



Unleash the

POWER OF ASPERA

With an Additional Layer of **Content Security**

IBM Aspera **ir|data**

Content Exchange & Distribution with Unparalleled Security in an Intuitive Combined Solution

Key Benefits:

- Move files at maximum speed, regardless of network conditions.
- Securely deliver content with anyone around the world.
- Integrate seamlessly with Content Management Systems via Aspera and Irdeto APIs.
- Irdeto TraceMark™ provides watermarking for all major mezzanine and broadcast quality formats. Supports resolution up to 3840x2160, including HDR and 10-bit color depth.
- The supported formats include J2K, ProRes, H.264, HD50, XDCAM, MXF, and IMX.
- The watermarking pattern dynamically embedded in the content represents the TraceMark Identifier (TMID) associated with an individual transaction.

Within the Digital Content Supply Chain, many different solutions are leveraged to handle both the tracking and security of assets as well as the efficient distribution to countless recipients. Having an integrated solution to seamlessly accelerate the transfer of data with forensic watermarks enables simple and effective content exchange and security business processes.

Ad-Hoc File Distribution with Aspera on Cloud

With the globalization of content workflows, effective collaboration and exchange of large video assets require fast and efficient ways to connect with both internal departments and external parties, especially as the size and number of files grows. IBM Aspera® on Cloud (AoC) facilitates an easy, high-speed exchange of large video files, audio files, and their accompanying metadata, over a wide area network. AoC is an ideal solution for Media and Entertainment workflows where exchanging big data across the world is required.



Figure 1:
IBM AoC Deployment Options with
Centralized Management

Through an intuitive web-based interface, collaborators can send and share files and folders bundled as packages to individuals or groups, whether they are within the organization or are external partners. Aspera FASP® technology provides delivery at maximum speed, while enterprise-grade security features help ensure that only authorized people have access to download the data. The service authenticates users upon login, encrypts data in transit using strong cryptography, and verifies data integrity to protect against man-in-the-middle attacks.

AoC overcomes the data transfer challenges of the hybrid cloud by allowing companies to securely and reliably move big data across on-premises and multi-cloud environments at an unrivaled speed. The hosted service from Aspera is the fastest way to transfer, exchange, and deliver data from Amazon S3 or Google Cloud storage repositories to anywhere with anyone.

For Video Distribution or Work-in-Progress Media, Aspera on Cloud allows for the seamless ability to deliver a single package, containing a single file or a collection of files and folders, to unlimited receivers. Capabilities like Shared Inboxes for ad-hoc content submission, mobile device support, and an automated desktop downloader help ensure that teams stay on top of content changes, especially for projects with tight deadlines.

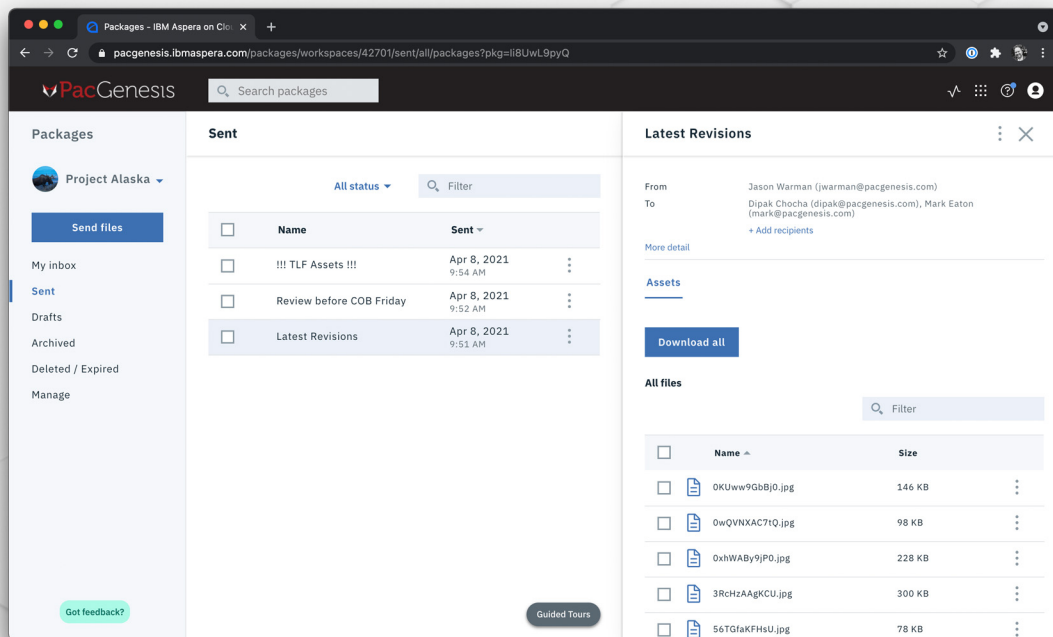


Figure 2: AoC User Interface for accelerated downloads of Watermarked assets

Extend Security for Content Exchange with Irdeto TraceMark™

With the prevalence of digital distribution for finalized assets as well as the collaboration of works in progress, there is a tremendous need to protect valuable video assets across the many hands that have access. Having a watertight distribution and content collaboration network is critical in combating global piracy and significant loss in revenue.

Irdeto TraceMark™ is a cloud-based SaaS solution that embeds an invisible, unique forensic watermark in each downloaded video asset which identifies the content distribution channel and recipient of the asset.

The fully automated solution watermarks a wide range of assets in a centralized and consistent way, replacing legacy visual marking methods and manual workflows so commonly used today.

There is no need for client-side software changes and the watermark is invisible to viewers. Irdeto TraceMark™ creates individualized watermarks without affecting download speeds, making it a seamless deployment experience for your distributors. Being a SaaS deployment model, leveraging AWS or Google Cloud, Irdeto TraceMark™ is able to scale up on-the-fly to handle peak demand.

Being able to identify content leaks instantaneously is crucial in the new digital delivery world. Irdeto TraceMark™ gives you direct access to locate pirated content online, identify the source of leaks, and implement enforcement actions when combined with Irdeto's Online Piracy Detection Portal.

This allows you to fully secure your most valuable video assets and prepare future counter-measures with your partners and Digital Supply Chain.

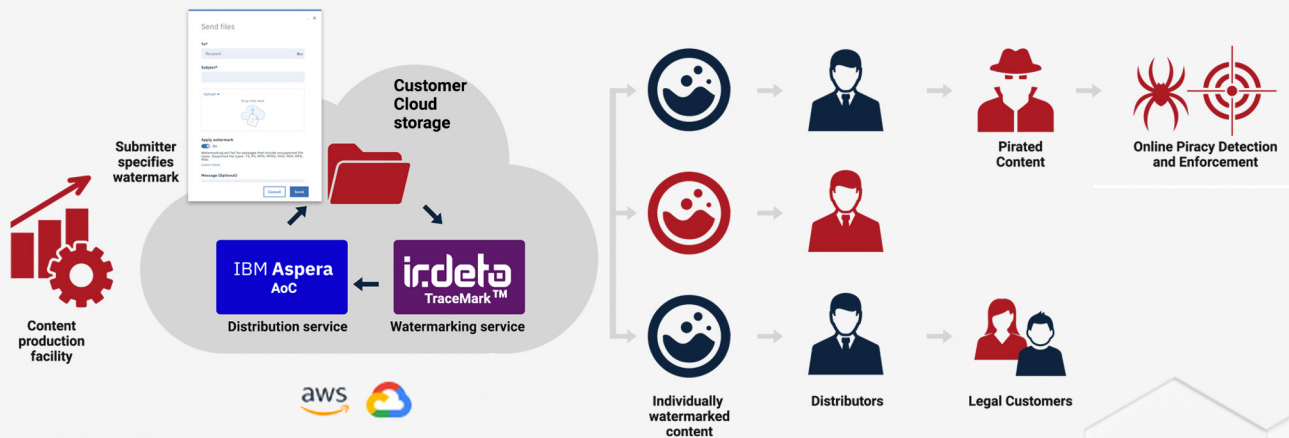


Figure 3: Irdeto TraceMark™ + IBM AoC + Irdeto OPD Integrated Solution

Delivery and Traceable Security Combined

With the capabilities for simplified distribution and content exchange from IBM Aspera on Cloud and the security and traceability of valuable video assets from Irdeto TraceMark™, the possibilities of automating and enabling a powerful antipiracy collaborative Digital Supply Chain has truly arrived.

Irdeto TraceMark™ is available as a fully integrated solution with IBM Aspera on Cloud

Files can be watermarked from the IBM Aspera on Cloud management interface by simply selecting 'watermarked delivery' when uploading a package for distribution, or by enforcing watermarking as a business rule on accounts or specific workflows. Content is then delivered as an individually watermarked asset to any number of recipients, making it simple and quick to deploy. Alternatively, you can use the simple RESTful control APIs to integrate Irdeto TraceMark™ with your existing content management systems for additional control and reporting.

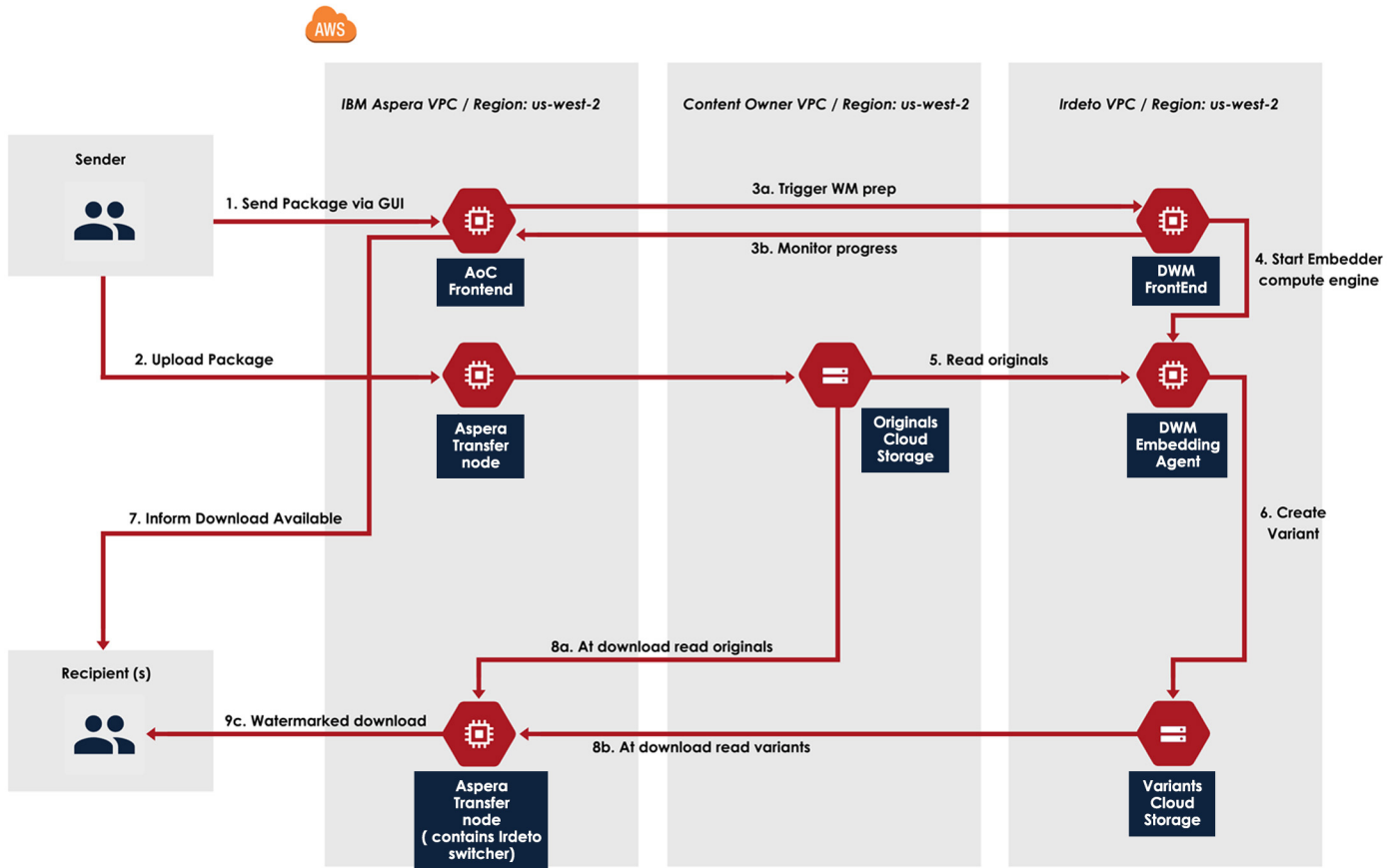


Figure 4: Irdeto TraceMark™ + IBM AoC Integrated Workflow

This powerful combination allows for an easy and effective solution, leveraging FASP for data transfer on request, leading to speed and efficiency of content movement, while seamlessly applying a unique invisible watermark to every single recipient. The entire Work-in-Progress and Content Distribution pipeline is secured.

Customers simply connect their cloud storage (S3 or GCP) to their Aspera on Cloud Organization. Once enabled, Aspera on Cloud is able to send and receive content in a secure and accelerated manner. Irdeto TraceMark™ is explicitly granted read-only access to this bucket to allow for variant file creation (~3% of file size). When a download/transfer is requested, the original file size and the variant are combined with a unique pattern by the Irdeto Switcher that is enabled on the Aspera Transfer Server. Each content partner receives a completely invisible uniquely watermarked asset from the source, which is traceable at any point.



Premier Aspera Business Partner

PacGenesis is a leading business solutions provider and an IBM Gold Business Partner. PacGenesis has been serving organizations of all sizes in the data security space for over 10 years. Over this time period, PacGenesis has seen a revolution in how businesses operate and how businesses seamlessly and efficiently transfer data through the support of modernized services and solutions. Their customer-first mentality has helped PacGenesis stand out as one of the leading Trusted Advisors in digital file movement security. To learn more about PacGenesis, follow @PacGenesis on Facebook, Twitter, and LinkedIn, or go to www.pacgenesis.com



Irdeto. Building a Secure Future.™

Irdeto is the world leader in digital platform security, protecting platforms and applications for video entertainment, video games, connected transport, connected health and IoT connected industries. Irdeto's solutions and services enable customers to protect their revenue, create new offerings and fight cybercrime effectively. With more than 50 years of expertise in security, Irdeto's software security technology and cyberservices protect more than six billion devices and applications for some of the world's best-known and loved brands.

People are Irdeto's biggest strength and diversity is celebrated through an inclusive workplace, where everyone has an equal opportunity to drive innovation and support Irdeto's success. With a unique heritage in security innovation, Irdeto is the well-established and reliable partner to build a secure future where people can embrace connectivity without fear.



2020 Product of the Year -
Tracemark™ for Distribution with IBM Aspera on Cloud



PacGenesis 2021
IBM Beacon Award Winner



2020 Cloud Service Innovation of the Year -
Tracemark™ for Distribution