

ClearEnv Advantage

What ClearEnv adds to your ClearCase Platform

A GoMidjets White Paper

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Introduction

The Challenges of ClearCase Configuration

IBM ClearCase allows developers to coordinate efforts, simplify the software delivery process and boost productivity.

To enjoy the benefits of ClearCase, each developer must install and configure a ClearCase environment on a workstation or a view server in order to work with the ClearCase server managed by an administrator.

Since ClearCase can be integrated with many environments and offers many options, configuration is both crucial and complex.

However, ClearCase does not provide administrators with an easy way to control client configuration. To create a work station for a development, QA, release managers, or technical writing personnel, a lengthy process of setting up the client is required.

Setting up a new working environment takes an hour or more, at which time users are unable to work, and administrators have to handle the installation. This process must be repeated for every new version or project.

The ClearCase *Join Project* wizard attempts to overcome this challenge by graphically presenting setting options and guiding the user through the configuration process.

However, *Join Project* does not solve the basic problem, since control of the installation is still on the client side, rather than the administrator's. This situation results in faulty configurations, difficulty in integration with complex environment and weaker IT governance.

ClearEnv: Create New Environments at the Click of a Button

ClearEnv is a ClearCase add-on that takes a different approach to configuring work environments. It enable administrators to control the configuration of work stations, allowing them to have better control of actual installation, and saving time for both users and administrators.

Starting a new project is quick and easy with ClearEnv. The administrator configures environments which are installed automatically in the background, saving costly setup time and man hours.

Using ClearEnv organizations can expect a productivity gain of at least 1 hour for each environment they install. This may amount to many working days even in a typical organization.

An additional advantage is a greater control of the administrator on actual installation, enabling better management and IT Governance.









How does ClearEnv Work?

ClearEnv has two components: Control Center installed on the network as a shared resource, and a client installed on each work station.

Administrators use the Control Center to define the development environment for each project, including general properties, naming conventions, streams (branches) and views structure and strategy, and more. The settings for each work environment are saved under a project name.

Once the environment is configured, creating a new environment is as easy as pressing a button. Users install a client on their machine that prompts them for the project name, and then automatically installs a complete environment for development, integration or other needs.

ClearEnv also enable administrators create a "silent installation" that requires no user intervention.

ClearEnv Main Advantages

ClearEnv adds powerful functionality to ClearCase that allows both administrators and developers to focus on their main tasks. It also provides administrators with better control and visibility.

Its main advantages are:

- 1. Standardized deployment and work environments
- 2. Enhanced functionality
- 3. Enables IT Governance and better security
- 4. Supports multi-platform and interoperability









ClearEnv and Join Project Compared

Standardization

Standard development environments and naming conventions simplify administration and prevent mistakes. While ClearCase allows users to set their own environment, ClearEnv provides them with a ready-to-go environment that works seamlessly with other project resources.

	ClearCase – Join Project	ClearEnv
Wizard Complexity	Guides user through 6 screens with many options. It does little more than adding GUI to the basic installation.	User has just one choice – which project to install. Everything else is automatic. In Unix/ LINUX users also have to supply a password.
Views Included in Project	Users select their views manually from a list. Too few views may interfere with normal work, while too many may breach security.	The administrator determines which views are necessary for the environment and they are included automatically.
Storage Locations	Users choose locations, which leads to mistakes and confuse the file structure.	The administrator determines where to store files and they are created automatically.
Branch Management and R&D Methodology Support	Users choose which branches to join, or where to open new branches. Hence, enforcing an R&D methodology is almost impossible, and mistakes commonly occur.	Administrators have full control of what branches users join or open. Thus, administrators can implement advanced methodologies, including private, team and feature streams, Agile, Scrum and FDD.
ClearCase Explorer shortcuts	Users create shortcuts manually.	Shortcuts are created automatically.









Enhanced Functionality

ClearCase offers many options to administrators and users, but many of them are very difficult to implement, or require R&D efforts. ClearEnv adds a wealth of features to ClearCase in a friendly and automatic manner.

	ClearCase - Join Project	ClearEnv
API	None. Installation must be done manually.	Integration with other systems is simple with full access to parameters and command line for external scripts.
Scripting	The environment is setup manually and scripts cannot be added before or after installation.	A simple option to run a script before or after installation, allowing easy integration with other systems and IDE environments (e.g. Eclipse, Visual Studio).
Command line	Not available.	Possible to create new environments automatically, with no need for user interaction. Such tasks can be scheduled beforehand, or get generated from a script.
View types	Snapshot (static) and dynamic, are available, but not both at once.	Users may choose each of the two view types or both, without restrictions,
Multi-regions	Possible, but requires complex manual setup.	Automatic setup as part of normal installation.
Create a project continuation	Possible to create a new project on the basis of an existing one, but requires a complex manual setup of dozens of options, which frequently leads to mistakes.	A simple option for the administrator to base a new project on a previous one. It will be implemented automatically as part of normal installation.
Check for free space	No checks. Environments are installed on available space, resulting in faulty installations.	ClearEnv verifies there is enough storage space based on initial settings.









IT Governance & Security

Compliance requirements and the growing importance of IT in modern organizations have made information gathering and control of IT resources paramount. ClearEnv allows a much better control and tracking of development projects.

	ClearCase – Join Project	ClearEnv
Logs	None.	ClearEnv documents each creation of an environment, including a time stamp, user name and file names.
User Groups	Users can join any project, and create environments even in projects they are not part of.	Each group of users can be assigned its own projects, preventing access to others.
Access to ClearCase Project Explorer	Developers, managers and administrators must have access to the sensitive Project Explorer.	Developers do not need Project Explorer for their work. Administrators can restrict access as necessary.
Access control policy	Access control policies can only be implemented manually by personnel.	Policies can be defined before- hand, so correct access control will be applied to all branches and environments.

Interoperability

R&D teams are required to develop technology for heterogeneous systems and innovative storage and network platforms, which they also use internally. These may include Windows, Linux/ UNIX and storage platforms. ClearEnv facilitates working in heterogeneous environments with ease.

	ClearCase – Join Project	ClearEnv
Cross-platform support	No automatic cross-platform support. Requires about 20 manual steps to coordinate between different environments.	Fully automated support included in basic product.
3 rd party storage support	Can be done manually using the Region Synchronizer.	Automatic setup on 3 rd party storage platforms included in basic product. No need for additional tools. Supports NFS, Samba, NAS (IBM NetApp,









Automate your Advantage

EMC, HDS) and SAN.	
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Conclusion

IBM ClearCase is one of the most advanced software configuration management (SCM) offerings on the market, but its environment installation process is complex and time consuming.

By adding automatic installation and other functionalities, Go Midjet's ClearEnv saves time and effort in setting up new projects and work stations. Further advantages include standardization of the environment, advanced features, better security and IT Governance, and seamless integration in heterogeneous environments.

Learn more

To learn more about ClearEnv and download a trial version, visit the ClearEnv product page at: www.gomidjets.com/ClearEnv

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