



Plastic SCM 2.0 Features:

Independent Workspace and Repository Servers

The independent workspace and repository servers system is one of the new features included on the improved Plastic SCM 2.0 version.

This useful feature provides another Plastic SCM powerful and customizable characteristic, allowing users to set up as many repository and workspace servers as required. The obvious result: a remarkable performance increase and greater flexibility in both the client and server configuration.

Types of servers

Plastic SCM works with two different types of servers: the repository and the workspace server. These two servers will be usually located on the same machine, but Plastic SCM architecture allows separating them whenever it is required, as we will see on the usage examples.

Repository Server

This type of server provides access to data as well as actions such as creating new repositories and deleting old ones. There may be one or more repository servers depending on the speed of the system as well as the number of users.

As far as the users are concerned, the files stored in Plastic SCM could be located in their machine as they appear magically on their system, but they are actually stored in the powerful repository server, which is also in charge of the following actions:

- Repository creation, deletion and edition.
- Items management (directories and folders), providing access methods to the stored data and managing storage operations.
- Management of branches inside the repository.
- Management of markers inside the repository.
- Providing system information and verifying compatibilities

Workspace Server

This type of server provides different functionalities for managing workspaces. It can be located either on the same machine as the repository server or on a different one, providing a higher level of isolation to workspaces. One workspace server can retrieve data from different repositories located on different machines. This will centralize the communication with the client machines.

Depending on your company's requirements and needs you can choose to keep all the workspaces together on the same server or more than one. Let's see the actions the workspace server is in charge of:

- Managing workspaces and their selectors, which are the specifications indicating the workspace server which items must be loaded.
- Providing the clients with the required operations.
- Providing system information and verifying compatibilities.

Usage Examples

The best way to understand what your company can achieve with the possibility of having independent workspace and repository servers is seeing real cases, so let's see two cases of which large companies benefit from using multiple servers.

Multiple Repository Servers:

Why having different Repository Servers? Plastic SCM database scheme is supported by widely-used and reliable database backends (Firebird or SQL), which makes it possible to have a very large repository, several small repositories or several large ones: In the case of a company with a large number of different projects that do not share code in common, the best alternative would be dividing each type of project on a different repository server (as many as needed), so the load is divided according to the projects.

The most transparent method of working will be setting each repository server containing repositories relating to a certain type of projects, (for example Projects type 1).

These repository servers will be linked to the workspace servers related to those teams working on Project type 1 as well, so each team of developers working on a related kind of project will be sharing their repositories and will only need to access a certain repository server, so the workload is properly and intuitively divided according to the company's needs.

Figure 1 shows a multiple repository server example:

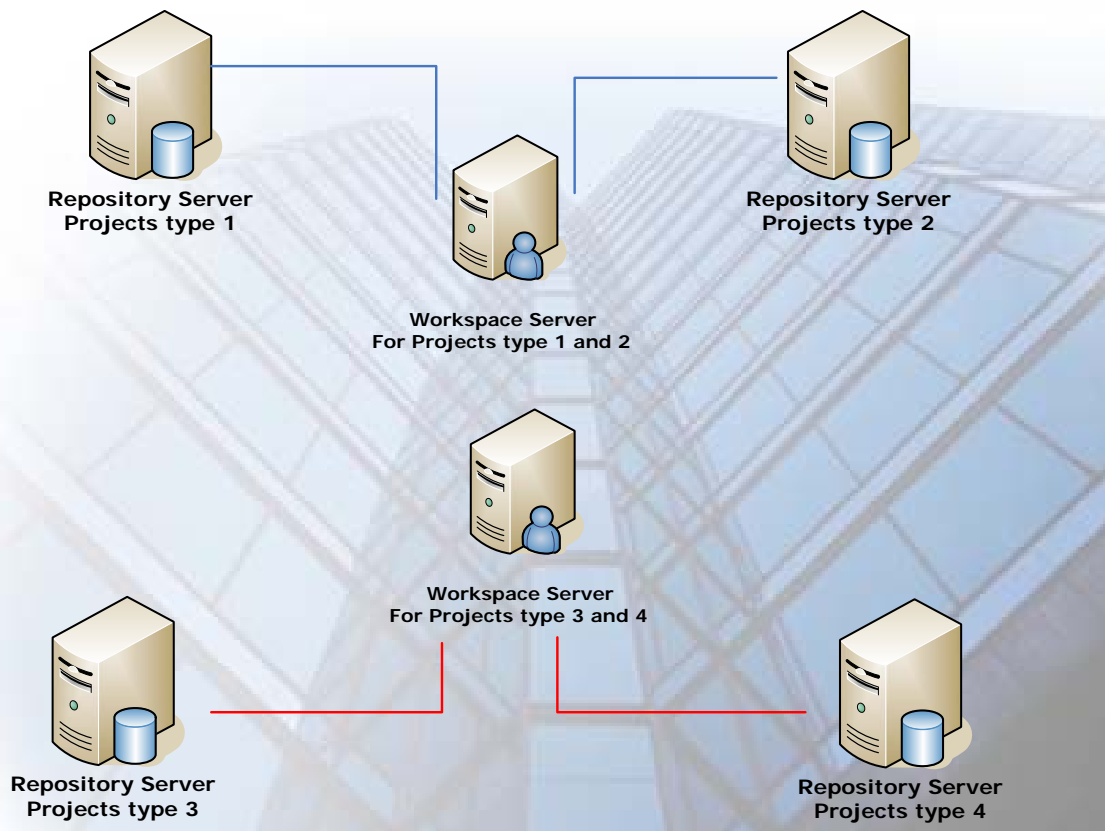


Figure 1: Multiple Repository Servers

The opposite case: Multiple Workspace Servers.

On the second case, as shown on Figure 2, we have a development company with central offices in London and subsidiaries in four other locations. They all work on the same kind of projects so they share a great deal of information, which would be the reason of choosing to have just one repository server instead of locating one on each site (which would also be possible if needed).

If there was only one workspace server (installed with the repository server), the workload on the server will be very high and its performance will decrease, especially on this case on which the company has offices on several places. Plastic SCM solution: simple!, just mounting a workspace server for each of the locations, each of them will just contain the workspaces of the team of that location and the communications with the repository server will be smooth as highly used operations such as retrieving a check outs view will be done from each of the local workspace servers.

In any case, if each different location needed to have its own repository server and workspace server, or more than one, it can be easily achieved as Plastic SCM allows using as many servers as needed.

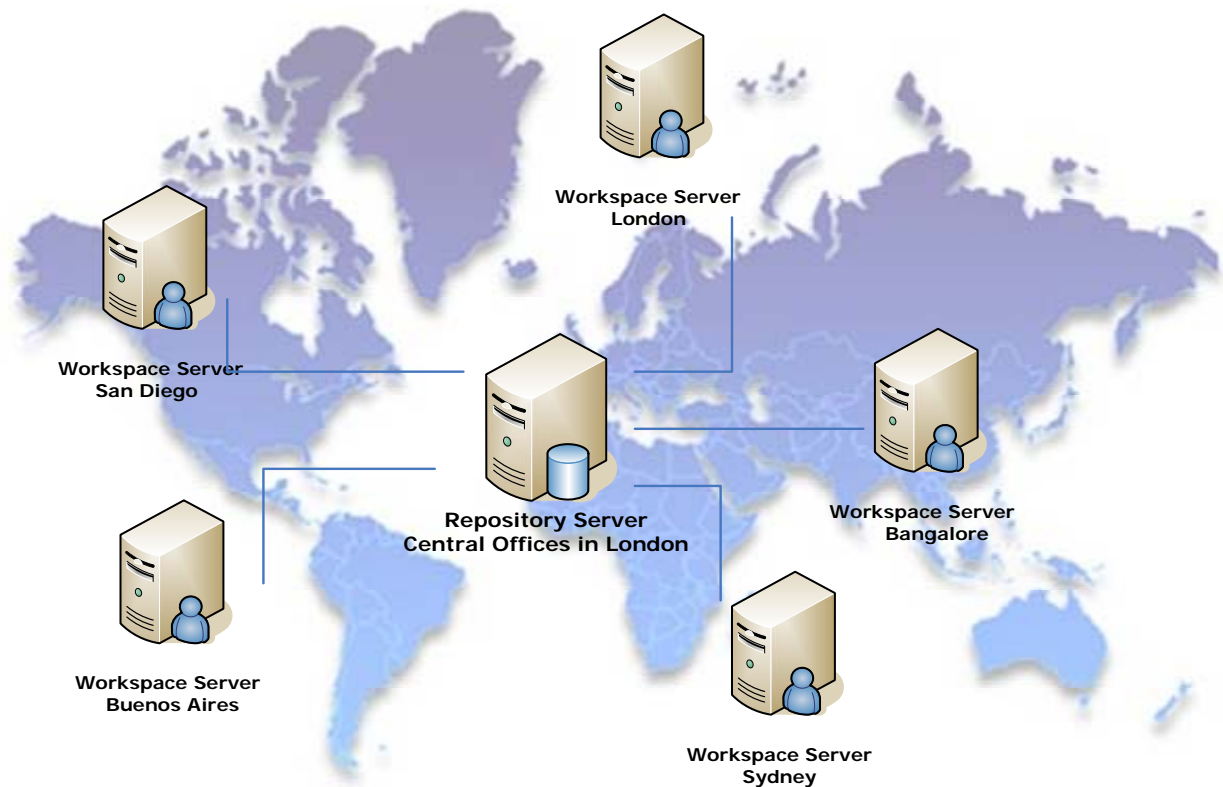


Figure 2: Multiple Workspace Servers

You might consider that this feature only applies to big companies and if yours is a small development company you may think that the multiple server system does not apply to your organization but you should not think small: your company may be increasing over time and you do not want to be left behind by your tool's restrictions.



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