

Serena ChangeMan Builder

Automate and Streamline Complex Software Builds

Serena® ChangeMan® Builder™ is a comprehensive, automated software build solution spanning client/server, IBM mainframe and web environments. Builder supports multiple operating environments, programming languages, integrated development environments (IDEs) and configuration management systems. It is seamlessly integrated to Serena software change and configuration management (SCCM) solutions, including Serena® ChangeMan® Dimensions™ and Serena® ChangeMan® Professional™.

Serena ChangeMan Builder automates, accelerates and simplifies the build process so that applications are built correctly the first time and every time. No scripting is required, although pre-configured Builder scripts may be modified as required. Choose the command-line interface or work in the intuitive web client for convenient access to Builder from any platform or location.

Builder is based on industry standards, and leverages Serena technology and a strategic partnership with Catalyst Systems.

Product Capabilities

Web Client Interface

The Serena ChangeMan Builder web client interface lets you easily and quickly start build jobs, define new build jobs, or review build reports from a standard web browser. Globally distributed development teams will find it easy to use the web client interface from anywhere.

Java Language Support

Today, pure Java applications are often built using the very popular ANT scripting tool. However, many applications today require an interface to other languages like C or C++, which typically requires two separate build processes: one for the Java code, and one for the C/C++ code. With Builder, your organization can rely upon a single build process to build from all programming languages.

Pre-configured for Most Popular Compilers

Builder comes with a Knowledge Base that is preloaded with hundreds of standard Build Types and Build Rules. A Build Type indicates which rules should be evaluated by the Build engine for a given target application: a Jikes Java compile or JDK Jar, for example. Build Rules then indicate the order in which components of a particular Build Type are to be compiled and the name of the build script that will be used to perform that step in the build process. For example, a rule may indicate that a (xxx.cpp) file is the input to building a (xxx.o) target. Build Scripts contain the commands that will be executed during the build, including the setting of compiler options and environment variables. Build scripts are standard Perl and in many cases run fine as is, but you can modify the scripts as you see fit.

Dependency Analysis and Impact Reporting

The Dependency Impact Analysis in Serena ChangeMan Builder is truly a luxury in the overall development process. Using Implosion and Explosion reports, you can see the relationship between source and executables, revealing which executables are affected by a change to any given file.

Footprinting and Bill of Materials

The Footprinting and Bill of Materials facility make it possible to trace the creation of a given executable. Bill of Materials lists dependencies used to create the final deployable object, including all the environment variable settings of the build machine. Footprinting additionally inserts this information inside the actual executable. Using the supplied OMIDENT program, you can review all information about how the executable was created.

Remote Application Builds

Regardless of the platforms required for the build, Builder allows one user to initiate and monitor the entire process from a single build console. Remote Build Servers (RBS) require the Enterprise Edition of Builder, and an additional remote build server license, but can be installed on any supported platform and then be managed through the Builder web client. Build Logs are managed by the Builder Knowledge Base Server, allowing authorized users from any end-user workstation to view logs and build results from the remote build location.

Serena ChangeMan Builder Product Editions

Serena ChangeMan Builder Standard Edition – Designed and optimized for Windows operating systems. It comes standard with Serena ChangeMan Professional Suite for SCCM, and with Serena® ChangeMan® Dimensions™ for SCCM and IT Infrastructure Management.

Serena ChangeMan Builder Enterprise Edition – Provides automated build management to all development platforms and environments; adds support for Java, impact analysis, and remote builds. Available as an upgrade to the Standard Edition.

Serena ChangeMan Builder for z/OS – For use with Serena ChangeMan Dimensions only, extends application builds to support the IBM mainframe environments: OS/390 and z/OS.

System Specifications

Serena ChangeMan Builder is based on industry standards. The current release, v.6.3.1, supports the platforms listed below. Support for new technology is added continuously, however—please contact Serena Sales offices in your regions for the latest information.

Supported Operating Systems

- Microsoft Windows 2000 Professional Edition
- Microsoft Windows XP Professional Edition
- IBM RS/6000 AIX 5.1, 5.2
- HP-UX 11. 11.00, 11.11
- Sun SPARC Solaris 8 & 9
- Red Hat Linux 7.1, 7.3, 8.0, 9.0
- Red Hat Enterprise Linux 2.1
- IBM OS/390 V2 R6 or later, z/OS V1.1 or later

Java Runtime Environment and Java Plug-In

- Java Runtime Environment 1.4.1_02 through 1.4.2_05 (Required)
- Java Plug-in 1.4.1_02 through 1.4.2_05

Perl and ANT

- Perl 5.6.0, 5.6.1
- ANT 1.41 or higher (included in the command-line client installation for Windows)

Web Browsers

- Microsoft Internet Explorer 5.5 through 6.0
- Netscape Navigator 7.0 through 7.1
- Mozilla 1.4 through 1.6

Supported IDE Integrations

- Microsoft Visual Studio 6.0
- IBM Visual Age for Java 3.5.3
- IBM WebSphere Studio Application Developer 5.0

Client Requirements (Windows and UNIX)

- Standalone web client: 5 Mb disk space, 50 Mb RAM
- Command-line client: 50 Mb disk space, 64 Mb RAM

Server Requirements (Windows and UNIX)

- Knowledge Base server: 100 Mb disk space, 512 Mb RAM
- Remote Build server: 130 Mb disk space, 512 Mb RAM

Serena Supported Configuration Management Systems

- Version Manager 8.1
- Dimensions 9.1.0

About Serena

Serena Software is the largest company solely focused on managing change in the IT environment. Serena's products and services automate process and control change for teams managing development, web content and infrastructure. Based on 25 years of innovation in process and configuration management, Serena Application Framework for Enterprises (SAFE™) solutions enable customers at more than 15,000 sites worldwide and 49 of the Fortune 50 to improve IT governance, mitigate risks, support regulatory compliance, and boost productivity and quality. Serena is headquartered in San Mateo, California, with offices throughout the U.S., Europe, and Asia Pacific.

Contact

To learn more about these products, and how to begin implementing comprehensive change management across your IT environment, visit Serena at www.serena.com or write us at info@serena.com.

