THE IT ASSET MANAGER'S GUIDE TO CLOUD MIGRATION
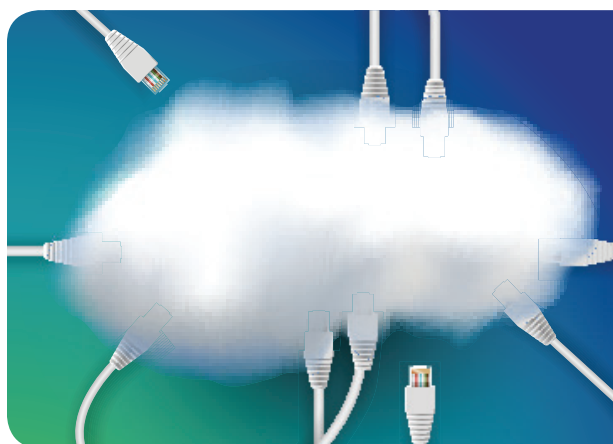
WE DO ITAD RIGHT

Lifespan

Planning for a smoother, more efficient, more cost-effective transition

Advancing technologies and server virtualization allow organizations to consolidate their data centers into smaller, more cost-effective, more energy-efficient packages than ever before. Cloud services allow companies to migrate some, or all, of their IT infrastructure to the cloud for greater flexibility and easier management with access to a wider range of architectures.

For many companies, the business case for consolidating data centers or migrating to the cloud is very strong, with clear benefits and cost reductions. But as with any major IT systems change, a data center consolidation or move to the cloud should include IT asset management planning to ensure the process goes as planned, on budget and on time. Compliance and data security need to be carefully integrated into the plan as well.

Typically, IT management teams planning consolidation or migration are concerned about:

- Downtime
- Data security
- Initial cost vs. long-term savings
- Customer support

WE DO ITAD RIGHT

Lifespan

Specializing in IT asset disposition, data destruction, remarketing, and recycling

There is a lot of work that goes into ensuring that all systems and applications are migrated without interrupting business. IT infrastructure and operations teams often put in extra hours and work weekends over several months to ensure the transition is a success.

Because the focus in these projects is usually the cost savings and the business applications, data security and destruction and asset disposition plans are often left until late in the project. Planning ahead for moving and disposing of assets and managing any data stored on them will reduce risk, costs and stress for the operations team. This paper discusses six IT asset management and disposition issues commonly encountered during a data center move, consolidation or cloud migration and suggests strategies to plan for them for an efficient and cost-effective changeover.

The six ITAD issues are:

1. Disposal or redeployment decision-making

2. Data security and information destruction

3. Regulatory compliance

4. Investment recovery

5. Managing leased assets

6. Space and time requirements

ITAD ISSUE #1: DISPOSAL OR REDEPLOYMENT?

Rather than a complete migration, many companies are choosing hybrid models for their IT infrastructure, incorporating cloud and virtualization elements with internal data centers. Most companies are not abandoning all of their data center assets. But, when applications are migrated off of a particular system, what is the optimal next step for that asset? The options are to redeploy it by putting it to some other use in the internal IT infrastructure or dispose of it, either by recycling it or marketing it for resale. Factors to consider are:

- **Should it be redeployed?** Could the asset serve as a better-performing replacement for some other asset deployed in the organization? In a consolidation or move, is the asset still able to support the required applications? If the answer is yes and the new deployment will be at a different location, consider the costs of moving the asset(s) and plan for packing and shipping. Also add any costs for installation at the new site, any software upgrades required, and maintenance.

- **How much is it worth?** Relatively new IT equipment can be valuable on the resale market. Older equipment may be worth nothing, but it could have some operational value within an organization. Issue #4, below, discusses determining the resale value of retired IT equipment based on market trends.

- **How much space does it take up?** Real estate for work and storage costs a premium. If hardware doesn't have an immediately apparent use, companies should consider whether storing it for future deployment is an efficient use of space – or if they even have the space. Remember that the resale market depreciates over time – so the longer an unused asset sits on the shelf, the less it will be worth for resale.
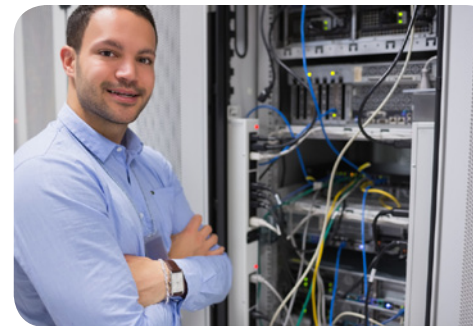
ITAD ISSUE #2: DATA SECURITY AND INFORMATION DESTRUCTION

Data security is one of the most – if not the most – pressing issues confronting IT professionals today. The risks associated with even a single data breach are major: costly legal fees and fines, loss of customer confidence, negative publicity, non-compliance with industry regulations, and a possible drop in stock price.

Data centers typically house hundreds or thousands of tapes and hard drives as part of the operational and storage systems that have been in use. Ensuring that data bearing media and devices are carefully tracked is important for security and compliance, as well as ensuring company policies for keeping or destroying data are being followed. Hard drives, tapes, and other storage media must either be destroyed or sanitized.

Review data retention policies, and secure approval to destroy media and hard drives well ahead of the final steps of the overall project. Uncertainty about what to do with stored data on drives and tapes can impact costs and the ability to complete the data center project on time.

If your company requires onsite physical destruction of data, be sure to have all the records and approvals you need to destroy the data, and allow for the time and the space for your certified data destruction vendor to do that.

If the storage assets are to be redeployed or remarketed, the existing data still needs to be wiped in a manner that provides security and allows reuse. For maximum security at the minimum cost, the method must be chosen carefully.

- Destruction involves physically altering a drive or tape so that no data can be recovered. Certified ITAD service providers (see #3 below) perform drive destruction using shredding or crushing equipment that meets industry standards. The destroyed material must then be disposed of in compliance with environmental regulations.

- Degaussing uses a strong set of magnetic fields to ensure all data on the drive or tape is destroyed. With degaussing there is no visible evidence that the data has been destroyed, but magnetic hard drives that are properly degaussed will no longer function in a device. Some tapes can be reused after degaussing, however.

- Data sanitization is the process through which the data on a hard drive is overwritten with other data (wiped) to the point where the original data is completely gone. For modern drives, this can reliably be accomplished in one pass with the right process and certified software tools. Using a certified process and software tools ensures data security and enables reuse or resale of the hard drives.

Some organizations as a matter of policy choose physical drive destruction for all their retired IT equipment. However, the difference in resale value between systems with hard drives and those without can be up to 30 percent. Drives and some tapes from storage systems have resale value on their own. All the major standards organizations in the U.S. and Europe accept proper data erasure as equal to the physical destruction of drives. A certified partner (see Issue #3) can perform data sanitization in compliance with the latest industry standards. On the other hand, erasure does cost more and takes significantly more time, so erasing data from equipment that won't have resale value can be a waste.

Another factor to consider is whether to have data sanitization performed onsite (which can cost more and require more space and time) or at a partner's facility (which is often less expensive, but requires addressing logistical and asset tracking issues). One method – erasure or destruction – does not fit all the possible disposition scenarios. You may have some assets that you physically destroy and some that you wipe for redeployment or resale.

Work with your certified data destruction partner as early in the data center change process as possible to develop a plan to be sure you have selected the right processes, the resources required are available, the work can be completed within the required timeframe, and that the plan will meet all company and industry requirements.

ITAD ISSUE #3: REGULATORY AND ENVIRONMENTAL COMPLIANCE

Depending on its industry, a company is beholden to any number of regulatory standards related to the data that is stored on its systems. Some include:

- HIPPA/HITECH
- PCI
- SOX
- FACTA
- GLB

These are in addition to internal corporate data security requirements and policies.

Every company is also required to be sure that all materials reach their final disposition in full compliance with federal and state environmental regulations. Just turning over the materials to a vendor who promises to do the right thing does not remove liability from your company.

When an organization falls out of compliance with industry or environmental regulations it risks fines and negative publicity. When equipment is retired after a data center consolidation or cloud move, the entire disposition process must be conducted in compliance with regulatory and environmental standards. The easiest and surest way to meet these requirements is to use ITAD and data destruction partners who hold third party certifications.

NAID AAA certification for data destruction

Generally, regulatory bodies place a high value on data security and come down hard on organizations that let sensitive data leak. If your organization is subject to industry or internal audits, you must be able to demonstrate a secure, documented process in place even if no breaches have occurred.

Organizations concerned about data security can look to industry accepted third-party certifications to ensure their IT asset disposition partner is performing data destruction and sanitization according to the latest best practices and regulatory requirements. The National Association for Information Destruction (NAID) provides the only third-party certification that focuses exclusively on information security. A vendor with NAID AAA Certification must document and demonstrate that all aspects of their employee hiring and training, material handling, technology and tools, and facilities meet the requirements. NAID performs both a scheduled and a surprise audit each year on the organizations it certifies.

e-Stewards and R2/RIOS for environmental compliance

Both e-Stewards and R2/RIOS certification prove that an IT asset disposition partner is handling its customers' electronics waste in an environmentally safe and compliant way. These standards include strict rules that prevent illegal export or land filling of electronic waste.

There are just a few IT asset disposition providers that are both R2/RIOS and e-Stewards certified. Many large enterprises now require that their electronics recycling vendors hold both.

ITAD ISSUE #4: INVESTMENT RECOVERY

Equipment that has been retired from data center use and not marked for redeployment has potential value on the resale market. Remarketing is an opportunity for companies to recoup some of their investment on retired equipment and cover some or all of their disposition costs, consequently improving the return on investment (ROI) of their IT program. For maximum value, remarketing decisions should be planned thoughtfully as early in the process as possible. The following best practices should be incorporated into investment recovery planning for data center assets.

1. **Identify market trends**. The market for used technology is fluid and returns can fluctuate, but price trends can be identified by asset type or class. An IT asset disposition vendor should be able to help determine whether the assets planned for disposition are revenue generators or not.

2. **Proper handling.** Damaged equipment has little value. Best practices for storing and packing assets should be followed.

3. **Complete systems**. Systems with missing components will net lower returns. Memory, processors, hard drives, power supplies, batteries, and all other components should be in place to maximize value.

4. **Cost-effective data sanitization.** See Issue #3.

ITAD ISSUE #5: LEASED ASSET MANAGEMENT

Many enterprises supplement their owned IT assets with leased assets. When a data center moves, closes or consolidates, the IT staff must be sure to segregate the leased equipment from the owned equipment. Planning the management of the leased assets in advance will save time, hassle and cost.

If the lease term is ending, are the assets to be returned to the lessor or are you purchasing them? A buyout of end of end of lease equipment may be more beneficial financially and could be simpler for your team than returning the assets. An ITAD partner who specializes in lease returns can help you determine the best option and simplify the disposition, whichever option you choose.

For assets being returned to the lessor, what is the data destruction plan (see Issue # 2)? You most likely will have to return the assets with the hard drives in place, yet you need to be sure that every single drive is fully sanitized. You will need to plan the time for this as well as consider whether your asset management team has the resources to sanitize the drives, ensure the right assets are returned, and to record exactly what is returned?

If the lease term(s) extend beyond the data center project completion, you need to have strong asset tracking and chain of custody procedures in place so you have records of every leased asset. A data security plan, if the assets are to be moved to another location, should also be in place.

ITAD ISSUE #6: SPACE AND TIME REQUIREMENTS

A large IT asset disposition project takes up space: space to stage the equipment, including removal and storage of hard drives or tapes, packaging for shipping, access to loading docks, space to perform onsite data destruction and sanitization.

It takes time to perform the de-install, move equipment around, scan it, and track it. Vendor management can also be an issue when data centers are closed or consolidated. IT operations must ensure each step and activity is performed when and how you need it. An example is that delivery of new equipment, removal of old equipment, data destruction, and shipping of redeployed assets all may require use of the same loading area and inside spaces – at many facilities these activities cannot happen at the same time.

IT personnel might be put to better use getting new servers (virtual and real) and networks online or supporting new applications. Selecting a vendor who can manage many aspects of the disposition process, and working with that vendor as early in the process as possible to plan all of the disposition activity, will save time and money. It also ensures on-time completion when deadlines are critical.

PLAN AHEAD, USE A CHECKLIST

Because of the risks and costs involved, proper IT asset disposition should not be overlooked or performed too hastily in the schedule crunch of a major operations change. Don't put your data security at risk because of end-of-project confusion, time and space crunches. Although disposition is the end of your process for your assets, make sure it's well thought-out and planned at the beginning of a project to save costs, reduce hassle, and ensure a smooth and on-time project completion.

LifeSpan's FREE Self-Assessment

Identify gaps in financial return, data security, environmental compliance and program efficiency with our FREE self-assessment guide.

Click to download LifeSpan's Free Self-Assessment
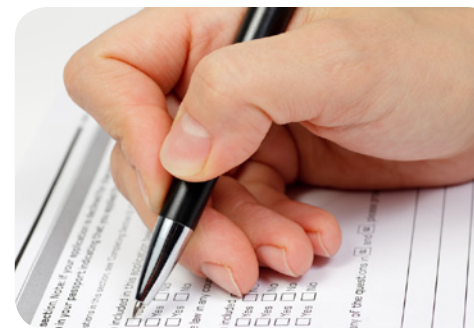
THE BENEFITS OF A HOLISTIC ITAD PLAN

Including disposition issues at the beginning of the planning process for a data center consolidation or move or a cloud migration will help ensure a smooth, cost-effective transition. Organizations that implement a well-planned enterprise-wide IT asset disposition program are already one step ahead. They understand the risks associated with ITAD and have put in place a well-defined procedure, optimized for value and ability to help the company meet its business objectives, while being transparent and auditable.

The challenge of IT asset disposition is ensuring that every disposition, at every location, is done according to corporate standards, and that the needs of every department with a stake in IT asset disposition are being met while minimizing the resources and difficulty required to get it done. That challenge increases with the size of an enterprise.

A holistic approach to ITAD recognizes the differences among the various departments and locations in an organization and tailors the process to fit their needs and capabilities. This approach makes it as easy as possible for team members to do ITAD right, every time, for every location, with the documentation to back it up.

By implementing and following a programmatic approach to ITAD, an organization will also be able to better manage costs and maximize returns, with an enterprise-wide pricing and service structure from its ITAD vendor.

LifeSpan's Next Gen ITAD Program

Sign up for a FREE 360 degree ITAD assessment and see what a next generation desposition process looks like for your company.

Click to apply for LifeSpan's exclusive Next Gen ITAD Program

Identify stakeholder needs with LifeSpan's self-assessment guide

If your company is planning to move to the cloud or consolidate servers, or is thinking about ways to optimize its ITAD program in general, LifeSpan's guide, "How to Perform an IT Asset Disposition Plan Self-Assessment," can help you identify the goals, concerns, and priorities of your organization's stakeholders and provides a roadmap for starting the process of aligning their objectives into a comprehensive ITAD program. **Download your IT Self-Assessment guide at info.lifespantechnology.com/itad-self-assessment-guide**