

Technalign – Repository Server Placement

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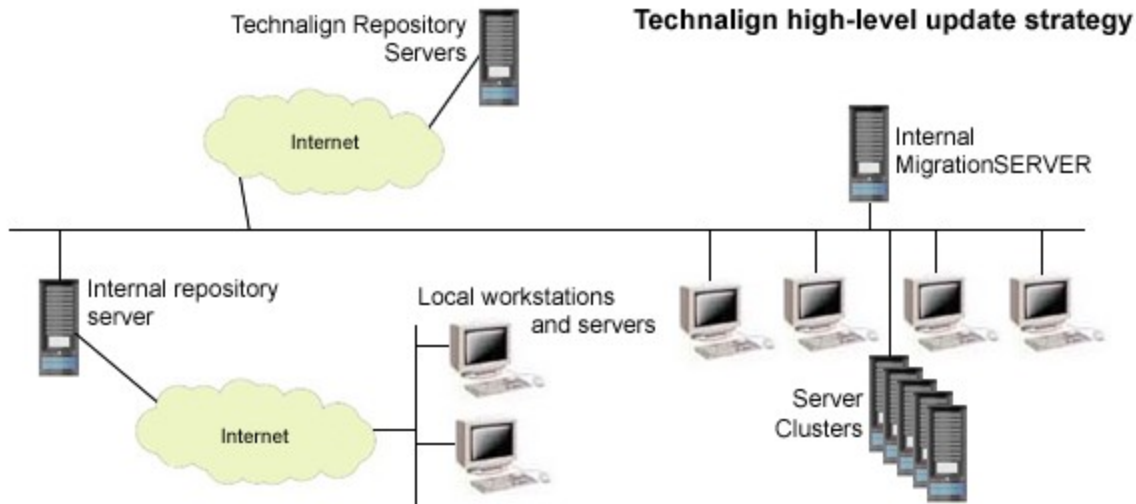
If your organization requires assistance in setting up a network or distribution system as discussed in this whitepaper, please contact a Technalign Gold Partner or above for assistance. Technalign also provides consulting assistance when a Gold Partner is not in your area. Depending on location globally, Technalign maintains field Account Managers, Consultants and support personnel.

This whitepaper addresses the use of Pioneer repository servers in a larger SMB, Enterprise or educational institution to provide assistance in the design and deployment of repository, or update servers. The end of this whitepaper also discusses additional applications such as Calendaring and Exchange replacements for updates and other repositories. Additional whitepapers discuss setting up Windows Domain Controller when required or strategic backup solutions needed in a company to prevent the loss of data.

The major concern today in delivering updates to systems today is bandwidth that requires updates to be delivered to workstations and servers. Updates include security, application, drives and utilities to all Pioneer workstations and servers in an SMB or enterprise. This whitepaper explains the methods that may be used to “push” updates to your Pioneer workstations and servers. Of course some companies do not run updates on their systems, but companies should have a policy to assure updates are performed on systems in a timely manner to assure all workstations and servers in an enterprise have their systems up-to-date.

When planning your Pioneer implementation, Technalign recommends that you consider all factors in your design. For example, your organization only utilizes the main, cowboy and wrangler repositories. In this case you may only want your repository server(s) to pull those updates that are required in your company. In this example you may only require updates for 2,000 applications versus the 23,800 applications available on Technalign's main repositories. You may also limit the applications that are used on your workstations by only providing only those applications on your repository servers that would be used in your company. Please see the last section in this whitepaper discussing the population of your repository server.

The simple diagram below displays a Technalign/Pioneer repository server that provides updates to an organizations internal repository server to push updates to internal workstations and servers within several company locations.



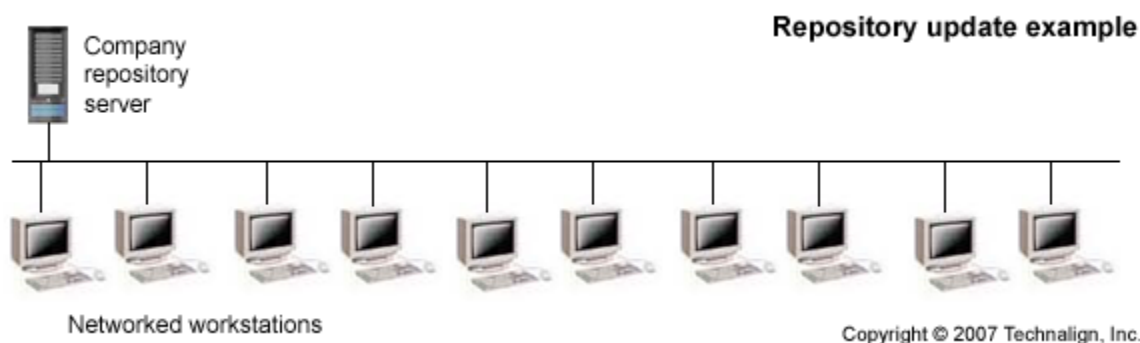
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Diagram 1 – Label A (Technalign repository servers)

Technalign maintains Pioneer repository servers in critical locations around the world. Technalign allow provides dedicated repository servers when required for an enterprise. If you wish to get more information about a dedicated Technalign repository server, please contact a Technalign Gold Partner or Technalign directly for more information. In the majority of cases, a dedicated repository server is not required. Repository servers contain applications, drivers and utilities to be used by users of all Pioneer operating systems. Technalign maintains specific repository servers for a multitude of requirements such as the cowboy, cowgirl and wrangler repositories. You can find more information about Technalign repository servers on the www.technalign.org website.

Diagram 1 – Label B (company repository server)

Many companies are setting up an internal repository server to minimize the impact of updates to a workstation providing an effective method of utilizing the corporate bandwidth requirements. An example would be 500 workstations located on a network within a company or company division. Providing updates to 500 workstations would cause a massive amount of updates to be pushed through the corporate internet connection since 500 workstations would require the same amounts of updates to be provided. Placing a Technalign repository server in a network would provide only one set of updates to that repository server. This allows a single update to be provided to the 500 workstations within that group of workstations.

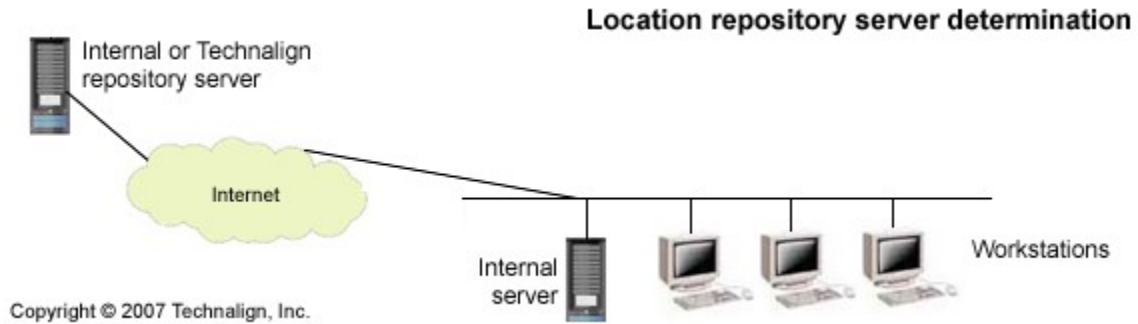


In this example, a set of workstations would be provided updates via an internal repository server thereby conserving the bandwidth requirement of the company to update workstations. Pulling updates to a single server and updating the workstations on the network served by that repository server will prevent the attempt of updating a multitude of workstations and servers with the network via a single link to the internet.

Even in this example, your company may have workstations at other locations requiring updates to the workstations. Allowing updates to the workstations as in Label C, you may decide that the number of workstations does not warrant a second repository server to be setup by the company and the bandwidth is sufficient to provide updates to the workstations at that location.

Diagram 1 – Labels C and E (other internal/networked locations)

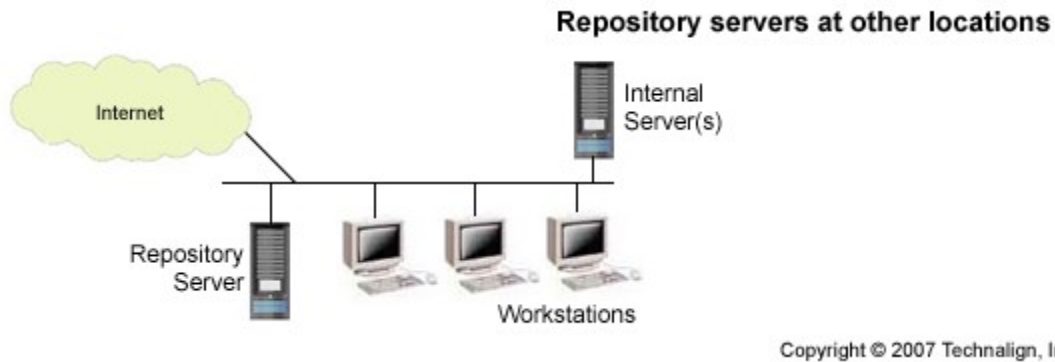
Label C displays a location networked to Label B without a repository server located in that location. An example would be a division, school, satellite office or remote government office at another location reporting back or structured with the parent at Label B. A careful analysis of the bandwidth requirements may not require that a repository server be located in that location since the amount of workstations and the bandwidth allow enough for the workstations to be updated through an off period, such as evenings or off hours during the workweek.



A careful network analysis of the locations within your organization will allow your company to effectively provide updates to a set of workstations and servers within your other locations. There are two possible solutions to updating the location in Label C. Solution 1 would be to utilize the repository server displayed in Label B while providing updates to the workstations. Solution 2 would be to provide the updates to the workstations via the Technalign repository server. In either case, your workstations will receive the updates required.

Diagram 1 – Labels D, F and G (other location repository servers)

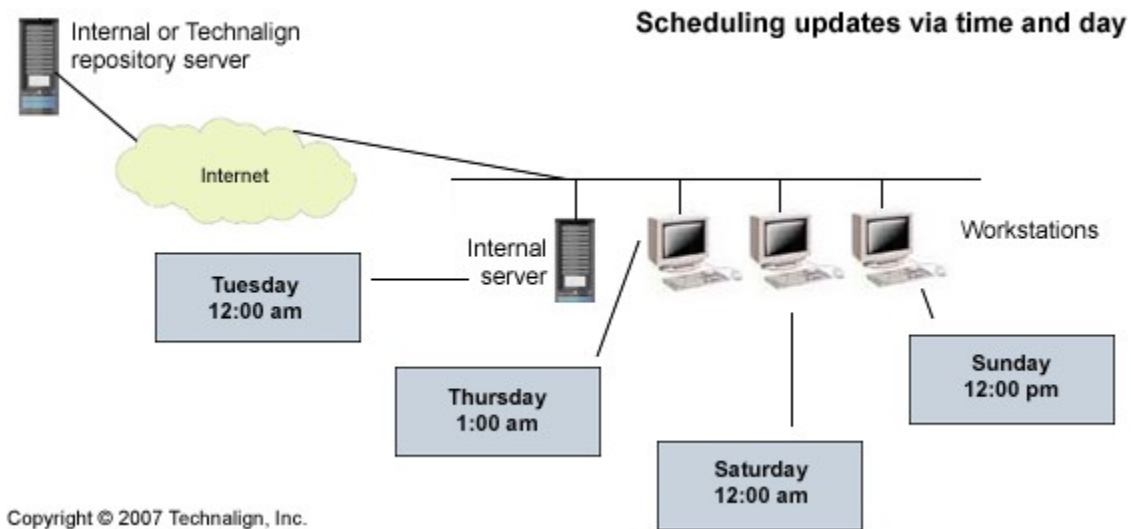
Label D shows another location, for example, that is a child of the main location (Label B and C) that has enough workstations to warrant another repository server at that location. Deciding on an additional repository server is simple, calculate the bandwidth and number of applications, utilities and drivers that are required periodically at that location. If the location requires another repository server, you would setup the repository server at that location for example. The diagram below demonstrates some of the requirement calculations that would need to be performed for that location.



The location on Label D may have several workstations and a server to a large number of workstations and servers depending on your organization. Bandwidth may be as small as a DSL or ISDN link to the location providing a simple and inexpensive connection to the internet at the location. Depending on the number of servers and workstations, the number of applications, drivers, utilities and Pioneer to be updated; you may require a repository server at that location to minimize the amount of updates to the workstations since your bandwidth may not be capable of downloading all of the updates to the servers and workstations. An alternative method of updating your workstations is discussed later in this whitepaper by scheduling the updates to workstations during different times of the day and week.

Alternative methods of updating – scheduling

There are alternatives for many companies updating their workstations via scheduling updates to the servers and workstations at different times and days of week. The example below shows a single repository server, either one of the Technalign repository servers or an internal server setup in the company. Calculating the estimated updates with the applications run in your organization makes it simple to determine a schedule of updates and when to perform those updates. If your systems do not run many applications as an example, you may only require an update be run once a week on weekends during periods of time the location is not operational.

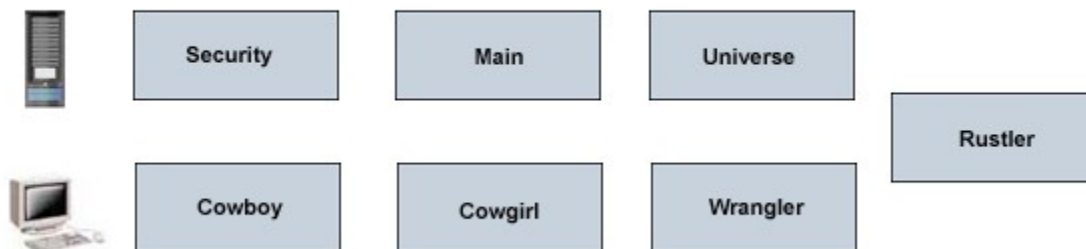


Careful planning within your locations will make updating your workstations and servers easy and manageable with the available resources of that location.

Populating your repository servers

Since a repository server provides updates to your servers and workstations, you will have the ability to populate them by providing only those required applications, utilities and drives that are being used in your company. For example there are 23,800 applications, drivers and utilities that are maintained in the Technalign repositories. Repositories are identified by name, for example there are some named Main, Universe, Cowboy, Cowgirl, Security, Wrangler and others. Your organization may not require the Cowboy repositories so updates via Cowboy may not be required on your workstations.

Repository server setup/configuration



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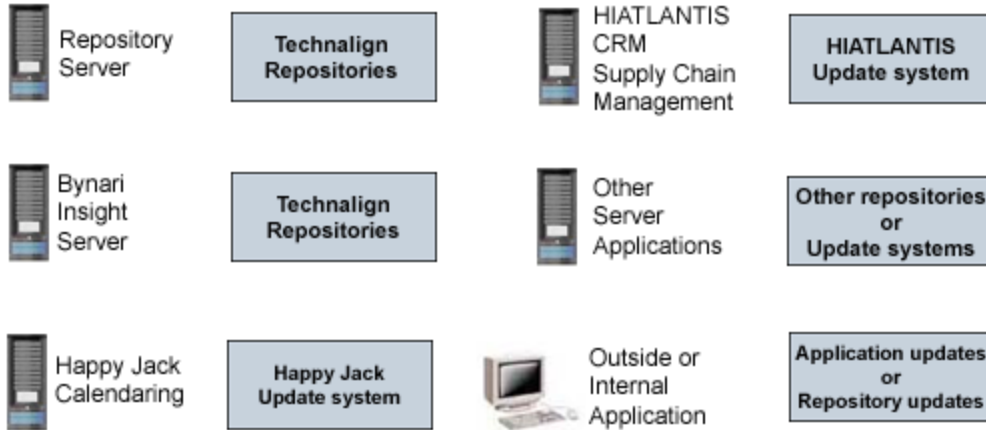
Once you've identified the repositories you require to maintain the updates for your servers and workstations, you would only require those repositories to be used in setting up your repository server.

Other possible required repositories or update systems

Other repositories may be required within your organization such as calendaring or Microsoft Exchange replacements. Some of these applications may use the same repositories that are standard to Technalign Pioneer, but others may require additional repositories or are updated outside of Technalign's control.

Repository and other updates

Technalign



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As shown, different companies or projects may require different repositories or use an update system for the application and administered by the network, database or application administrator. HITALANTIS, for example, utilizes an update manager built into the application to update the system while Bynari Insight would use the same update system as other Technalign applications or applications provided by another company or the community.

Some companies may have internal applications that have been developed in-house. These applications could be setup to use a repository in much the same way as other applications. Delivering updates to servers or workstations for an internal application allows companies to perform maintenance on their systems easily for delivery and updates. By companies creating installers that would work with a Technalign repository, those companies can deliver applications and updates easily on the network.