

The Problems with NAS



One of the most common complaints from IT administrators concerning file servers is the never ending creative ways users corrupt, damage, delete, misplace, or generally fail to manage their information properly. These cause significant work for the IT staff, can result in a massive crisis, cause other users or systems problems, make the staff work overtime or on weekends, and reflect badly on IT in general. While the term “User Resistant” is not the most compassionate term, it is one that IT departments relate to immediately.

Another source of frustration for end users, managers, and IT personnel is IT’s inability to provide some basic functionality needed to control the information. End users rarely understand the complexities involved in providing solutions to what may appear to be simple requests. IT is viewed as their only source of technology and yet is extremely limited in the tools and capabilities that can bring to bear on the problem.

Expedite has the ability to solve, eliminate, or reduce the consequences of these IT problems. The following is a list of different classes of problems and how Expedite can solve them. This is by no means a complete list and many of these problems are interrelated. However, providing clear solutions can significantly reduce the file server “firefighting” so prevalent in the IT world today.

WARNING: These are phrased in a tongue-in-cheek style for the “enjoyment” of IT.

Problem	Solution
1. The “Drag & Drop” problem.	A user bumps the mouse and moves the directory containing all the company’s contracts to some other place and may not notice. Expedite manages the security settings on the information it manages which eliminates this problem all together.
2. The “Oops, deleted it” problem.	“Accidental” deletion of a key file is more common than most imagine. The combination of security settings and the shadow mirror will ensure the file stays put. The consequence of this without Expedite means that an IT person has to restore the file. Ask any IT person and this always happens just before a holiday or weekend.
3. The “I didn’t know which directory I was in” problem.	Another common mistake for users occurs when they make copies of data from the server and get confused as to where they are, on the server or on their local copy. I’ve seen users copy changes the wrong way and wipe out significant amounts of work. Expedite manages the permissions but also because of its protections, becomes the trusted source for the information. (See the white paper, “Why Expedite Is Different”)
4. Modifying a file without proper supervision.	Mistakes made by temporary workers, those outside the process, or simply done by people who should know better can cause an unexpected crisis. Stories abound of contracts that were changed by someone trying to “help” at the last minute costing the company dearly. Expedite provides the approval and review process to prevent this problem. Any changes are identified, the right people notified of the change, and each approver is given the chance to approve or disapprove those changes as needed.

Problem	Solution
5. The "Upload huge files" problem.	<p>A recent story from an IT operation of a city government involved a worker with a new digital camera. He didn't really know what he was doing and set the camera to ultra-high resolution mode. He then proceeded to take a few dozen photographs of a manhole cover. Plugging in the camera, the software proceeded to automatically upload all those photographs, plus everything else it was storing, up to the server, which immediately ran out of capacity, crashing others attempting to do their work. IT was then chastised for doing a "lousy job, once again, of managing our computers". Expedite can control the contents of directories, limit what can be stored and created, can in this case, require a cover page describing these and then force photos to be added as attachments. The number of attachments, total capacity of attachments, etc can be limited if needed. For each attachment, Expedite requires a description making it obvious that the files are the same.</p>
6. Reference the wrong version of a file problem.	<p>This comes up over and over again. If there is no clear way to identify the latest approved document, one slip of the mouse can result in a crisis, make customers mad, and make your company look bad. Expedite manages the entire revision process and moves previous revisions to an entirely different directory. People always know where to find the latest version and can quickly tell if the file is being modified, still waiting for approval, etc.</p>
7. Inconsistent file naming convention.	<p>We have yet to see two people with the same file naming conventions. In fact, it is quite rare that the same person consistently uses their own convention! If the simple act of naming a file is so problematic, how can anyone find information that someone else created? Expedite can automatically enforce a naming convention, check it against a required pattern, use a metadata item like the company name for the file name, can automatically add serial numbers, etc.</p>
8. The "Do we have all these?" problem.	<p>Trying to tell if a set of files is complete can be a real challenge. Expedite provides an automatic serial numbering service for files so users can quickly tell if any are missing. Serial numbers also describe the order at which files were created and ensure that each one created is unique and does not overwrite some existing file.</p>
9. The "I never saw that!" problem.	<p>One management challenge is being able to prove that someone actually was informed about something. This comes up in many aspects from simple notices to users, to company policies like the sexual harassment policy, to regulatory requirements that requires proof of reading and understanding by an auditor. Keeping track of pieces of paper with signatures on it, email receipts, or web logs is difficult and time consuming at best. Expedite can automatically tell if a user opened the file, prompts the user for a response that they read it and understood its contents, and will log not only that they read it, and responded but will track how long the file was open before they responded.</p>
10. The "File name space pollution" problem.	<p>Users can store files into directories that may not be appropriate for the file being recorded. File systems currently do not provide any method to restrict the type of information that shows up in a directory. There is really nothing to prevent someone from storing the company bowling team photos in the contracts directory. Expedite can be configured to limit the way files can be created or imported in to the containers. It can enforce the user to enter metadata about a file imported to the directory. These safeguards as well as others, virtually illuminate this issue.</p>

Problem	Solution
11. The duplication problem.	Operating systems make it very easy to make copies of files. Duplicate files make it difficult to propagate changes to them, tie up backup time and media unnecessarily, and can cause confusion for users as to which one to use. Expedite controls the files to such an extent that users begin to trust the copy it is controlling. Users don't feel the need to make copies of key files to prevent others from "screwing them up".
12. The "I can never delete anything" problem.	Certain policies, regulations, or government mandates require that a complete history of all files be maintained. It is up to the users to 1) maintain prior revisions, 2) make sure they are named correctly so they can be identified, and 3) that the prior revisions are not modified after a new revision is created. Expedite does all these steps automatically as part of its processes. It will maintain a complete audit log of all activity on the file, and will move previous revisions to a separate location, identify them correctly, and lock them down to prevent modification.
13. The "I think it is in my email someplace" problem.	The reality today is that many people use their email system as a filing system. Unfortunately, all email systems are pretty poor filing systems. Users can waste a lot of time digging in their inboxes looking for critical files needed by someone else. Seldom is an important file included in a single email message either. Users run the risk of "finding" one of a dozen copies only to discover later they selected the wrong one or one that was out of date. Expedite, first of all, does not send users copies of files in emails. It sends a link to the file maintaining the master copy within the file system. Expedite also provides a way to locate the latest version of the file so people can rely on the fact that if they use that copy, they won't get into trouble. (Note: Remote users will receive a copy of the file for approval)
14. The "Can you email me a copy of that?" problem.	Sending copies of files to coworkers just makes the email system more congested. Expedite makes the file available in a known location so users can find it without having to resort to bothering someone else, congesting emails, etc. The interesting thing is that the recipient may end up asking for that same file again because it may not be obvious where it is in their own email should they need it later.
15. The inconsistent directory structure problem.	Just like file naming schemes, directory naming conventions and filing challenges are managed differently by different people. If there is a need to share this information, the data either cannot be found easily, wasting employee time, or there needs to be effort put in to create, agree upon, enforce, and correct a naming scheme. This can be very costly in terms of productivity and employee satisfaction. Expedite manages this problem automatically and maintains a consistent directory naming convention. It also provides a simple dashboard interface that allows finding the information based upon business process, not on a directory scheme making it much quicker to locate key information.
16. The "reallyreallylongfilenamesbecausethereIsNoWayToPutMetadataInTheFile.doc" problem.	Since the creation of the idea of an electronic file, people have struggled to add information about the file within its name. At least the days of 8.3 names are over! Users get "creative" in their naming schemes in a vain attempt to control their mass of files. The problem is that in order to be of much value, they need to be consistent, tracked, and enforced, which file systems don't provide. Expedite can track a large set of file metadata that is appropriate for the business process being used. It can maintain these metadata values from creation to obsolescence. It can also enforce the file naming scheme by using metadata values, serial numbers, and/or regular expression patterns, for whatever is appropriate for the process. Also, through the Expedite dashboard, the file names and their metadata are shown as needed making it much easier to identify the information.

Problem	Solution
17. The “Under-Notification” problem.	<p>When changing or creating a document, many times it is necessary to notify others of the new information. Currently, the users have to first, remember to notify people, and second, make sure they tell “everyone”. Unfortunately, the definition of “everyone” can vary. It is often too easy to forget to include someone in the loop who could be critical to the validation of the information. The missing people can end up causing problems later when they said they never heard about something or worse, could have spotted a problem with the document before it went any further. Expedite automatically selects the right people to be notified, formats the emails, and sends them automatically.</p>
18. The “Over-Notification” problem.	<p>The consequence of the under-notification problem is the over-notification problem. If someone has been left out of the loop in the past, people tend to over compensate and include the world in the email distribution list. The “reply-all” email button is simply too easy to use and can avoid leaving key people off the list. However, bothering people who really don’t need to be involved again wastes time and money for the company. Expedite allows the setting of who needs to be involved in a file and will automatically provide the proper notification. Expedite can also ensure these people read the file, and actually respond concerning their opinion about the information. This is necessary for processes that require periodic audits.</p>
19. The “Proof of approval” problem.	<p>Even though employees may have received an email stating there has been an update to a file, there is no guarantee that they read it. They may not have even had a chance to open the email yet alone read the attachment. Even with read receipt turned on, there is no real way to track they read the attachment much less their response. This can lead to all sorts of trouble if a problem in the file, such as a contract, should have been corrected but was mistakenly sent to a customer. These minor oversights can cost the company dearly. Expedite automatically watches what the user does and will prompt the user for their approval response when they simply read the file. This can be done via a link in the announcement email, through the dashboard, or by reading the file directly.</p>
20. The “I think I downloaded a Virus” problem.	<p>Viruses are an unfortunate fact of life for computers. Should a workstation connected to a file server be infected, the file server can also be compromised. Other workstations that use the file server can then become infected. Removing a virus from the file server can be difficult. Expedite sets the permissions on the files to prevent a rogue workstation from being able to modify these files or add new files to the server. It can also repair a modified file should the virus manage to bypass the normal file security.</p>
21. The process compliance problem.	<p>While this is clearly a management issue, the owner of the business processes relies on IT for help. A common situation is where the process owner will ask IT for a recommended solution and receive not much more than a blank stare. However, when the process owner wants to install a new software package that might actually help with the process, IT becomes a wet blanket making it difficult to select, purchase and deploy the new solution. Expedite provides one solution that IT can use to solve a large verity of process problems across all the different departments within the company. A single vendor solution that is expandable and flexible enough to solve the myriad of problems users and managers have with their information is sorely needed.</p>

Problem	Solution
<p>22. The “We need to better align IT with our business goals” directive from upper management.</p>	<p>This object has been around since the dawn of the IT department. If so, then why hasn’t this happened yet? The fundamental problem is the fact that IT understands the technology but has little knowledge of the processes. Users understand the processes but not the technology. Until that mismatch can be fixed, very little progress can be made towards this goal. Expedite fills this chasm by allowing IT professionals to begin having conversations about how the information is actually being created, used, and stored. IT now has the tools at its disposal to manage the files on the file server in a way that does meet the business goals.</p>
<p>23. The “Government has added some new regulations” problem.</p>	<p>Government regulations or regulations of any kind all require documenting compliance. Industries subject to regulations need to have a tool that will simplify and automate the collection, tracking, and notifications necessary to prove compliance. Expedite, with its flexibility and enforcement, is uniquely suited to provide the required documentation trail so vital to compliance. Companies with Expedite are setup to handle just about any kind of future documentation requirements that result from changed or new regulations.</p>
<p>24. The “Big Picture” problem.</p>	<p>In order for management to do their job, they often require a summary of the process their staff happens to be working on. For example, management needs to know the status of all the current contracts so they can tell if they are going to meet their end of the quarter goals. The problem is that during the time management needs this information the most, their staff are focusing on working the contracts. They really don’t have the time to stop and create a “status report” of everything. That could require interrupting every one of their co-workers, getting their status, formatting it into a nice looking report for management, and then getting yelled at later for not getting their contract work completed. Expedite solves this problem in two ways. First, through process automation, the manager’s staff is more productive so they have more time to apply to their process at hand. This is especially important during stressful times such as a looming deadline. Second, Expedite automatically maintains the summary status of the process and makes it available in real time to everyone. Management does not need to interrupt their staff. They simply open the dashboard.</p>
<p>25. The “No One Knew” problem.</p>	<p>Many processes require some form of action in the future. Contracts expire and need to be renewed, licenses need to be refreshed, or equipment needs to be recalibrated. Many times users simply need to know before some deadline passes that they need to do something. Ask any IT person if they have ever had a problem with a piece of hardware only to find out the maintenance agreement has expired. It’s bad enough to have some hardware down but if you have to scramble to get the maintenance agreement reactivated before users can get back to work, it is never any fun. Expedite can be used to track these agreements setting a metadata field as to when the agreement expires making it very simple to identify what is needed next. In a future version, Expedite will track down the right user and make sure they know some data needs their attention.</p>
<p>26. The “How do I Archive Anything?” problem.</p>	<p>If the information isn’t organized in the first place, archiving is difficult. Without it, a full backup of everything, be it related to the process or not, is saved off in the hope that no one in their right mind will ever want to look at it again. Archiving is an integral part of the best practices incorporated into the business process. There is actually an archive function for items being controlled by Expedite. Depending upon the process, Expedite can even automatically automate when the file is archived. When a file is archived, it is removed from the “active” list of entries and moved to a separate directory. All the information about the file such as its metadata, logs, attachments, etc., is also moved. Now, this directory can store, for example, all the purchase orders from 2008. Now when that directory is saved, it is saving it at the information level, rather than simply saving a snapshot of the entire server.</p>

Problem	Solution
27. The data source problem.	<p>Many business processes start from a common template and are built up from there. Making sure people always use the most recent template can be a challenge. Users either keep their own copy simply for convenience, or use the last completed file from the last time they did it as the template for the new one (see the Cut and Paste problem below). When a template needs to change, it can be difficult to ensure everyone uses the updated version. New contract clauses or pricing tables not updated can have serious consequences for the business.</p> <p>Expedite automatically identifies the correct template and will use that as the initial file contents. The template files themselves are also protected by Expedite requiring an approval process to be modified. This is an example where process compliance is actually easier than working around it using Expedite. A simple click on the dashboard and Expedite simply takes care of the problem.</p>
28. The “What happened to this? Problem.	<p>There is nothing worse than working hard on some project only to discover some problem with the file you are working on. Your first reaction is to ask who did this. Unfortunately, file systems provide little hope of being able to find out. Tempers flare, accusations are made, and someone has to spend the time to rework the file, restore it from a backup, or recreate the thing from scratch.</p> <p>Expedite automatically maintains a log of who did what to the file and when. When such a question arises, a quick look in the log will indentify the culprit. In reality, this situation rarely occurs because Expedite automatically notifies the right people when the file does change so everyone is in the loop.</p>
29. The “What’s this? I don’t know. Better keep it” problem.	<p>If you can’t even identify what the information is, how can you determine its importance? Unfortunately, this is an all too common occurrence. Ask anyone about their network drive and you will hear something along the lines of, “Oh yea. Our T drive is an absolute mess.” There is good information out there but there is so much other “junk”, the collection becomes kind of worthless. Users don’t want to be forced to actually try to find something out there since they have no idea if the data is valid anymore (or ever). Expedite is designed to provide organizational control over the information to prevent this problem.</p>
30. The “Data Abandonment” problem.	<p>Related to the above problem, the final result is data abandonment. No one simple trusts any of the data and simply refuses to use or reference it. One customer put it as that was where, “documents go to die.” This is sad because if the information was actually known, users could potentially be more productive, make decisions quicker, eliminate rework, or reduce costs. Management begins to ask, “If no one uses that information, why are we saving it and why did we generate it in the first place?” The entire premise of Expedite is to have a way to organize and automate information processing so this doesn’t have to happen.</p>
31. The “Why are my highly paid professionals spending time doing clerical work?” problem.	<p>The sad reality is that while nearly everyone has a computer, most people deal with their documents as if they were paper. File servers and the basic functions of an operating system provide little in the way of automating clerical tasks so common in business. Such work is a major distraction from the cerebral tasks that humans are so adept at performing. Expedite takes over these tasks to not just free users for other more appropriate functions, but can do them more reliably.</p>
32. The “Hey, the auditor’s here!” problem.	<p>Short of the IRS or 60 Minutes waiting in your office, the auditor showing up can strike fear in the hearts of any business process owner. Scrambling to ensure everything is in order before they arrive is a huge disruption in the normal workflow of the organization. The worry and stress involved doesn’t need to happen either. Expedite is designed to always maintain the required information. It’s ready at any time for an audit. There is no need to do any extra work prior to an audit. All the records are always maintained.</p>

Problem	Solution
33. The “The lawyer called and needs to talk to you.” problem.	The concept of eDiscovery has become a much bigger issue in the last few years due to some high profile cases. Sifting through huge piles of files to see if there is something relevant is a very costly process. Expedite can help that by maintaining information in an organized, tracked, and logged manner making it much easier, quicker, and less costly to identify the requested information.
34. The “I want you to pass this by this outside consultant” problem.	Trying to include people outside your organization in some process can be a challenge. Allowing outsiders access to your electronic information is not a viable option for most companies due to security concerns. Hoping people will be sure to include others in proper communication is not always a reliable method either. Expedite can automatically include external users in the approval and review processes simply via email. Expedite can tell if a user is a remote user, format an email to them with the file attached, and wait for them to reply. These external users simply have to click on a link that sends their response back to Expedite just as if they were local. Users can track what these external users are required to do, their actions get logged, and should they forget, they are gently reminded they need to do something.
35. The “Gatekeeper” problem.	Some users attempt to keep the information on a file server correct and accurate by assigning a person the job of gatekeeper. All information that is to be stored needs to go through that person. Not only is this an expensive solution but results in people only giving the gatekeeper the information at the end of the process. Users view this as a pain and try to avoid it. Expedite automates this gatekeeper function but does it at the very instance the information is created. Through the automation and protections, users find it is actually easier to do it the right way than to work around the process.
36. The “Process improvement? Do we have a process?” problem.	Improving a company’s business processes is a worthy goal that can pay big benefits if done properly. Many initiatives such as “continuous process improvement” are part of the culture at many companies. However, if there isn’t a defined process without ways to accurately track it, improvement is not much more than a hope. Expedite is designed to be able to take advantage of previously developed best practices, automate the appropriate steps within the process, and track its execution. Analysis of the information generated by the system can provide the much needed raw data so vital to understanding not just the baseline performance of the process but the identification of critical areas needed for improvement.
37. The “I don’t trust that copy on the server” problem.	Trusting information means people will use it. Once that trust is in question, the value of the information stored on the server plummets. There are many ways that people can loose trust in the information, many of them outlined in this table. Expedite’s underlying directive is to maintain the integrity of the information under its control.
38. The “Where did you put that?” problem.	Locating information can be a major productivity issue. Trying to find things on a server can be anything from a mouse click to an archeological expedition. While search tools can be very powerful, not everyone has assimilated the nuances of Boolean logic. Sometimes knowing where to start looking can be a real shortcut. Expedite organizes information based upon its business process so getting to the right location is easy and fast. The Expedite dashboard provides searching by the metadata of the information, something that file systems cannot provide. Expedite also maintains something called pivot directories. These are directories organized, not by file name but by the value of a metadata entry. For example, contracts with a customer name of XYZ can be immediately located with not much more that a couple of clicks.

Problem	Solution
39. The “It’s easier to bother someone than to go to the file server” problem.	Sometimes it is better to know the person who has the information than the information itself. However, it can be a major productivity waste to tie up two, or even more people, when looking for something. Expedite keeps the information organized, identified, tracked, and protected so locating information is significantly easier.
40. The “Is it done yet? Is it done yet? Is it done yet?” problem.	Anyone who has driven any distance with kids in the back of the car understands this problem. Knowing where a file is within a process can be difficult. As the urgency of the situation increases, the frequency of asking status can rise to an annoying level. Expedite provides a simple dashboard to allow for the checking of the status of a process in real time. The dashboard can identify where the process is currently and who needs to be working on it. Expedite can also automatically notify people when the process is complete. This can free up time by the people actually executing the process from the sometimes continuous requests for an update.
41. The “Where’s the file associated with this one?” problem.	Many files don’t live in isolation. Costing spreadsheets, photographs, request forms, estimates, etc. are all part of the domain of a file. These extra files can be difficult to keep attached to the main file and can be easily lost in the crowd. Expedite provides a simple way to attach files to a main file and have them be maintained as part of the package. When the main file is archived or made obsolete, the attachments are moved along with the file. This can be especially useful if that information needs to be referenced at some future time.
42. The “Where’s the chain of email associated with this one” problem.	One of the key pieces of data associated with a file can be the chain of email related to the creation and approval of its contents. Expedite will automatically log all the email notices and responses it sends but it can go further. Users can simply save the email as a file and attach it to the main file. This has the advantage of removing the email message from the email server, allowing everyone viewing the attachments to see the email rather than having it hidden in some users inbox, and when the file is removed or archived, the email message goes with the main file.
43. The “Cut and Paste” problem.	When generating documents that are similar in format and content, users will make a copy of an existing file and then attempt to update it with new information. They “cut and paste” data to the places in the file that need to be changed. While every editor provides this, there are still ways that can trip up the user. Having users do this type of manual editing in itself is an area for productivity improvement. If the user fails to catch some entry, the consequences can be “interesting” to say the least. Sending out a contract with the customer’s competitor’s name in the document can make for a potentially painful phone call. Expedite can start with a template (see the template entry above) and automatically fill in the fields based upon the metadata provided. For example, if the user enters the name of the customer, it will automatically enter that name in the file wherever it is required.
44. The “Double Entry” problem.	Integrating processes together can be a real challenge. A CRM system may be in place to track customer names and contact information but when it comes time to use that data to fill out a file, users often have to enter the information multiple times. Expedite can make references to other business processes, or even other databases such as a customer list to pull down contact information for example.
45. The “What files out there in that big pile need my attention?” problem.	Knowing just what people need to do when faced with a huge pile of files can be daunting. It is easy to overlook or forget some function needed causing all sorts of ripple effects to others. Expedite has a simple but effective dashboard that, at a glance, can show the user just what is required. Email notices are also sent out to notify a user their attention is needed, reminders are sent if they forget, and a summary report is generated each evening.

Problem	Solution
46. The “We don’t know what we have that is important” problem.	The concept of “importance” is very difficult to determine about some file or collection of files. IT has very little knowledge of what the data is. Looking at how often it is referenced gives little indication of importance. Asking users may not be much better since they may not know what the data is or have forgotten. In reality, only the business process can define the importance of the data. Unless there is a process and a system that will drive the process, it is virtually impossible to accurately determine the importance of any piece of data. The real reason people need to know the importance of data is to be able to do something with it. Expedite first of all controls the process and the process can define the importance of the data. Further, Expedite can automate the management of the information as the importance changes. For example, a closed purchase order can be put into an archive directory.
47. The “No one knows what is important” problem.	In order to do anything with a file (delete it, save it, move it, etc.) one has to determine the importance of the file. Unfortunately, the IT department can’t determine that, no even by looking at the contents of the file itself. The ugly truth is that the users may not even know the importance of the file! In reality, the only thing that knows or can determine the importance of that file is the process used to drive it. If that process is not documented, implemented, tracked, or otherwise ignored, there is simply no way to reliably determine the value of some random piece of data on the file server.
48. The “It’s easier to work around the system than to use it.” problem.	Many products have been created to attempt to manage information more effectively. When dealing with files, nearly every one of them takes the file and hides it behind some application or web interface. While this does protect the data, it causes a much bigger problem. Because these products are so clumsy, people quickly figure out that if they keep the files located somewhere else, it is easier to get their job done. They spend their time trying to work around the so-called solution rather than working with it. Expedite maintains the idea that users access files through a file system. A simple dashboard provides an easy way to interface to their data. Expedite automates much of the tedium of the process so users quickly learn it is actually easier to use the system than to work around it. That saves management a lot of work trying to “encourage” their people to use some expensive system that is getting in their way.
49. The “innocent question” problem.	Apparently simple questions asked about information can cause a cascade of interruptions and effort. A manager asking if their outside counsel approved this change or a customer asking about the status of their proposal can start emails, phone calls, interruptions, and extra work just to answer these types of questions. Since Expedite organizes, manages, and logs the activity of information, these types of questions are either easy to answer accurately or simply don’t come up.
50. The “How do other people do this?” problem.	Learning from other people’s mistakes and experience is a way to more quickly improve a process. Expedite can encapsulate a “best practice” that can be very quickly deployed. Paradoxically, while users want to steal someone else’s best practice, they feel that their process has some unique aspect that is not handled. Expedite has anticipated this and can be tailored to match just about any modification request. Starting from an existing best practice makes the final solution, even with any needed modifications, much cheaper and more reliable than attempting to develop it themselves.