# The Benefits of Aldon’s Single, Centralized Inventory Design

In the current world of version control solutions, there are two fundamental design choices for hosting the repository: a single, centralized approach and a distributed approach. While there are certainly merits to each approach, by implementing the centralized approach, we believe that our customers attain the more comprehensive collection of benefits. They are briefly summarized below.

### Increased Visibility

Aldon’s centralized inventory provides a central point where everyone can monitor and track application development, regardless of database technologies, programming languages or platforms. This automatically improves communications between all parties in the application change process. Managers and extended team members have visibility and control for real time project information, activities and artifacts. Furthermore, disparate teams find it easier to collaborate on joint projects, reducing the so called “silos of development” effect.

### Increased Security

Having a centralized inventory makes the process of configuring even the most complex workflow processes and security schemas much more straight-forward. Aldon’s Role-based Security ensures that all users have access to all the artifacts and functionality that they legitimately need to perform their daily functions, but no more. This model also provides the ability to fully lock changing artifacts that cannot be merged, such as jpegs and word documents. Finally, a centralized inventory can be more easily secured, backed up, replicated for high-availability, audited and reported against. Deployment to live production servers is much easier to configure, manage, secure and track if the deployment is performed from a single, centralized repository.

### Increased Productivity

As mentioned above, all artifacts are available to all developers (based on their authority settings). This ready access to all versions makes it much easier, and therefore, more common, for developers to work collaboratively much sooner in the development process than is possible with other methodologies. With a single repository, you are able to quickly pull together all artifacts necessary for a single task, whereas in a distributed environment, this may be quite difficult if the items are dispersed.

Aldon’s advanced branching and merging technologies give developers the tools they need to manage even the most complex project workflow requirements. In fact, creating branches in Aldon is an extremely fast process because Aldon only duplicates the structure of the original trunk, the artifacts themselves are not copied until they are changed. This also enables very fast identification of what artifacts have been modified in this branch. Thus, even large customization projects and other intrusive changes can be developed in parallel to the mainline. Aldon keeps them separate but in sync with the trunk until they have evolved and stabilized sufficiently.

Other developer productivity enhancements include:

* Checkpoint work in progress by returning to the repository for safekeeping, but not making it generally available to other developers
* Easy and straight-forward methods to compare and merge the multiple versions of artifacts that exist in multiple branches.
* Automatic flagging of potential conflict scenarios when one artifact in a multi-version combination has changed.

## Ease of Audit Reporting

Having a single place to go for all audit history data is a definite plus when tasked with gathering proof of version and object control for the auditors. Aldon’s web-based reporting solution is designed to easily pull together the reports you need, whatever platform they were for.

## Reduced Network Traffic

Distributed solutions copy the entire structure locally. Therefore, they place an enormous strain on corporate network bandwidth. Aldon’s centralized solution does not require the entire workspace to duplicated, thus causing less of a tax on the network.

## Conclusion

The final advantage Aldon provides, of course, is that it is much more than a version control solution. Aldon goes well beyond where traditional solutions such as CVS, VSS and SVN stop. Aldon is a full Application Lifecycle Management solution, providing full coverage of an application change from its initial request, through its change lifecycle (e.g. Development, Integration, QA) and to its final installation in production. Workflows, from the simplest and most direct to the most complicated, can be quickly configured and maintained with minimal interaction from administrators.