

## Serena ChangeMan Builder Product Overview A COMPREHENSIVE AUTOMATED BUILD SOLUTION FOR THE ENTIRE ENTERPRISE

Spanning web, client/server and mainframe platforms, Serena® ChangeMan® Builder™ is the industry's first comprehensive, automated build solution for the entire enterprise. ChangeMan Builder supports multiple operating environments, programming languages, integrated development environments and configuration management systems. Leveraging Serena technology and a strategic partnership with Catalyst Systems, ChangeMan Builder is seamlessly integrated to Serena software configuration and change management solutions.

#### BENEFITS FOR THE ENTIRE ORGANIZATION

## **Project Manager**

For the project manager, ChangeMan Builder creates a reliable, repeatable process that ensures that the application is built correctly every time. Correct builds reduce risk to the project schedule and lower team stress levels all around. By preventing build-related regressions that cost time and divert resources, ChangeMan Builder helps development and QA teams move more quickly to testing cycles.

### **QA/Test Manager**

No longer will the QA team arrive in the morning, unsure of whether the build completed properly and wondering if testing must be postponed to deal with build-related regressions. Instead, with its reliable and automated build process, there are fewer delays due to build errors, and QA teams and managers have more time to do the work that counts when they use ChangeMan Builder.

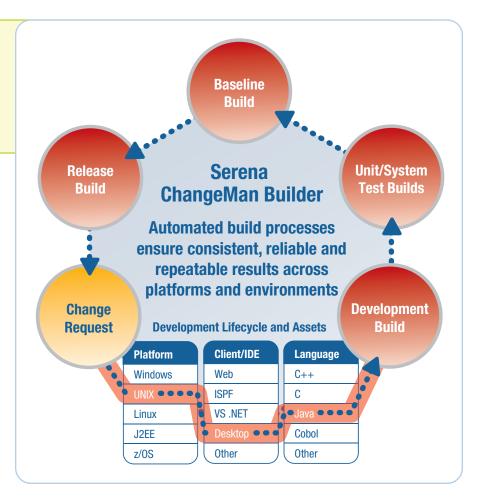
## **Build/Release Engineer**

For the release engineer, often called the 'build guru' or 'buildmeister', ChangeMan Builder eliminates the tedious and error-prone task of manually scripting the software build. ChangeMan Builder ships with many pre-defined build types that can be quickly selected depending upon what programming language, and operating platform is targeted. The open architecture and flexibility of ChangeMan Builder allow the release engineer to add or modify build types as necessary. And if the release engineer must make a customization, then they can modify the underlying processes and scripts that automate the build process.

## **Developer**

Every developer builds software – it's a natural part of the development process. As the developer makes changes, he or she will compile those changes and test to ensure that they work as expected. Often, this build process is separate from the 'system' builds that are performed by the release engineer. By integrating to popular IDEs, ChangeMan Builder allows the developer to use the same, reliable build process used by the release engineer, and still have control over the compiler options necessary for debug builds. Now the developer can focus on fixing and writing code instead of modifying the arcane and hard-to-read build scripts – and the release engineer can relax because the developer is using a consistent process.

ChangeMan Builder integrates the power of Serena Enterprise Change Management for predictable impact to software configurations.





#### **Web Client Interface**

The ChangeMan Builder web client interface gives the organization rapid access to start, check status, or review reports from a standard web browser. The remote access that the web client interface provides supports the needs of globally distributed development teams.

## **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 ChangeMan Builder, organizations can rely upon a single build process to build all the necessary programming languages.

### The ChangeMan Builder Knowledgebase

The Knowledgebase is delivered pre-loaded with over 2000 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 are composed of the commands that will be executed during the build including the setting of compiler options and environment variables. ChangeMan Builder build scripts are delivered as standard Perl scripts and may be modified to suit the needs of the individual organization and application.

## **Dependency Analysis and Impact Reporting**

Dependency Impact Analysis feature in ChangeMan Builder is truly a luxury in the overall development process. Through the use of Implosion and Explosion reporting, full dependency information can be reviewed by showing the relationship between source and executables.

## **Footprinting and Bill of Materials**

The Footprinting and Bill of Materials facilities provide a list of dependencies that were included in the creation of the final deployable object in report format including all the environment variable settings of the machine where the build was executed. Footprinting additionally inserts this information inside the actual executable. Using the supplied OMIDENT program, a user may view information about how the executable was created.



Regardless of the platforms required for the build, ChangeMan Builder allows one user to initiate and monitor the entire process from a single build console. Remote Build Servers (RBS) can be installed on any supported platform and then managed through the Build Client. Build Logs from the RBS are stored remotely, but managed by the ChangeMan Builder Knowledge Base Server (KBS), allowing authorized users from any end user workstation to view logs and build results from the remote build location.

# IDE Integrations – Visual Studio .NET and WebSphere Studio Application Developer

Many development organizations today use an integrated development environment (IDE) to develop their applications. ChangeMan Builder integrates directly to IBM's WebSphere Studio and Microsoft's Visual Studio .NET, providing the benefits of a controlled and consistent build process directly from the IDE.

## **Broad Platform Support**

ChangeMan Builder operates on Windows, Linux, Solaris, HP-UX, AIX, z/OS and OS/390.

#### SERENA CHANGEMAN BUILDER PRODUCT EDITIONS

#### Serena ChangeMan Builder Standard Edition

ChangeMan Builder Standard Edition is designed and optimized for the Windows computing platform, providing the most comprehensive, automated build solution in the market. For organizations that build Windows applications and technology, or do not have a need for remotely building applications, Standard Edition is the perfect fit. Standard Edition is bundled with Serena® ChangeMan® Dimensions™ Standard Edition and ChangeMan Professional.

## Serena ChangeMan Builder Enterprise Edition

ChangeMan Builder Enterprise Edition is the perfect solution for organizations that develop and support applications across a wide range of operating environments, or ones that are developing Java or J2EE applications. Enterprise Edition provides remote build capabilities, including the ability to initiate a build across multiple platforms, or request a UNIX application build from a Windows platform. Includes use and group management, impact analysis reports, Java support, and UNIX platform support. Enterprise Edition is available as a standalone product, bundled with Dimensions Enterprise Edition, and as an upgrade to Standard Edition.



## Builder for z/OS

ChangeMan Builder for z/OS is a component of the Dimensions for z/OS product suite. This product provides support for IBM mainframes running OS/390 or z/OS. Builder for z/OS is fully integrated to the Dimensions clients, allowing one to initiate a mainframe build from any other supported platform. An ISPF interface provides a mainframe-native environment for organizations maintaining, and developing new mainframe applications.

Feature	ChangeMan Builder Standard Edition	ChangeMan Builder Enterprise Edition	ChangeMan Builder for z/OS
Define build types (Windows)	х	х	
Define build types (Java, AIX, Solaris, HP, Linux)		x	
Define build types (z/OS)			х
Set up builds (Windows)	х	x	
Set up builds (Java, AIX, Solaris, HP, Linux)		x	
Set up builds (z/OS)			х
Execute local Windows builds only	х		
Execute local and remote builds on Windows and UNIX		Х	
Execute Java build		х	
Execute builds on z/OS			х
Manage projects	х	x	х
Manage users	х	x	х
Manage groups		x	x
View reports (build logs only)	х		
View reports (build logs and impact analysis)		x	х
Dependency footprinting and Bill of Material text based reporting	х	х	х
Smart logging	х	x	х
Set working directory	x	x	х
Field level Help	х	x	х
Configuration Builder conversion utility	х	Х	х
Web client and command-line client	х	Х	Х
Web client administration	х	Х	x

#### INTEGRATED TO SERENA DIMENSIONS

ChangeMan Builder is a fully integrated component of Serena Dimensions, allowing users to initiate and monitor build activity from with the Dimensions user clients – whether web, desktop or command-line. This tight integration enables a complete, closed-loop change management process, including the process of building the software application.

#### INTEGRATED TO SERENA CHANGEMAN VERSION MANAGER

ChangeMan Builder is integrated to Serena® ChangeMan® Version Manager, a component of Serena's Professional suite for complete software configuration management. The integration allows users to initiate a build directly from the Version Manager, improving developer productivity while providing the organization controlled and consistent build management.

#### **AVAILABILITY**

Product Edition	Standalone	Professional	Dimensions	Dimensions Enterprise Edition	Dimensions for z/OS
Builder Standard Edition		Х	Х	n/a	n/a
Builder Enterprise Edition	Х	Upgrade	Upgrade	х	n/a
Builder for z/OS	n/a	n/a	n/a	n/a	х

#### **ABOUT SERENA**

Serena is a global provider of application lifecycle management solutions that deliver control, insight and predictability to enterprises that are dependent on software application to run their businesses. Serena helps companies protect and optimize these businesscritical assets, supporting regulatory compliance, improving IT governance, mitigating risks and boosting productivity, quality and ROI.

#### ABOUT CATALYST SYSTEMS CORPORATION

Catalyst Systems Corporation, the leader in application build management technology, is a premiere provider of configuration management software and consulting services.

Openmake is an evolutionary build management tool designed to eliminate the need for XML scripting and makefiles while empowering developers with the robust functionality of Ant.

#### CONTACT

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



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