Signiant Manager+Agents
More Innovation with Manager+Agents: 4 New Capabilities

Over the past year, we've added several significant new capabilities to Manager+Agents, our flagship solution for automated, scheduled transport of large files between geographically dispersed locations.

The recent enhancements reflect Signiant's ongoing commitment to innovation in support of our customers' evolving needs within a rapidly changing, competitive, and fast-paced media landscape.

Specifically, the new capabilities are:

→ 1. New integration with Media Shuttle for automating file deliveries to people

→ 2. Enhanced integration with Flight for fast uploads to the cloud

→ 3. Support for local object storage

→ 4. Growing file support

Collectively, these additions provide for greater integration across Signiant's entire product portfolio, support for new technologies and hybrid storage deployments, and an expansion of addressable use cases.

Before exploring these new features, let's quickly review Manager+Agents' core features and benefits.

MANAGER+AGENTS: A QUICK OVERVIEW

As on-premises, behind-the-firewall software for automated, accelerated file movements between geographically dispersed data centers, Manager+Agents provides a backbone for system-to-system file movements within and between enterprises. This broadly deployed solution is used by most of the world's largest media enterprises for mission-critical file transport.
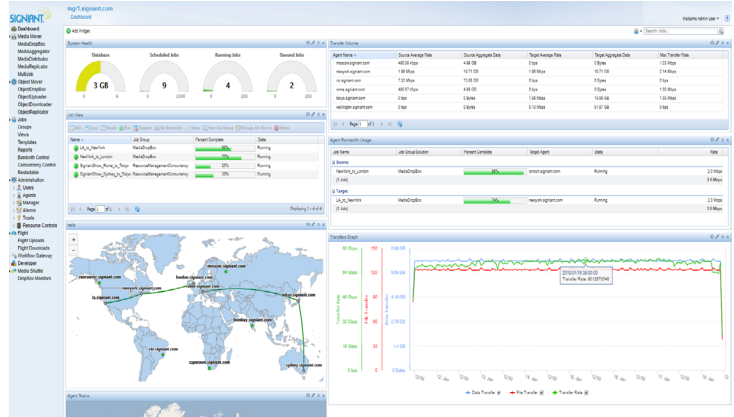
MANAGER+AGENTS DASHBOARD / MANAGER VIEW

At its core, Manager+Agents consists of three components:

→ **Manager** – As the central command center for an M+A deployment, the Manager software handles all administration, control, and reporting functions. Administrators interact with the Manager via a Web-based interface that allows them to configure the system, automate tasks, and monitor activity.

→ **Agents** – Agent software, which executes the accelerated file movement tasks, is installed on remote servers. File movement occurs from one Agent to another.

→ **Relay Agents** – Relay agents enable firewall traversal and the isolation of content from external networks.

In addition to the award-winning Signiant core technology—acceleration, reliability, and security—all Manager+Agents' deployments benefit from its enterprise class scale-out architecture. Designed from the ground up to operate at scale, Manager+Agents' central database and policy-based architecture allow configuration information to be automatically propagated out to hundreds or thousands of endpoints, rather than configuring each one individually.

The web-based Manager console also includes the following features:

→ Customized email notifications of job completions

→ Customized reports that you can schedule

→ Complete visibility into system activity and in-progress file movement jobs

→ Management of bandwidth usage, including setting ceiling and floor ranges based on the time of day or traffic loads on the network

→ Manager peering to view jobs running on other systems and to initiate jobs between peered systems configured to enable this

→ Pre-configured file transfer templates for common operations, such as file distribution, aggregation, replication, and hot folder transfers

Understanding how important interoperability is to our customers, Signiant also provides rich SOAP and REST APIs to allow customers to extend their Manager+Agents' workflows by enabling external applications to initiate jobs.

For even greater automation, customers can license the optional Automation Engine module that allows for the creation of flexible workflow templates for automating the processing of content. Using an intuitive visual BPMN-based Workflow Designer, users can connect workflow steps and manual tasks with the appropriate business rules and store these in the workflow library for reuse. The Manager then uses the applied templates and associated rules to execute file transfers based on the inputs supplied by various systems, and to trigger actions in connected third-party tools. So, for example, a workflow template might define directing an outbound package for transcoding and watermarking before publishing.

The Resource Management module enables even more sophisticated control over Manager tasks than the base package. With this module, administrators can…

→ Exercise more control over resource utilization

→ Create fine-grained rules for prioritizing asset delivery based on business needs and timelines

→ Reorder the job queue as situations or priorities change

Visit the Managers+Agents product page for more information

MANAGER+AGENTS: NEW CAPABILITIES

→ **1. Automated Deliveries to Media Shuttle Users**

Many of our customers use both Manager+Agents and Media Shuttle, Signiant's cloud-native SaaS solution for person-initiated transfer of large files. Our newest capability now enables even more integration between Manager+Agents' workflows and Media Shuttle users.

It has always been possible for the Manager+Agents and Media Shuttle s to connect to the same storage, thereby enabling person-to-system workflows. One common use case is for content received through a Media Shuttle Submit portal to be automatically processed by a workflow defined in Manager+Agents. This is achieved simply by configuring the M+A workflow to monitor the same storage folder to which Media Shuttle is delivering content.

The new capability extends the integration between the two products to include system-to-person workflows. Via Media Shuttle's new automation API, workflows can now be created to directly link automated Manager+Agents' deliveries to individual Media Shuttle users.

Configured to work for Share portals—with Send from Share enabled—the Delivery Automation feature replicates Manager+Agents' functionality previously implemented using Media Exchange and Media Gateway, Signiant's first-generation solutions for person-initiated file transfer.

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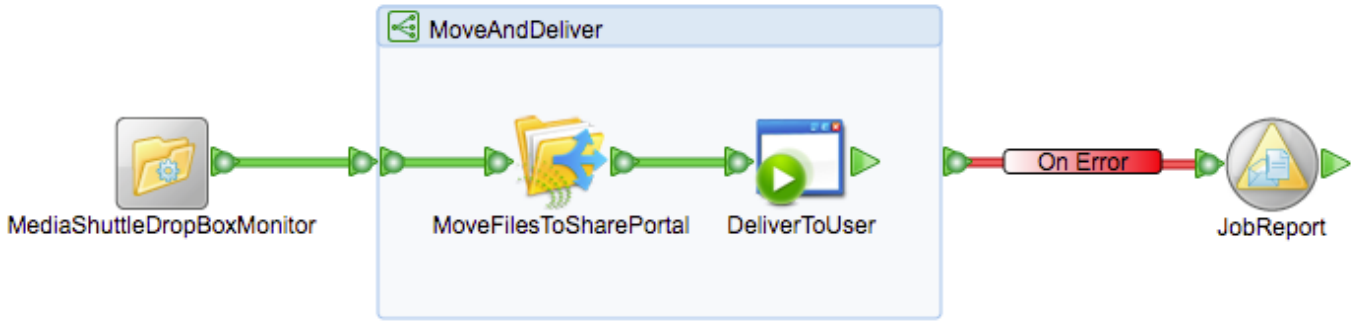
As customers increasingly replace these early products with Media Shuttle, the new feature makes it easy to migrate a wide range of workflows to a more contemporary solution – and to take full advantage of all the benefits of a SaaS delivery model.

For newer customers, the integration allows for the creation of even more efficient and cost-effective automated workflows for sending content to people within (or outside) their organization by leveraging their existing Media Shuttle subscription.

An example is a Manager+Agents' workflow that automatically moves newly received content through a QC process and then, if it fails, to a specific individual for manual inspection and next steps. As with all Media Shuttle transfers, the recipient will automatically receive an email with a link notifying them that the file is available for download from the relevant Share portal.

→ **2. Enhanced Flight Integration for Fast Cloud Uploads**

From its launch, Flight—Signiant's auto-scaling, cloud-native SaaS utility for fast, secure transfer of large data sets into and out of the cloud—has been deployable as an optional workflow component for Manager+Agents.

Flight employs Signiant's patented acceleration technology to dramatically speed up cloud transfers by minimizing the impact of latency and packet loss. With Flight, there's no need to buy cloud compute resources or install software in the cloud; Signiant handles all of that. When used in conjunction with Manager+Agents, Flight extends the automated system-to-system accelerated file transfer workflows of the former into cloud storage—a "must have" feature of today's hybrid (i.e., spanning both on-premises and cloud infrastructure) operations.

Recently, Signiant released a newly patented, standards-based transport architecture for Flight. Unique in the market, this new technology accelerates any HTTP-based transfer and is capable of delivering data to the cloud at multiple gigabits per second by using multiple cloud instances for a single transfer.
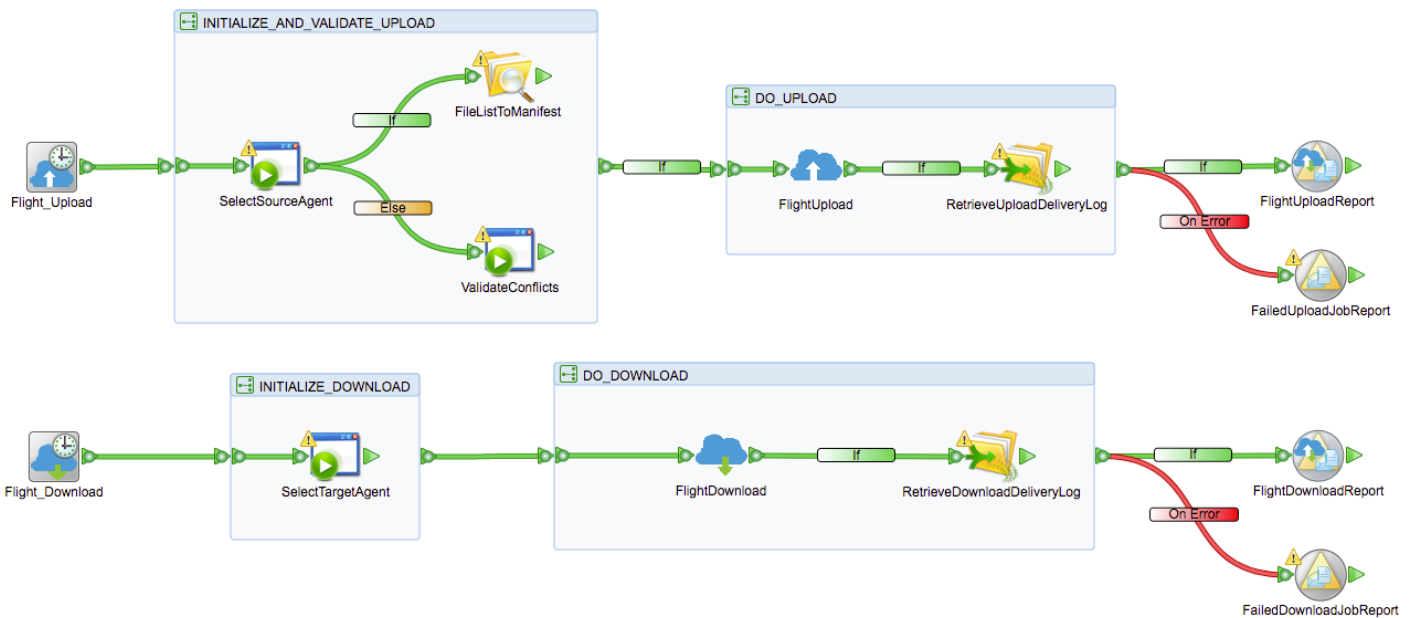
When used in conjunction with Manager+Agents, the new architecture enables transfers to the cloud and transfers between on-premises storage locations to be managed identically. This means that the Manager interface can provide full visibility of all transfers. In addition, the Manager can take advantage of advanced functionality, such as resource control, and apply it equally to cloud uploads. The result is the ability to seamlessly manage data transfers in a hybrid cloud deployment from one central console.

The new deployment option supports the use of relay agents to navigate firewalls for transfers to the cloud. It even supports sharing content from the cloud storage with trusted third parties who have their own Manager+Agents in a peered relationship.

There are multiple use cases for deploying Flight, such as high-speed transfer of large data sets to the cloud for archiving, back-up, cloud processing (e.g., transcoding or data analytics), or distribution. Increasingly, we also see customers deploying Flight as part of an IT drive to migrate compute resources off-site and into the cloud.

Whatever the reason, Flight's enhanced capabilities and tighter integration with Manager+Agents make the combination of the two products even more efficient and compelling than before.

→ 3. Local Object Storage Support

As storage choices continue to proliferate, Signiant remains committed to the notion of storage independence. Media enterprises have long relied on Manager+Agents to access and move assets stored in traditional on-premises file systems, and, with the addition of Flight, to provide accelerated transport to public cloud services, such as Amazon Web Services or Microsoft Azure.

With local (on-premises) object storage gaining traction due to its scalability, low cost, simplicity, and compatibility with cloud architectures, Signiant now provides support for S3-compatible object storage offerings from vendors such as Dell EMC, NetApp, and Quantum.

Perfect for storing large volumes of unstructured data, local object storage is frequently used as nearline storage, enabling companies to limit expensive, dedicated production storage (used by NLEs for example) to only storing content currently needed in production.

With Amazon Web Services (AWS) owning roughly 40% of the cloud services market by revenue, it is no surprise that AWS S3-compatible object storage has fast become an industry standard among storage vendors. The advantage to customers is that any applications they may buy or build for use on their S3 buckets in AWS should also work with S3-compatible storage they purchase for on-premises usage, thus minimizing the cost and effort of building out hybrid cloud operations.

With the addition of this new capability, and the option to extend workflows to the cloud with Flight, hybrid architectures can be fully supported that allow Manager+Agents' customers to securely transfer large files between any of these storage types:

- → On-premises file storage
- → On-premises S3-compatible object storage
- → Cloud storage in AWS or Microsoft Azure

→ 4. Growing File Support

In the world of live event production, particularly sports and news, speed is the name of the game. The addition of growing file support to Manager+Agents enables Agents to transfer files (provided they are in formats that support streaming, such as QuickTime or MXF) while they are still being written to storage. The obvious benefit is that transfers can be completed within seconds of concluding ingest of the live event feed. For the remote teams, they can power down remote facilities and mobile units much faster. This saves money and allows staff working long shifts to wrap up earlier.

Growing file support is also a critical component of the increasingly popular "at home" production model in which as much of the event production as possible is done by staff who are not on site at the event, but rather remain at the broadcaster's primary production facilities. This model has emerged in an effort to reduce costs while still producing more content for more platforms in as close to real-time as possible. In other words, doing more with less.

Growing file support enables these workflows without the need for adding expensive and impractical baseband delivery of all remote event feeds back to the main facilities. It does this by allowing, for example, highlights editors or journalists "at home" to edit and publish their packages, perhaps for online or mobile platforms, while the main event coverage is still ongoing and the corresponding file is still being transferred to their location.

Especially with sporting events, which can last an hour or more before any interruption in the action, this capability enables the creation and distribution of very fast turnaround of high value content without incurring the expense and complexity of either producing everything on site or backhauling all the remote feeds to the main facility. Waiting until the event is over, the video feed is finished, and the resulting closed file is transferred to the production team is simply not an option in today's consumer-driven world.

With the addition of support for transferring growing files, Manager+Agents now fully embraces this use case as well as other ones where the ability to transport and process files while they are still being written is a requirement.

These are just some of the new improvements and enhancements Signiant has recently made to our flagship Manager+Agents solution. Stay tuned for more announcements as we continue to innovate and add new capabilities.