLS REVENUE SHARE BY REGION, 2002


Total = $850M
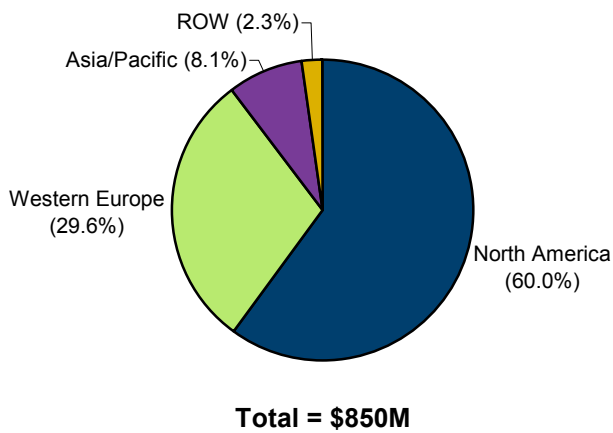
Source: IDC, May 2003

PERFORMANCE BY OPERATING ENVIRONMENT IN 2002

Overall, there was very little change in SCM revenue by operating environment from what was reported for 2001. The 32-bit Windows platform continued as the revenue share leader in SCM, as 57.1% of total worldwide revenue was attributable to that operating environment (see Figure 2). Unix continued in second place, followed by the mainframe operating environment — no change in rank from last year. No other operating environment garnered significant revenue share. Linux remained in the fourth spot, but its share of SCM revenue was virtually unchanged from what we reported a year ago.

WORLDWIDE SOFTWARE CONFIGURATION MANAGEMENT TOOLS REVENUE SHARE BY
OPERATING ENVIRONMENT, 2002

Total = $850M
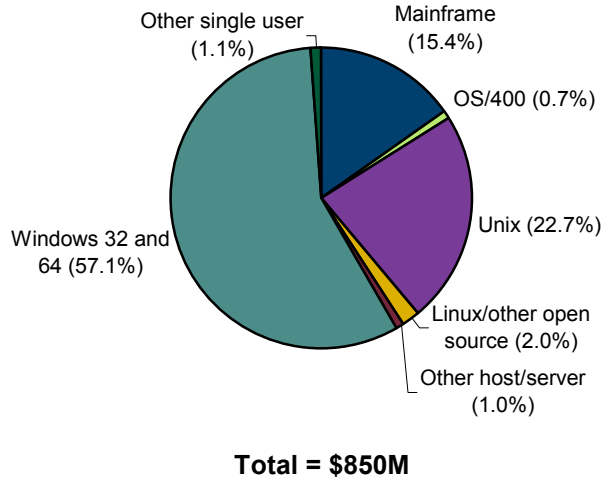
Source: IDC, May 2003

VENDOR PROFILES

RATIONAL SOFTWARE

Rational Software is the revenue leader in the SCM market with its ClearCase, ClearQuest, and RequisitePro products and has been for several years. Rational provides an integrated life-cycle management solution, encompassing best practices, tools, and services. Life-cycle activities supported include requirements and analysis, software development, system testing, process/project management, and software configuration management. All of these activities are integrated and coordinated via the Rational Suite Team Unifying Platform.

However, the most important recent event for Rational Software is not its 2002 revenue performance, which was an 11.0% decline in from 2001 in SCM, but its acquisition by IBM. In addition to its number 1 position in SCM worldwide revenue, Rational is among the automated software quality (ASQ) market leaders as well as the worldwide revenue leader in analysis, modeling, and design tools. The combined IBM/Rational now has all of the components required to span the full application life cycle. Thus, Rational brings an extremely well-established and complementary product set to IBM, with very little, if any, overlap. Note that the IBM revenue shown in Table 1 is for a mainframe SCM product that does not compete with Rational's products.

Like most major mergers and acquisitions, this one is not without its challenges. Although IBM certainly broadens the reach of Rational, particularly via IBM's huge Global Services arm and the strong WebSphere brand, just how successful this merger will be in the long run is still to be determined. Nevertheless, IBM is certainly well positioned to be the dominant application development and deployment vendor.

MERANT

The new senior management team at MERANT appears to making progress in defining and implementing the company's strategy for the future. Although 2002 revenue was down 10.8% from 2001, IDC believes the company is positioning itself well for future growth. 2001 was a tumultuous year for MERANT to say the least. The company admitted that the merger of Intersolv and Micro Focus to form MERANT just a few years ago was a failure. The development tools business was spun off as Micro Focus once again and middleware products were divested to a separate company (DataDirect). This left the reconstituted MERANT with its very popular PCVS brand of SCM tools plus content management tools obtained via the acquisition of the Enterprise Division of NetObjects.

MERANT has now refocused on its core strength in SCM. There are two distinct product families: the popular and ubiquitous PVCS Professional (the flagship MERANT product) and Dimensions (for process-centric SCM). The PVCS brand has strong name recognition and market presence and the company attempted to leverage that by using the label "PVCS Dimensions" for its process-centric SCM tools. However, PVCS and Dimensions are significantly different products targeted at different audiences and problem spaces. In the final analysis, this association of distinct products under the same brand label caused some confusion in the marketplace. IDC applauds MERANT's recent decision to drop the PVCS label from Dimensions and focus the messaging around each product line on its specific market sweet spot.

The key to MERANT's long-term success is how quickly and consistently the new management team can deliver on its corporate strategy. If it can execute this expeditiously, MERANT is well positioned for future growth. Initial results look encouraging.

SERENA SOFTWARE

SERENA Software's 2002 SCM revenue was nearly unchanged from 2001 (-2.5%). Given the general economic climate in 2002 and the fact that the two SCM revenue leaders (Rational and MERANT) both experienced double-digit declines, SERENA's results are more than respectable. SERENA's flagship ChangeMan brand has a long history and strong reputation in the mainframe SCM arena. SERENA is playing to that strength by labeling all of its SCM products under the ChangeMan label. Although primarily known for its mainframe product (and the majority of SERENA's revenue is still derived from that platform), SERENA has rolled out a full line of SCM tools, including those for distributed environments and Web content.

SERENA's approach continues to be to move beyond from the mainframe with an integrated full life-cycle SCM strategy. Very recently, SERENA announced the acquisition of TeamShare, a defect tracking and change management vendor. The addition of this functionality is a good complement to SERENA's existing products.

SERENA's mainframe-based approach should resonate well with its mainframe customer base, enabling customers to easily expand into new areas without leaving a trusted vendor. Conversely, the challenge facing SERENA is to gain recognition and share with prospects not coming from a mainframe-centric environment.

COMPUTER ASSOCIATES

As previously noted, the year-over-year growth rates for CA's SCM revenue are not truly indicative of the vendor's overall presence and trends in the market. The accounting change accounts for a significant fraction of both the over 40% year-over-year revenue decline from 2000 to 2001 and the 27.9% growth in 2002. Regardless of

how one interprets the short-term growth rate fluctuations, CA is, has been, and, in IDC's opinion, will continue as a major SCM player.

CA has pulled together all of its SCM products (as well as other products such as tools for modeling and project management) under the AllFusion label. This unified branding is part of a full life-cycle support strategy. The AllFusion Change Management Suite is the umbrella designation for CA's SCM offerings. The Suite includes AllFusion Endevor Change Manager, AllFusion Harvest Change Manager, and AllFusion Change Manager Enterprise Workbench. AllFusion Endevor Change Manager is the mainframe-focused product. AllFusion Harvest Change Manager supports project teams working on distributed enterprise systems. AllFusion Change Manager Enterprise Workbench provides a cross-platform view to synchronize and correlate change management activity across both the mainframe and distributed environments.

IDC believes that an integrated full life-cycle SCM approach is overdue from CA and that the AllFusion strategy is a definite step in the right direction. Time will tell what impact AllFusion will ultimately have on the marketplace. Execution is the key to success.

TELELOGIC

Telelogic, a Swedish company, has long been known for its modeling tools focused on high-tech development markets, particularly in Europe. However with the acquisitions of Continuus (with its process-centric Synergy SCM tools) and QSS (provider of the DOORS requirements management product), Telelogic became a significant participant in the SCM space and with an enhanced presence in the large U.S. market.

Telelogic had a very successful year in 2002 in the SCM space. Worldwide revenue grew 11.7% (while the overall SCM market declined 3%). Telelogic's SCM revenue is growing strongly both in terms of absolute dollars and as a percentage of revenue. The SCM segment now accounts for over two-thirds of the company's revenue. The DOORS requirements management tool is a key product and now contributes the largest share of Telelogic's revenue.

Telelogic's technical strength and product breadth should enable the company to continue to prosper in the high-tech sector. The challenges facing the company are gaining presence and mindshare in the large U.S. market and in convincing more conventional IT organizations that its products are appropriate for non–high-tech environments. Telelogic is clearly addressing these challenges both strategically and tactically. The company experienced a good deal of success and gained traction in 2002 (in a difficult economic climate). Time will tell if Telelogic can continue to build on the momentum it generated in 2002.

OTHER VENDORS

Microsoft's Visual SourceSafe is a ubiquitous SCM tool delivered as a component of the Visual Studio development suite. The wide popularity of Microsoft development tools means that a huge number of developers have access to Visual SourceSafe. Although VSS is not generally considered a full-function SCM tool, it nevertheless serves as the introduction to SCM for many programmers, and, as such, its role as a market driver should not be underestimated. The potential strength of Microsoft can never be underestimated in any market in which the company participates.

Borland Software acquired **StarBase** in late 2002. Borland also acquired TogetherSoft, establishing its place as a full development life-cycle vendor. StarBase had been in the SCM space for many years, and its StarTeam product is noted for

ease of use and strong support for collaborative development. StarBase acquired Technology Builders Inc. (TBI) in 2001, thus adding a requirements management tool (Caliber RM) to its overall SCM product set. However, StarBase subsequently encountered extended financial difficulties. IDC views the acquisition by Borland positively, and it is a move that can potentially breathe new life into the StarBase product line.

FUTURE OUTLOOK

Even though 2002 proved to be a challenging year for a number of SCM vendors, in the final analysis, the market performed above our earlier expectations. This bodes well for the future. SCM tools are the glue that holds together the various components and phases of the application life cycle. These tools organize and control the process and artifacts of application development and deployment. The basic drivers that have fueled the SCM market in the past (i.e., productivity, quality, and collaboration) will continue to do so in the future as overall economic conditions improve.

IDC believes that the SCM market will return to positive growth in 2003 and then grow steadily thereafter. For example, the promise of Web services cannot reach its full potential without robust management of the elements that constitute these services. This is the realm of SCM, and demand for new and improved tools and processes will emerge to support the Web services wave.

MARKET CHARACTERISTICS IN THE FUTURE

The processes (or best practices) used to develop, deploy, and maintain software are the key to significantly improved quality and increased productivity. However, the software community (with some notable exceptions) has been slow to adopt the discipline and structure evident in other technical areas. However, there is mounting evidence that attitudes are changing.

IT organizations are facing what IDC terms a "software complexity crisis." The world of software development and deployment is becoming more and more complicated. Heterogeneous, multitier, Web-based systems are becoming the norm. Development teams include members from diverse disciplines and are geographically distributed. In addition, software applications are more highly visible than ever before and have a high cost of failure. Software is no longer relegated to the "back office" to support the business. Today, many applications are customer facing (e.g., Web-based order entry). Down time or errors in these systems directly impact the bottom line of the business. These are no longer IT problems, they are business problems.

IT managers not only have to deal with the complexity crisis and the critical impact of software failures, they are being asked to do so under very stringent budget and time constraints. This is not a passing phenomenon that will dissipate as the general economy improves. It will become the typical IT environment going forward.

What do increasing complexity, criticality, and resource constraints mean to the SCM market? In short, businesses will demand more discipline and accountability from their IT organizations, and that is where SCM can provide major assistance.

Successful SCM tools will have the following characteristics:

☑ **Process-centric, but flexible and "customizable."** Formal, repeatable processes are key to improved software quality and development productivity.

☑ **Easy to use and highly collaborative.** SCM tools need to readily support diverse and distributed development teams and cross-platform applications.

Moreover, ease of use must be a primary consideration. Developers have an innate aversion to "process" or anything else that they believe hinders their primary function of software creation. The ideal SCM tool is one that is invisible to the developer and yet works "behind the scenes" to relieve him or her from the tedious (but vital) tasks of managing the artifacts and processes of software development.

☑ **Support the full application life cycle.** SCM had its beginnings in basic configuration and change management functions. These are still essential activities, but modern SCM solutions need to go well beyond these basic functions:

❑ There is increasing attention being focused on connecting the business and IT constituencies within enterprises. A focal point of this collaboration is requirements management — the link between the business and technical communities.

❑ Historically, there has been a wall, or at best a handoff, between development and operations. Modern technologies and demand for faster turnaround for deployment of new or updated applications is forcing closer ties between the development and operations activities of IT. Full life-cycle SCM tools will help break down the development/operations wall and improve organizational efficiency.

ESSENTIAL GUIDANCE

Successful SCM vendors will be those that can best meet the market demands discussed above. Keys are full life-cycle support (which can be achieved either by a single vendor or via astute partnering) and a strong yet flexible process/workflow story. In the short term, SCM vendors must demonstrate the benefits of their SCM tools and solutions even in the current challenging economic environment. The most successful vendors will be able to provide demonstrable ROI, not only for IT, but also for the business enterprise as a whole. In the long term, successful SCM vendors will be those that can best meet the market demands for SCM tools that provide full life-cycle support, robust yet flexible process/workflow support, and ease of use.

LEARN MORE

RELATED RESEARCH

☑ *Software Revenue Recognition Policies and Their Effects on Market Data* (IDC #29458, May 2003)

☑ *Worldwide Software Configuration Management Tools Forecast, 2003–2007* (IDC #29012, March 2003)

☑ *IDC's Software Taxonomy, 2003* (IDC #28820, February 2003)

☑ *IBM Achieves Full Life-Cycle Support with Acquisition of Rational Software* (IDC #28529, December 2002)

☑ *Merrill Lynch Achieves Strong ROI with Rational RequisitePro: A Requirements Management Case Study* (IDC #28441, December 2002)

☑ *CitiPower Benefits from Automated Requirements Management: An End-User Case Study* (IDC #28300, November 2002)

☑ *Worldwide Automated Software Configuration Management Tools Forecast and Analysis, 2002–2006* (IDC #27290, June 2002)

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