

A Blueprint for Success

EGNYTE CONNECT™



Laying the Foundation

Ten years ago there were 773,614 construction companies in the United States employing over seven million workers, but in 2008 the Construction & Engineering Index plunged a whopping 68%. Firms that survived the financial crisis that year faced severe margin pressure - dropping from 5% in 2007 to 1% by 2010. The industry had to act fast and looked for more innovative ways to cut costs and boost profitability.

Many turned to technology; embracing mobile devices for “anywhere access” to data and streamlining collaboration to keep projects on time and budget. Others try to consolidate services by replacing traditional access methods like VPN and FTP, and moving to the cloud; always trying to balance security with ease-of-use, and functionality with simplicity.

Today, Egnyte is the gold standard for file management and collaboration in the construction space. Supporting over 2000 construction firms, Egnyte has been able to realize tangible benefits in the industry. Balfour Beatty, for example, saved \$5M on the reconstruction of the DFW airport in Dallas leveraging Egnyte, while PC Construction reduced the time needed to provision new projects by 90%.

This white paper highlights common use cases and looks at savings associated with employing a hybrid cloud infrastructure.

Balfour Beatty
Construction

Saved \$5M on the reconstruction of the DFW airport in Dallas



CONSTRUCTION

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Operational Challenges in Construction

Construction companies face a myriad of operational challenges on a daily basis, all of which have a direct impact on productivity and profitability.

These include:

Execution Speed

Ability to increase project speed and efficiency through all stages (commissioning through completion)

Connectivity in Remote Locations

Providing file access at worksites with little to no connectivity and poor bandwidth

Mobile Access

Enabling field workers to access large design files from anywhere and any device—even in areas with poor connectivity

Selective Collaboration

Protecting sensitive information in an increasingly collaborative environment

Traditional methods like VPN and FTP face significant shortcomings when addressing these challenges. The VPN solution works well to assign secure access to files, but fails to address collaboration and mobility requirements. Similarly, an FTP solution addresses the problem of large file transfer but without the ability to collaborate between multiple parties. Not to mention the significant effort and costs in setting up and maintaining multiple servers and clients.

For the most part, cloud is the most promising solution for many of these issues. However, most cloud providers are not able to solve all of these issues either. A combination of solutions seems to be the way forward.

The Egnyte Solution

Egnyte Connect is designed to meet the demanding needs of security and collaboration in modern industry. At the core, it serves as the central hub for all cloud data and command console for administrators. It delivers the security and administration inherent to on-premises repositories but with the benefits of the cloud. Basically, a cloud solution with the architecture of a file server.

This allows you to:

- Keep pace with new projects by quickly provisioning file sharing
- Protect sensitive information by creating a secure collaboration environment
- Protect against data loss
- Integrate with applications you already use

Keeping pace with new projects

The Egnyte Cloud File Server (CFS) lets you provision a file service infrastructure as soon as a project gets underway. The robust permissions model ensures that the new project folder functions as an isolated share only accessible to authorized users.

Moreover, administrators can granularly control access for users and groups at any folder level. Folder permissions can be assigned to users, groups, or a combination of the two. This model supports not only inheritance of permissions from parent to child folder in large hierarchies, but also exclusion at any level of the hierarchy.

The granular permissions model lets you delegate responsibility to project owners without compromising security. Project leads can be made owners of a project folder, giving them full read/write/delete privileges for its content and the ability to manage permissions for any subfolders. IT can now delegate some access control privileges to project owners and focus on more pressing issues.

Smart reporting and auditing provides full visibility into all account activity. Administrators can generate reports on the tracking changes to files, user login activity, permissions activity and more. This equips IT with the tools to perform speedy troubleshooting.

Protecting sensitive information

The industry-leading security framework offers the flexibility and scalability to effectively collaborate while protecting sensitive information.

Firstly, the permissions model allows administrators to modify or exclude permissions at any folder level, ensuring that subcontractors and clients only have access to relevant content.

Secondly, the user management model ensures a secure collaborative environment particularly important to construction firms. With Egnyte Connect, external users are created, managed, and licensed as a part of the company's account. This ensures that IT has complete visibility and ownership over all data and can manage users (internal and external) centrally. Egnyte also integrates with existing directory services like Microsoft's Active Directory (AD) and SAML based identity providers, allowing IT to maintain a central layer of authentication for users and groups. It offers administrators the flexibility to enforce multi-factor authentication for external users, allowing for more secure collaboration with subcontractors and clients.

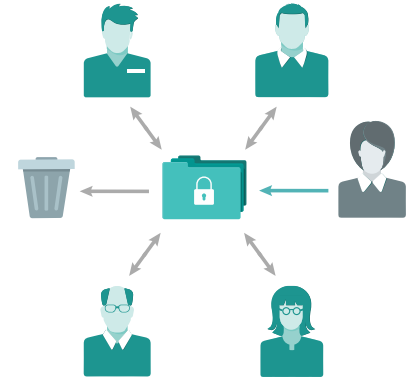
Thirdly, mobile device management (MDM) is built around security and control for administrators. This includes policies around mobile device

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usage, a mandatory passcode lock, local encryption, and more. In case of a suspected breach, it allows administrators to remotely wipe Egnyte content from any user's computer or mobile device.

Finally, secure link sharing features include the ability to set a password for a link, expiry date and notification when it is opened. Additionally, Egnyte provides an anonymous upload facility using the upload links. This feature allows construction firms to collect and automatically organize bids from subcontractors en masse, without providing any visibility into other files.



Ensure data is never lost

Egnyte Connect protects against data loss in many different ways. To begin, CFS provides full version control for all files. Administrators can set custom policies around version retention, enabling users to return to a previous iteration at any time. Maintaining a version history is crucial for construction companies, as design files change frequently. Multiple copies of each file are stored in the Egnyte data centers for disaster recovery purposes.

Similarly, Egnyte also lets administrators determine data retention policies for their account. Users can be excluded from being able to delete files. Even after deletion, files are retained in a trash area for a specified amount of time, accessible only to administrators. This ensures that data is never deleted without explicit IT sign-off.

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Integrate existing applications

The modern digital construction site is a complex place with lots of data sources, digital tools and applications that need to (ideally) work in unison. Egnyte provides any construction site a practical digital workbench that allows the many different elements to work better together.

For example, a drone video of a site can immediately be uploaded through Egnyte using an app like Botlink, and then easily correlated to specific ongoing projects. The content is then unified through Egnyte for instant analysis and editing by other apps like FotoIn or SmartVideo. It is this unification of project-specific content, accessed by multiple employees, using different apps that boosts efficiency on any construction site.

Deployments Based on Requirements

Egnyte provides the ability to customize cloud infrastructure depending on the size or type of project and its specific needs. For smaller projects, firms can utilize a cloud-only solution since it provides fast provisioning and collaboration with no investment at the site. For larger projects, a combination of cloud and on-premises repositories can be used to ensure fast on-site access with the flexibility of the cloud. For legacy projects, a pure on-premises solution can be used to provide secure, VPN-less access to legacy data without moving any data or metadata to the cloud. Egnyte's infrastructure also maintains data redundancy for disaster recovery and unforeseen hardware failures at different worksites.

Smaller projects – cloud-only deployment

Smaller projects have faster turnaround, require fewer people onsite, and are often in areas with stable internet connectivity. These environments are perfect for cloud-only deployments because projects can be up and running in minutes with no hardware required.



Larger projects – cloud & on-premise deployment

Larger projects have more people onsite, require significantly more files, and often have limited bandwidth in parts of the worksite. Egnyte Connect overcomes these challenges by syncing files between the cloud and on-premises repositories. The result is a powerful hybrid infrastructure that provides users with the best of both worlds: the flexibility and ease of use of the cloud paired with LAN speed access to project files that reside in on-premises repositories.



This combination of cloud and on-site access is highly suitable for large construction projects. It provides the fastest access to files at the worksite while leveraging existing digital investments.

Fast access at worksites

Cloud-only providers can't always provide on-site access at worksites. Data becomes stranded in the cloud, leaving users at the mercy of faulty network connection and limited bandwidth. These conditions could be overlooked during short-term projects, but for long-term projects, marginal inefficiency adds up.

For fast and consistent access to files, Egnyte helps to eliminate connectivity and bandwidth issues by providing access to up-to-date content using on-premises repositories. This ensures access is never interrupted by connectivity problems.



Collaboration across offices and worksites

The ability to collaborate between the jobsite and the office (or even multiple worksite and offices) can involve multiple tools like VPN, FTP, or even manually copying data from one location to another. It becomes even more challenging when dealing with large files in remote worksites.

Egnyte synchronizes files between the cloud and on-premises repositories across one or more locations. This hybrid approach gives users the fastest access to their content regardless of their location, while updating the files in the background as network conditions permit.



Single platform for all files

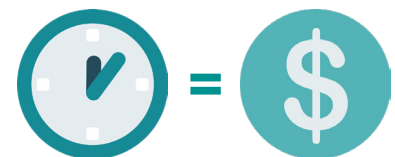
Egnyte Connect fully integrates with cloud and on-premises repositories. With VPN-less access to on-premises files, construction firms can easily access 100% of their files and use cases. This improves the experience for end-users, allowing them to consolidate services and administer all file access through a single vendor.

Reduced total cost of ownership

Legacy content repositories can contain huge amounts of data, and migrating it to the cloud can be costly. It can take months to upload, use significant bandwidth, and require extensive time and resources. Instead, you can simply allow users to access legacy data through Egnyte and enjoy the benefits of the cloud without the migration headaches.

Work Better Together

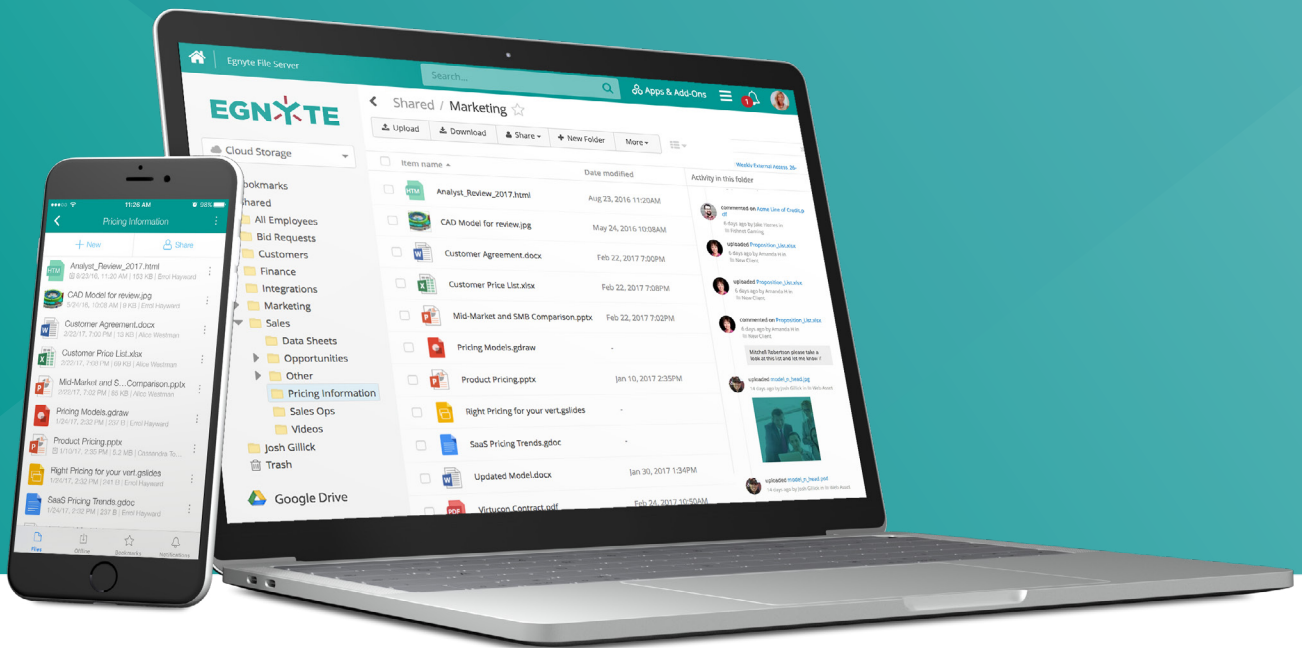
With net margins in construction currently hovering around 1%, firms need to find additional sources of value from their operations. Considering IT spend is lower than the cross-industry average, increasing productivity through IT is one such source. Shortening the project cycle time by improving efficiency can have a significant impact on the bottom line in a capital-intensive industry like construction. Built for business and designed to tackle the needs of industry, Egnyte is the only comprehensive secure file sharing solution for construction projects of any size.



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Start a free 15-day trial today.

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Contact us at 1-877-734-6983

