

CASAHL Case Study: Assessment Value and Details

Introduction: Why Assessment?

Successful migrations start with an assessment. Understanding the content in a legacy deployment, and how that content is used, is the first step towards organizing an existing deployment or building successful migration plans. Companies that take the time to understand their content before making migration plans always find opportunities to organize, optimize, and streamline their migrations before they even start.

CASAHL's Assessment Service provides insight into a variety of source systems including SharePoint (online and on-premises), Dropbox, Google Drives and Sites, Lotus Notes, Exchange public folders, Atlassian Confluence, and ECM systems, or combinations of those systems. Our multi-source, multi-target solution can be used with multiple systems, so that enterprises with more than one legacy deployment can get a complete picture of their content and resources.

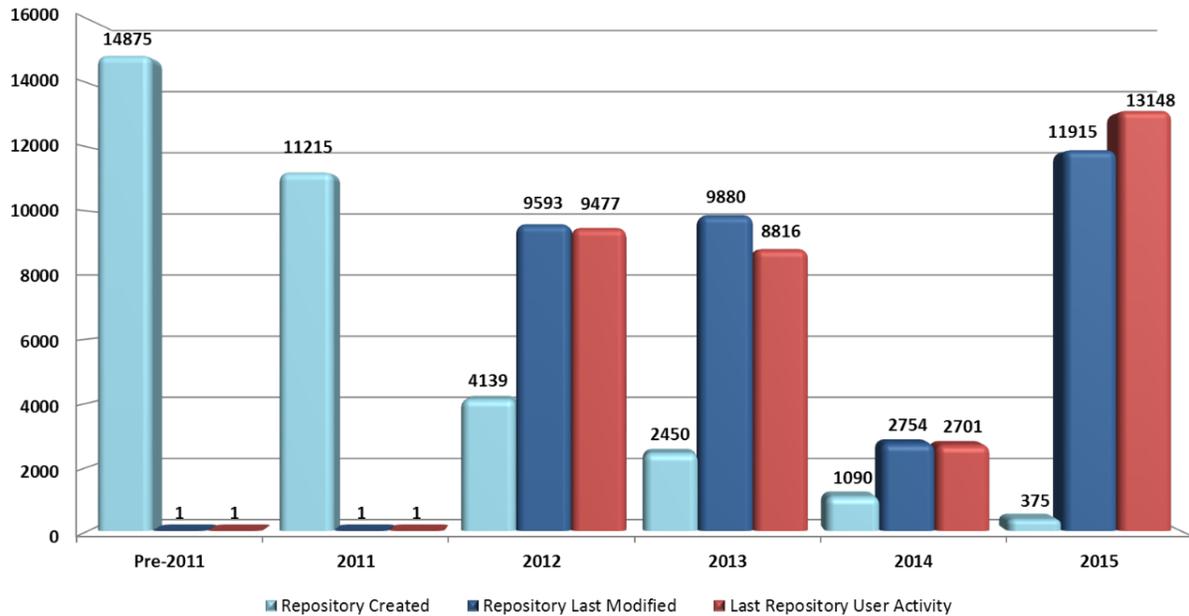
Once a system has been assessed, we use the data gathered during assessment to compile detailed reports on the assessment's findings. All reports include information on content volume and types, content complexity, application complexity, and the feasibility of migrating custom applications to the cloud (when applicable); each report also includes a number of system-specific details. These reports provide a valuable look into many important aspects of a legacy deployment, as outlined in this document, and give enterprises the tools to do the following.

Identify unused or under-used content and apps

A huge factor in many enterprises' decisions to hold onto their legacy systems instead of migrating to a more modern deployment is the sheer volume of their legacy deployments. As deployments age, it's easy for enterprises to lose track of the content they have, or accumulate so much content that a migration seems impossible. Assessment offers enterprises a way to cut legacy content repositories down to manageable levels by identifying which content and apps are or aren't in use.

CASAHL's assessment shows enterprises which of their content is actively used and which can be archived. On average, roughly 60% of a given enterprise's legacy deployment is unused; archiving this content enables enterprises to reduce expenses on storage and hardware by archiving this content, and dramatically reduces the scope and complexity of potential migrations.

By reviewing an inventory of deployed sites along with usage activity patterns over time, enterprises are able to identify unused content and sites:

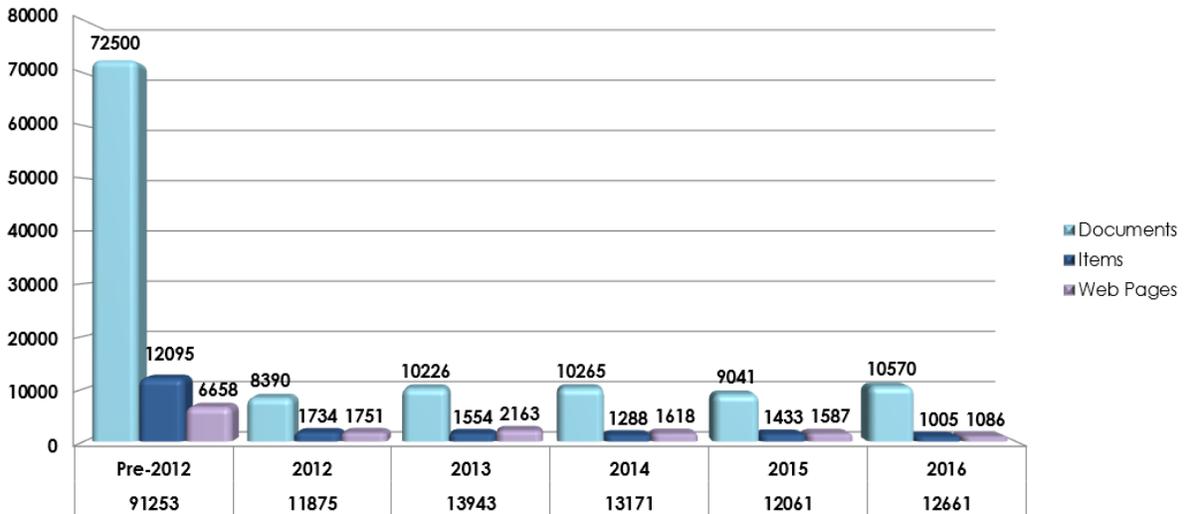


In the example SharePoint assessment graph shown above, a significant number of sites were found to be inactive. The usage data shows that the number of new sites created dropped sharply over the past five years, even as the number of sites used for the last time in a given year increased. The cumulative number of sites abandoned between 2011 and 2015 meant that a significant portion of total sites were going unused. Identifying unused sites allowed the company to greatly reduce the scope and cost of the migration by excluding them.

Identify highly used content and apps

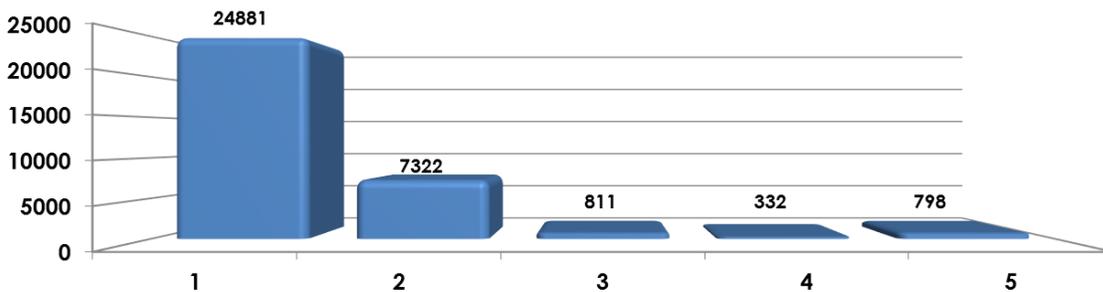
Once enterprises have identified and flagged unused content and apps for archival, it's time to look at the content and apps that *are* frequently used. Determining which content is most active is a helpful first step towards identifying valuable content that should be given priority during the migration.

In the example Google Sites assessment graph shown below, the date of last use graph is broken down by content type. Breaking the findings down this way lays the groundwork for a deeper understanding that enterprises can use to build more accurate, more effective migration plans. Once key active sites are identified, CASAHL computes the complexity and scale of the active content so we can offer more accurate estimations of migration cost and duration, and looks at active content to identify key users for enterprises to include in their migration plans.



Compute the complexity and scale of content and apps

Content and applications that are identified as valuable are run through a complexity analysis to determine how much time and effort they would take to migrate. CASAHL assesses over 70 different weighted attributes to assign sites a complexity rating from 1 (the simplest) to 5 (the most complex).



In the example above, from a SharePoint assessment report, the majority of sites received either a 1 or 2 complexity score. Sites with complexity 1 or 2 are often very simple and generally eligible for automated migration.

By attaching complexity ratings to sites, the report suggested a first step on this enterprise's migration road map: migrate the simple but highly-used content first. Complexity 1 and 2 sites can often be migrated rapidly using CASAHL's [fixed-cost migration service](#). As such, users are eased into the new deployment, with all their simple content available right away and already in place.

The ability to give users their simple sites and content in a new deployment with no delays and no hassle lets enterprises speed adoption and encourage the use of the new deployment while keeping the overall user experience positive.

In cases like this example, where the majority of content is simple but frequently used, CASAHL recommends tackling the simplest content first and leaving the complexity 4 and 5 apps until last. Migrating highly-used simple content first makes it possible to quickly migrate large amounts of content

for a fixed and predictable cost and, thus, clear the path for complexity 4 and 5 applications to receive the focused attention they require in successful migrations.

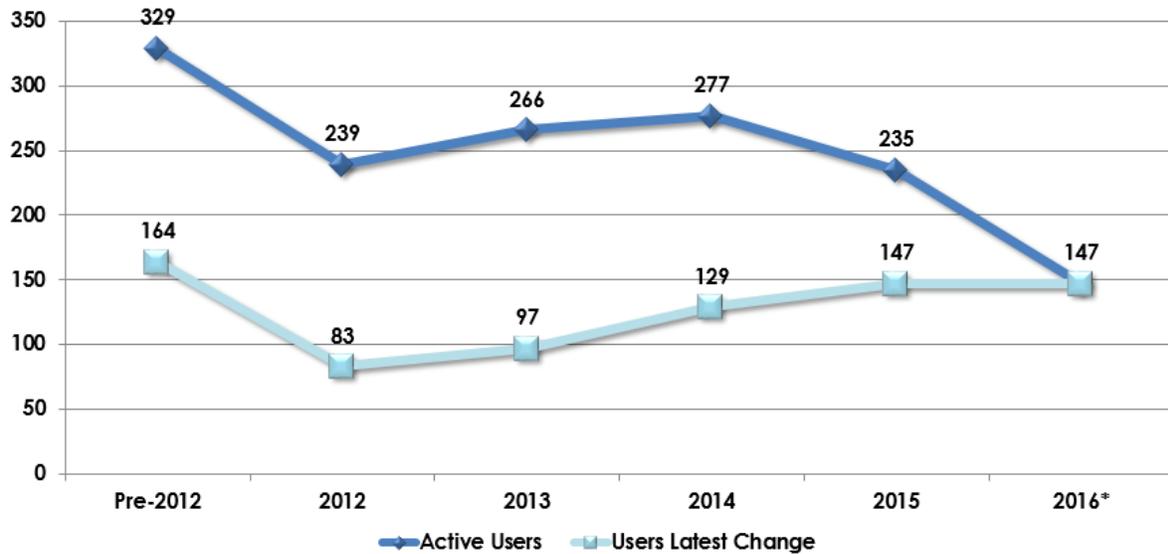
Identify the most active users in a deployment

Once an enterprise has identified its active content and applications and assessed the possible migration cost and effort, it's time to turn to the report section on active users. Engaging an enterprise's most active users provides valuable insights when planning for a migration and, after the migration, promotes better adoption of the target deployment. Moving power users and their content to new deployments first also gives them a chance to adjust to the new system, thus building momentum for the new system from the inside.

By identifying the most prolific of those users (a report on the ten most active users is also included with assessment results) and inviting them to sit in on the migration discussion, enterprises can ensure that no important content is overlooked. Key users whose concerns are addressed in the migration planning stage often become champions of the new system among their peers (as was the case with the company whose data is used in the graph below), and help ease the transition for other users and increase adoption rates once the migration is carried out. User data and input often helps enterprises remediate complex migration problems or identify areas for improvement as well.

These key users often follow the 90-10 rule (informally, that 10% of the people do 90% of the work), so if enterprises get their input during planning, migrations are often made more thorough and therefore more effective. Experience shows that enterprises willing to collect active user input during planning *and* migrate their simple, highly-used content first find that those users are among the first to be active in the new platform and quickly become productive in their new home. When this happens they often become internal champions for the new deployment, bringing their colleagues into the new deployment more quickly because of their central role in the enterprise dynamics, and dramatically increasing adoption rates for new platforms.

Conversely, by identifying inactive user accounts, whether from previous employees, accidental redundancy, or users who simply don't use legacy systems, enterprises can save tremendously on software licensing. The gap between active users and total user licenses (shown below with a sample graph from a Google Sites assessment report) illustrates the gap between total users and active users, up until the enterprise removed the unused user licenses in 2016.



Total Users who worked on data = 767

Looking at and consulting users on activity data can also yield better insight into workers' preferred productivity tools and patterns. CASAHL often sees enterprises whose most active users have a clear preference for managing and sharing their content in deployments besides the expected legacy deployment, such as via OneDrive for Business rather than a SharePoint Online site, or in Google Drive rather than Lotus Notes. In cases like this, CASAHL's support for multiple migration sources targets makes it easy for enterprises to address user target preferences, or add a new migration source to the assessment to account for these 'shadow' IT systems.

Identify migration blockers

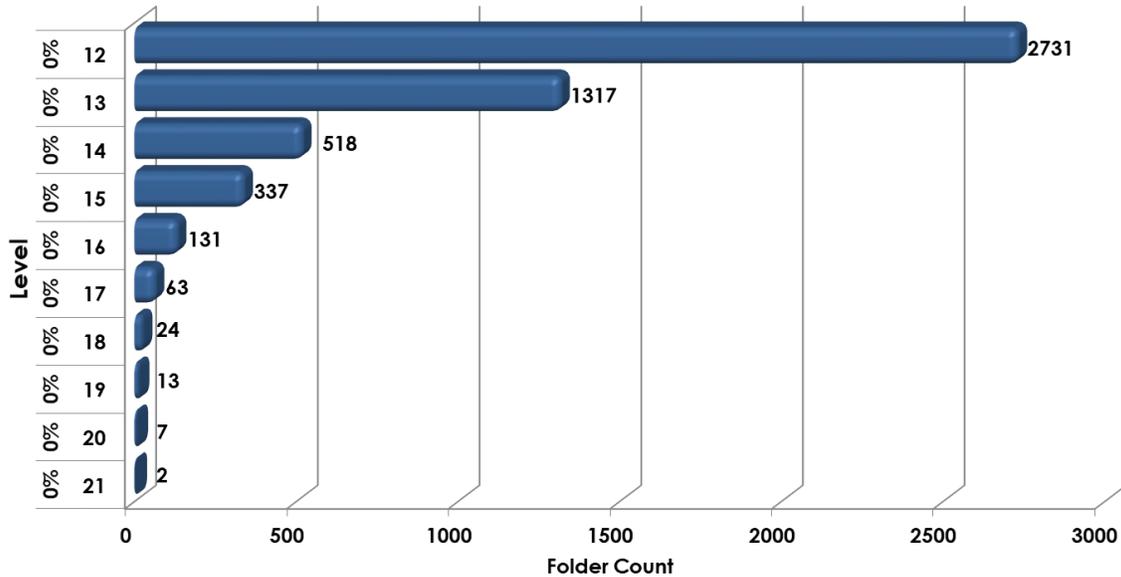
CASAHL's assessment identifies potential migration blockers such as path length issues, illegal file types, and illegal characters in file and folder names before they cause problems, so that migration can proceed smoothly and with a minimum of unpleasant surprises.

The assessment results can also identify underlying structural issues, pointing them out so enterprises can fix the problems before they repeat in a new deployment. Many of the challenges associated with migration, such as unusual file and folder naming conventions, can be simplified or avoided entirely with the information provided by the assessment reports.

Duplicate files are a common source of clutter, especially in legacy on-premises deployments. In CASAHL's experience, users often save personal copies of files they received by email, but rarely refer to them again; this is one of the most common causes of file duplication. Identifying duplicate content is a great way for enterprises to reclaim storage space whether or not they plan to migrate, but it's especially helpful for enterprises that want to migrate to modern cloud systems like Office 365. Since the structure of Office 365's cloud-based document libraries makes this type of file duplication largely obsolete, identifying and deleting duplicate files helps keep their next deployment that much more efficient by removing the need to create duplicate files in the first place.

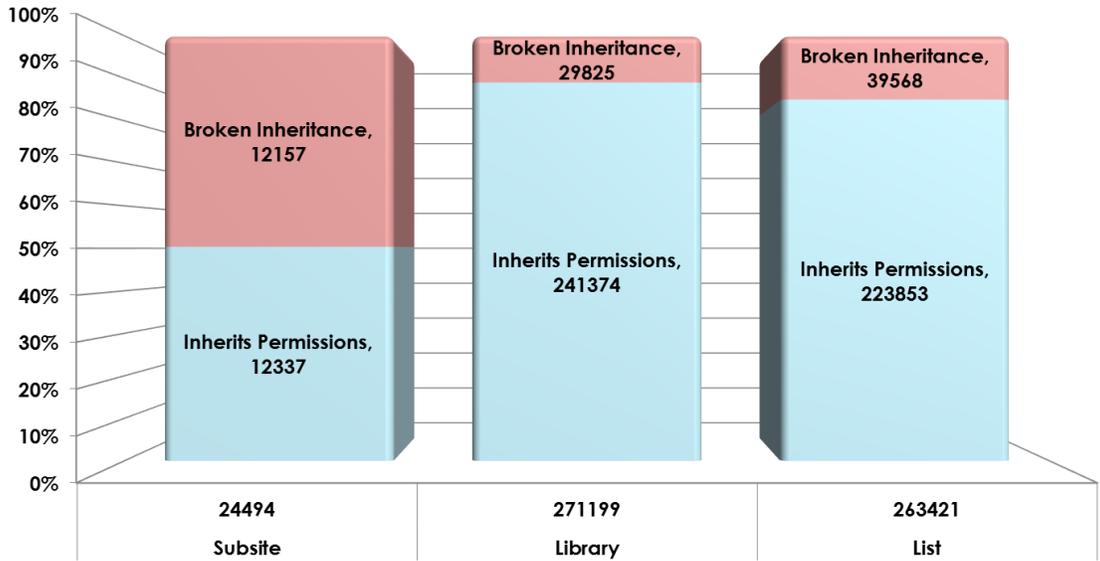
The types of identifiable structural issues vary by system – Google Drives often have trouble handling duplicate file names in a single folder, for example, whereas SharePoint is the only system affected by

exceeded list value thresholds – and so vary by assessment source. File shares and other systems with folder trees that have 12 or more nested levels (as shown below) are also flagged for restructuring, because character limits on file names often place files in those folders at risk of accidental exclusion from the migration.



One key migration blocker for SharePoint that CASAHL’s assessment covers is the List View Threshold (LVT); lists that exceed the 5,000-item limit often drag down SharePoint performance, so these lists are flagged as candidates for restructuring to ensure that high standards of performance are met and maintained in new SharePoint deployments.

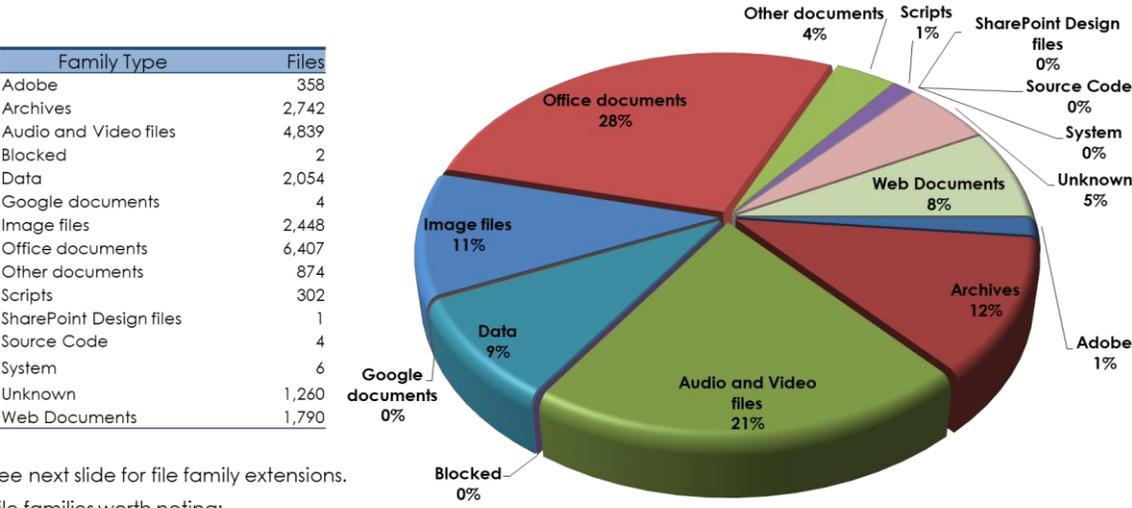
Another potential migration blocker and indicator that a SharePoint deployment needed to be restructured is the permission inheritance. Folders, sites, and libraries generally pass access permissions down in a linear fashion, so that subsites and subfolders have the same permissions as the parent. Subfolders or subsites that have permissions granted to different users than their parent (whether more users, fewer users, or just a different set of users) are said to have “broken” permission inheritance. In cases like the one pictured below, nearly half of the enterprise’s subsites have broken inheritance, which is a very strong indicator that the subsites need to be restructured before they are migrated to a new deployment. In combination with the removal of redundant content and rationalization of structural issues, this gives enterprises the chance to make their migration to new deployments efficient and optimized.



Some potential migration pitfalls can also be addressed by users before they cause problems; in these cases, enterprises can use CASAHL’s Rationalization Service to provide a collaborative workspace to make sure users are given the chance to address any issues with their content before that content is migrated. Showing the blocking issues are for a specific custom solution to both enterprises and content/app owners allows remediation efforts to be assigned directly to the owner of the site in question. This approach encourages community participation while streamlining the migration process by assigning the users most familiar with specific apps or custom solutions to work on remediation for those apps or solutions, and eases the transition for users by giving them a chance to ensure that their content is eligible for migration before the actual migration is carried out.

Identify content characteristics

CASAHL’s assessment results also incorporate a wide range of content characteristics, including file size, file volume, and the number of documents, sites, apps, and other criteria.



See next slide for file family extensions.

File families worth noting:
 “Blocked” contains file types prohibited by SharePoint by default.
 Office documents – with Office Web Apps – are especially well-suited for SharePoint.

The breakdown of content types by size, format, and count (shown above as an excerpt from an Exchange public folders assessment report) is used to help enterprises plan for their target environments and make sure their new deployments are leveraged effectively.

Identify and assess complex applications (SharePoint)

Solutions in SharePoint often fall into several distinct categories, most notably custom and third-party. Customized solutions and apps are also more difficult to migrate, in large part because they draw on complex or highly customizable content like web template solutions. These apps are complex; customized sandbox solutions, workflows, InfoPath forms, and third-party SharePoint Solutions are particularly difficult to migrate for this reason.

Migrating solutions with Web templates is one of the more straightforward types migrations; web templates and web parts are fairly consistent among systems (even if their appearances aren't). Other complex applications are not so simple to transplant into a new deployment. Workflow applications in particular are a category with a high rate of non-reusable templates.

CASAHL's assessment flags applications that can't be reused in new deployments without modification. When dealing with complex custom apps, each application has to be analyzed, optimized for its new home, and then reconstructed for use in the new deployment (typically Office 365 or SharePoint 2016) before it can be migrated; CASAHL offers an [Application Recomposition service for that purpose](#).

Next Steps: planning for optimization or migration

The detailed insights assessment offers are a critical part of understanding the contents of your enterprise's legacy deployments, but CASAHL's assessment process is only the first step in our migration lifecycle. The next stage, [Rationalization](#), uses assessment data to help enterprises gather user input and build migration plans. Enterprises that choose to migrate can then implement those plans with CASAHL's ecknowledge migration engine, which covers the same range of source and target systems as assessment in a single product. Simple content can be migrated quickly and cost-effectively using the automated migration techniques in CASAHL's [Fixed-Fee Migration service](#), and complex custom applications can be optimized for and migrated to new deployments with CASAHL's [Application Recomposition](#) service.

To learn more about CASAHL's assessment process, read more on [our site](#), or [contact us](#) to get started.