



## AutoVirt Enhances File Migration Experience — Preemptively Identifies Trouble Spots

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### Management Summary

With release 3.5 of their namesake product, AutoVirt, Inc., of Nashua, NH, is assisting its file migration users by dramatically proving the old adage “**what you don’t know *can* hurt you**” in a whole new, high-tech way. Their disarmingly simple, yet powerful idea is that IT management (located either within the firm or with an outside contractor) needs to identify which issues might happen before they are surprised by them during a file migration project. Too much effort, time, and money is at stake NOT to be informed about potential pitfalls.

Their solution is an assessment tool that is not unlike a high-end GPS (or Global Positioning Satellite) system for your car. Advanced units suggest routes around temporary impediments, such as a bridge out, extra heavy traffic, or even a late breaking road blocking traffic accident, *before you reach them*, hopefully allowing you to adjust your plans accordingly. In effect, the GPS is providing actionable information that will help the driver by providing heretofore-unknown data.

IT managers want analogous data during the planning stage so that they can size the file migration project accurately, take preemptive actions, if necessary, and staff appropriately. The goal is a smooth file migration that avoids moving unnecessary data, fixing file problems before the migration event, and using automation to remove human error as much as possible. However, they do not want to lose decision-making control on how to remediate any lurking issues. To find out how to ensure successful file migration projects using automation, virtualization, and a global namespace, please read on.

### AutoVirt Software

AutoVirt, Inc. of Nashua, New Hampshire, has announced the availability of Release 3.5. This software product is for customers who have file-based Network Attached Storage (NAS) and want the freedom to move files around without taking a system outage. Typical use cases involve (a) technology refreshes as new storage is rolled into the data center and you need to migrate from old to new; (b) movement of files between storage tiers; (c) virtualization projects that separate the physical location of data from its logical location; plus (d) migration of data for backup/recovery or offsite disaster recovery. New with this release is an Assessment Module that examines files before moving them to highlight potential “trouble files” well before the actual migration event. **In short, it tells you where to look to find files that could hurt you – if you did not know they were there.**

### Live File Migrations

No contemporary IT organization wants to be subjected to an application or system outage unless absolutely necessary or unless they are forced to do so by external circumstances (fire, flood, malware attack, etc.) They particularly want to avoid outages associated with data relocation, such as migrations, technology updates, and data tiering. AutoVirt offers a solution that can pay for itself by:

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- Migrating less data
- Speeding migration projects
- Accurately scoping the size and effort of the project so that scheduling is more favorable and more realistic, all while
- Avoiding system or application outages.

### ***Artificial Intelligence — No ... Your Intelligence Operative — Yes***

AutoVirt leaves the decision as to what to do about offending files to the administrator and intentionally excludes server-based artificial intelligence. More control is the reason for this design decision. Administrators are in the best position to make decisions about these files because they know or have access to background data that would affect their decision making process. Nonetheless, AutoVirt does support the use of scripts that can be developed to comply with corporate policy standards. In fact, such automation is one of AutoVirt's core competencies.

### ***Why AutoVirt is Different***

#### **Global Namespace**

The key to AutoVirt's utility is its use of a global namespace plus performing data migrations "live" without taking an application or a system outage. It does so by virtualizing all NAS and Windows file servers, building a global namespace – a service in your network that receives client requests for files and returns the appropriate storage location. Using this approach lets customers keep their shortcuts even after the files they reference have been relocated. This transparency shows AutoVirt's understanding of how data really is used by sophisticated as well as novice users. It also is an indicator of why the software installs so easily and is accepted so readily by users.

AutoVirt's global namespace is integrated tightly with policy-based data assessment, migration, archiving, and replication modules within the suite of software provided. This means that when you move data using an AutoVirt policy, the namespace is updated immediately, so that data is readily available. This organic approach allows users to avoid the overhead associated with *DFS (Distributed File System)* from Microsoft. With AutoVirt, you let the namespace provide the automatic redirection to data.

Customer file shares also can utilize the AutoVirt global namespace by enabling logical views of all shares – regardless of their actual

physical location within the network. Users can browse the logical shares without concern for where the data is actually residing. You also could employ this functionality to reorganize user data without changing the underlying storage.

#### **Out-of-Band Solution**

With AutoVirt, the file migration task is accomplished using out-of-band processing. There is no extra software in the data path to slow down the movement or processing of data. It also means that there is no performance degradation while the independent and behind-the-scenes migration takes place. With out-of-band processing, there is no extra system time taken for post-processing following a migration event.

#### **Agent-Less Client Software**

This software does not depend upon copies (or agents) being present at each node in the network. Rather, it is agent-less thereby avoiding all the headaches associated with keeping all agents (sitting on nodes) at the same maintenance/patch level. It also avoids the scheduling problems associated with initially installing the software and thereafter keeping all sites in sync. You also avoid the Big Bang of activity where all changes take place simultaneously in your network.

### **How New Assessment Module Helps**

Before beginning a data migration project, it is always prudent to examine what files will need to be moved. Only then does it make sense to size the effort and to schedule the activity. The new AutoVirt Assessment module can provide you with the following file level metrics information.

- **Count of Files to be Moved** – Are there any candidate files that could be deleted without penalty before the migration begins? Can this count be lowered? Would the migration effort be lower without their inclusion and by how much?
- **Ownership of Files** – Should files from employees no longer employed at the firm be moved? Should those files be located on fastest, best, most expensive storage tiers, or could they be served by lesser storage tiers, such as slower SATA? Should these files be archived for long-term retention? Should they be deleted? Who is using how much storage and is it within enterprise standards? Should certain organizations have more file space

than others?

- **Create Date or Other Meta Information** – Should files from 2007 be moved to archives? Can files last accessed as of a certain date be migrated to another tier of storage? Do we want to virtualize files from a specific project?
- **File Type** – After examining file name extensions, do we want to migrate space-eating video files, music files, photos, etc.? How much space is consumed by video files? Could that space be recovered for other, higher priority uses?
- **Files with Persistent Error Reporting**, such as files with repeated access denied or ACL (Access Control List) Errors. Should they be moved as is or should they be researched and remediated?
- **X-Y Tables and Charts**, including:
  - **General-purpose charting** that can be exported in CSL format for subsequent analysis by this or other tools.
  - **Image exports** for subsequent analysis and possible data mining.
  - **Creation of other filters** to promote enterprise policies and procedures.

### ***Why Do File Migrations Fail?***

The number one reason why file migrations fail is underestimating the time and effort involved. Optimism that all will go well is overtly naïve. If you are a third-party service provider for migration services, you may see the profit for this engagement quickly drain on the petard of a troubled file needing remediation. If you are an internal IT department, you may see your estimate for project completion to senior management turn into unwanted oversight and extra management attention, not to mention the complaints if users are affected. AutoVirt's Assessment Module means having a better lay of the land that will improve project estimates on a go-forward basis.

### ***Effects of Failed File Migrations***

The effects of failed migration projects are predictable, if not totally quantifiable: time delays, cost overruns, but also impacts on other projects. Because migrations are often part of the critical path for larger projects, the effect of any delay can be multiplied forward as can its cost overruns. Under-appreciated or unappreciated is the fact that there also are opportunity costs involved: projects started late, projects delayed, even projects cancelled. All of these impacts certainly justify your evaluation of what

AutoVirt Release 3.5 can do for your organization. AutoVirt indicates publicly that its customers are saving an average of 75% of average time for completion of successful file migration projects.

### **Other Important Release 3.5 Features**

- **Reduced configuration requirements for production**, reducing minimum production configuration from three VMs down to just two.
- **Assessment Module installs on a single VM** for easy implementation.
- **Upgrade from single VM to full production configuration** takes place in less than an hour.
- **Transitioning from Assessment Mode to Action Mode is Immediate.** The transition to AutoVirt's full production configuration usually can be completed in a matter of minutes.

### **Conclusion**

Today, any company with either of the following two words in its name is certainly worth investigating: *automation* and *virtualization*. This means that AutoVirt should automatically be on your to-be-researched list. The better reason to study AutoVirt is its commitment to providing low-cost IT infrastructure tools with remarkable applicability. Release 3.5 is instructive. It is *hardware agnostic*, i.e., it works equally well with all file-based storage. It is *non-disruptive* to users and their applications. And, it is *scalable*, meaning that it will operate with predictable performance across a broad range of configurations and work loads.

However, perhaps the bigger story is that IT support personnel can recover some of their valuable time that typically would be consumed by file migrations. Being *non-disruptive*, AutoVirt can run during the work day rather than late at night or on a holiday weekend. Being *policy-based*, well-thought-out standards can be applied across the firm with minimum intervention. Being *schedulable*, support staff can avoid the deadly visits to third-party locations for semi-annual testing exercises.

Take a look at AutoVirt Release 3.5. It may put you back on schedule and allow some sanity to return.



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