

Intelligent MFT for data-heavy workflows

Technical Datasheet

MASV is a cloud-native, instantly-scalable, intelligent managed file transfer solution that moves terabyte-scale files anywhere in the world quickly, securely, and reliably.



Built for massive files & high-speed workflows

Optimized for media, AI, and enterprise use cases, with browser drag-and-drop, Desktop App, branded Portals, no-code automation, and APIs.



Intelligent, resilient transfer engine

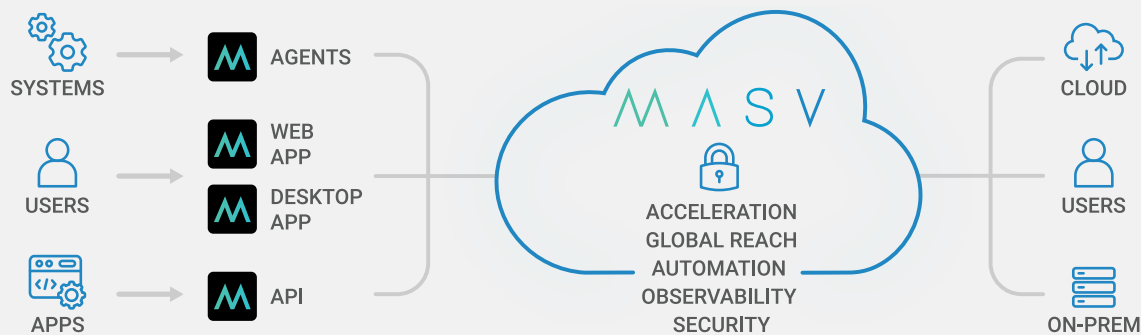
File chunking, bandwidth saturation, auto-resumable uploads, channel bonding, and automatic error recovery, secured end-to-end.



Cloud-native delivery & integration

Runs on globally optimized cloud infrastructure, integrates directly with major storage and collaboration platforms, works across all environments (on-prem, cloud, and hybrid), and can deliver files while they're still uploading, with no servers or infrastructure to manage.

Architecture at a Glance



Core Technical Capabilities

MASV provides an alternative to hardware-based managed file transfer (MFT) systems with a globally distributed, fault-tolerant ingest and delivery fabric capable of sustaining multi-gigabit transfers.

Access Methods

- > **Web Application** – zero-install, drag-and-drop browser interface with no plugins required.
- > **Desktop Application** – native client with optimized I/O, automation, and transfer resilience.
- > **Headless Agent** – securely transfers files to/from MASV; available for macOS, Windows, Linux, Docker. Scriptable CLI and RESTful APIs.
- > **REST API, SDK** – programmatic control for workflow automation and system-to-system integration.

Transfer Architecture

- > **Throughput** – sustained 10Gb+ transfer rates via a private, optimized global network of 400+ servers.
- > **Multi-Path Channel Bonding** aggregates multiple network interfaces (e.g., Ethernet, LTE/5G) with automatic failover.
- > **Large Object Support** – supports multi-terabyte jobs without compression or manual segmentation while preserving directory hierarchies.
- > **Fault Protection & Checkpoint Restart** – automatically resumes transfers from the exact point of interruption.
- > **Bandwidth Management** – rate-limiting and scheduling controls for shared network environments.
- > **End-to-End Integrity** – MD5 checksums validate delivery.

Core Technical Capabilities continued

Integration and Workflow Automation

- > **Integrations** – native connectors to 25+ cloud storage and media collaboration platforms for automated ingest, egress, and archiving.
- > **API-Driven Workflows** – full lifecycle control of Portals, transfers, users, and cloud destinations. Robust REST API, webhooks, and transfer Agent allows technical teams to build proprietary data ingest accelerators.
- > **MASV Portals** – custom upload experience and Full REST API/Webhooks for no-code automation.

Deployment Model

- > **No Dedicated Hardware** – operates over standard internet with no port forwarding or hardware installation or maintenance.
- > **Rapid Provisioning** – operational in minutes via browser or API.

TECHNICAL SPECIFICATIONS

Maximum Transfer Size	Unlimited (Unlimited number of files and file package sizes, with single files up to 15TB in size).
Network	TCP/IP based for max speed over conventional internet reaching 10Gbps+ . Outstanding browser-based performance via a private, accelerated network of 400+ global servers.
Speed Acceleration	MASV Multiconnect bonds multiple internet connections. MASV Express starts downloading to configured destinations before upload finishes.
Supported Protocols	Browser-based (no plugins) for sending; integrates with cloud & on-prem storage.
Security and Compliance	Certifications: ISO 27001:2022, SOC 2 Type II; TPN Gold Shield vendor. Regulatory Compliance: GDPR, PIPEDA. Authentication & Access Control: SSO, MFA, private portals, password-protected transfers, Teamspaces, download expiry, and role-based user controls.
Workflow Automation	MASV Portals (custom upload experience) and full REST APIs and webhooks for no-code automation. More than 25 cloud and on prem storage integrations with custom development potential for many more.

Operational Model

MASV uses zero-infrastructure HTTPS transport with parallelism, chunk-level resume, and API-driven automation.

Global Acceleration Fabric

MASV operates a global transport network: a mesh of global landing points deployed across multiple AWS regions. Each landing point is an ingress/egress acceleration node optimized for parallel chunking, TCP tuning, automatic retry & resume, and geo-aware routing.

Chunk-Oriented Transfer Engine

MASV uses adaptive chunk sizing with integrity validation and parallel retransmission at chunk-level granularity. Folders are treated in the same manner as files, with structure preserved. Compression is not needed, simplifying the upload experience.

Failure Model

MASV is designed to assume that connection failures are normal. Transfers are idempotent and self-healing. Failures such as packet loss due to path congestion, browser crashes, or IP changes are handled automatically through relentless retries and checkpoint restart.

Portal-Centric Workflow

A Portal is a means by which file transfers may be defined and controlled. It defines identity, access controls, filtering, naming conventions, and file retention period; supports metadata definitions; and configures where data lands. File transfer status and histories may be viewed and filtered.

The Flow



Portal created, policies established



> Content is uploaded via browser, desktop, CLI, SDK, or API.



> Data streams into the MASV global mesh and is auto-delivered to:

- Integrations: cloud or on prem
- Downstream workflow and asset pipelines

The MASV Ecosystem

MASV Web Application

The MASV Web Application provides a zero-install, browser-based, drag-and-drop interface for initiating and managing large file transfers.

Capabilities

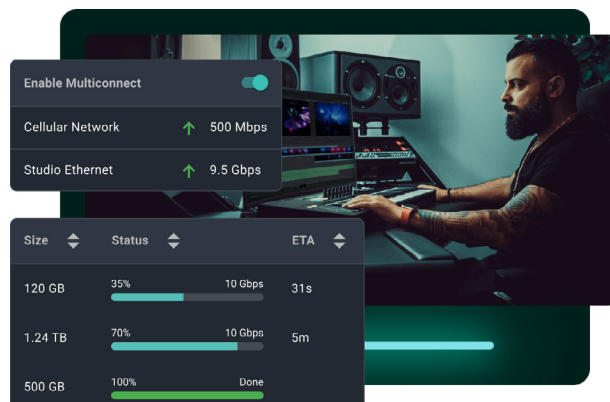
- > Send complete directory trees without count limits and individual files up to 15 TB.
- > Manage user profiles, team membership, access policies, and security configuration.
- > Configurable for brandable, organized, trackable inbound and outbound transfers. Receive files from external users without sender accounts.
- > Integrate with cloud storage, on-premises storage, and collaboration/asset management tools.
- > Monitor transfer activity and generate detailed usage and billing reports.

MASV Desktop App

The MASV Desktop App offers additional features that boost performance and automation. Available for Windows, macOS, and Linux.

Capabilities

- > Faster sending and receiving of files – reaching 10Gbps+.
- > Automate sending and receiving files with Watch Folders.
- > Bond network connections to increase transfer speed and reliability.
- > Automatically resumes transfers in the event of a network interruption.
- > Checksum verification ensures what is sent is exactly what is received.



MASV Agent

The MASV Agent is a lightweight, headless service that runs on servers, cloud infrastructure, and client endpoints to securely and efficiently transfer large files.

Capabilities

- > Runs without a browser dependency, enabling fully unattended and automated file transfers. A scriptable CLI and RESTful API offer complete management and control.
- > Operates on cloud and on-prem servers and client endpoints, allowing transfer execution close to the data source or sink.
- > Authenticates and coordinates with MASV via APIs while executing transfers locally.
- > Supports on-premises, cloud, and hybrid architectures with consistent transfer behavior.
- > Enables authenticated, encrypted transfers aligned with enterprise security and access control practices.

MASV SDKs, API, and Webhooks

The MASV API is a RESTful interface that exposes MASV's high-performance, secure large file transfer capabilities for direct integration into external systems and applications.

Capabilities

- > Create and manage upload portals, packages, and transfers without user interaction through the MASV web interface.
- > Integrate file movement into custom applications, DAM/MAM platforms, SaaS products, mobile applications, and automated pipelines.
- > Monitor transfer lifecycle state and delivery outcomes for downstream processing and auditability.
- > An embedded, API-driven file transfer service that enables full workflow and UX control by the host system.
- > Available SDKs include packages for upload and download, with more in development.
- > Receive notifications within MASV via custom webhooks.

MASV Security and Compliance Overview

- > Compliance-aligned security program (ISO 27001, SOC 2 Type II, GDPR, PIPEDA, Trusted Partner Network)
- > Cloud-native, zero-infrastructure architecture (HTTPS-only, no infrastructure)
- > End-to-end encrypted, high-performance file transfer (TLS in transit, AES-256 at rest)
- > Strong identity and access controls (SSO, MFA, RBAC, least-privilege)
- > Portal-level controls for access, expiry, and external sharing governance
- > Full auditability and transfer visibility



Technical Use Cases

High-throughput data ingest over unreliable networks

TECHNICAL CHALLENGE:

Ingest large, time-sensitive data from geographically distributed sources over unreliable networks without VPNs, servers, or physical media.

MASV CAPABILITIES:

- > Globally distributed acceleration fabric
- > Browser-based and native client upload options
- > Chunk-level resume and end-to-end integrity verification
- > Policy-controlled upload portals with expiring access links
- > API and agent-based automation

OPERATIONAL BENEFITS:

- > Sustains high throughput despite packet loss and network congestion
- > Eliminates manual handling, physical media, and fragile SFTP workflows
- > Reduces operational overhead by reducing IT burden
- > Scalability without user licensing friction

Automated data pipelines into hybrid storage

TECHNICAL CHALLENGE:

Automate reliable data pipelines to move massive datasets into hybrid storage while maintaining performance, security, and observability across unpredictable networks.

MASV CAPABILITIES

- > Globally distributed acceleration fabric
- > Chunk-level resume and end-to-end integrity verification
- > API and agent-based automation
- > Webhooks for observability and directing post-processing
- > Metadata-aware storage integrations

OPERATIONAL BENEFITS:

- > Designed to overcome fragile transfer infrastructure
- > Reliable ingest automation at scale
- > Consistent performance over variable networks
- > Simplified security and compliance operations

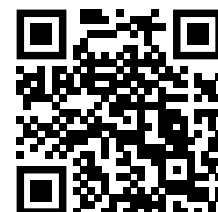
Benchmark MASV in Your Production Environment

Stress-test MASV's cloud-native architecture with your own data, storage, and security requirements.

Launch a structured two-to-four-week PoC with dedicated engineering support and discover how MASV can transform your workflow.

Fill out the form at massive.io/enterprise/poc or follow the link at the QR code. Our team will reach out to discuss how we can tailor the PoC to meet your objectives.

Contact sales at sales@masv.io



masv.io