



TOLKA Watermark Solution

The increase of web-based content distribution raises the risk of revenue loss due to illegal sharing, copy and re-distribution. In order to protect the valuable content, most conditional access systems allow Broadcasters to generate a secure link to grant content access between the Headend distribution to the individual Set-Top box.

Tolka Watermark is a software-based solution that addresses the needs of Broadcasters to protect their content from illegal usage and revenue losses. Whereas typical watermark solutions use complex algorithms encoded into the content at source requiring significant hardware processing, Tolka Watermark utilizes its patent-pending software technology, Digital Signature Engine (DSE), to insert an invisible digital signature at the final destination on the distribution path making each piece of content unique each time it is decoded.

Furthermore, the unique digital signature can be used to identify the specific device which last decoded the suspect content before it was copied and redistributed.

If the suspected content proves to be an illegal copy made from a device on a DTH operator's network, Tolka Watermark Solution can match the Digital Signature ID and the device associated with this signature on the network, thereby allowing easy and prompt identification of an illegal copy and facilitate tracing the copied content to the device (eg: handheld, tablet, etc.) on which it was last decoded.

System Benefits

- Lowest cost watermark solution in the market.
- Software-based solution, eliminates the need of per-unit hardware cost.
- Compatible with both STB and various smart devices.
- Simplified decoding and ease of implementation.
- Watermark security is based on overwhelming variety, the watermark changes over time making it harder to find and bypass.

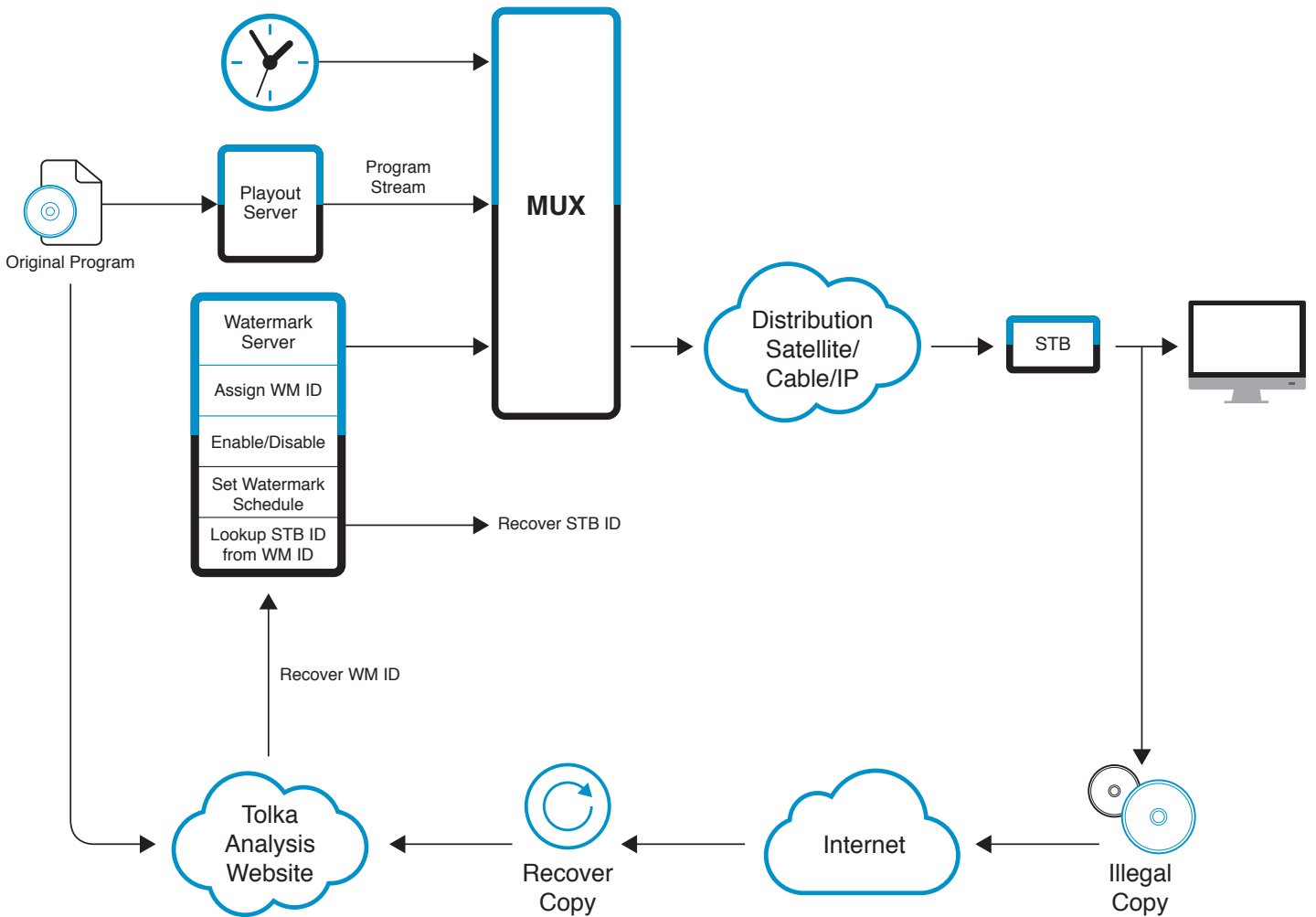
System Requirements

- Must have Tolka Watermark Server.
- STBs must be enabled for Tolka Watermark.
- Smart devices must use Tolka player.
- Must have 25-50 kbps available in the distribution path to support watermark control.
- Watermark server must have Internet access for registering smart devices.

System Functions

- Centralized server allows registration of STBs and smart devices; allows coordination with CAS server.
- Centralized server assigns unique ID to each STB and smart device.
- Centralized server schedules variety in watermarking.
- At each path-point in the system where the program is decrypted, decoded and rendered for display, the unique watermark is added to the rendering.
- Watermark decoding web site allows submission of watermarked copy plus original source to recover ID of the device that produced the copy.
- Centralize server can recover the identity of the user responsible for the device that made the copy through the recovered watermark ID.
- Supports smart device player – FFmpeg.
- Watermark decode tool for recovering the watermarking ID.
- A variety of watermarks are set on the STB platform as directed by the centralized server.

System Drawing



ADTH

For over 20 years, Atlanta DTH, Inc. has been a leading supplier of Cable and Satellite DTH communications equipment and an innovator of ground-breaking telecommunication systems for IPTV, OTT, DTT and other media related applications. Our solutions provide the tools for content broadcasters to expand their service offerings to existing and new customers allowing them to expand and develop their markets. We strive to meet the technological goals of our customers; be it in the broadcast, telecommunications or IPTV markets. Partnered with TOLKA, a revolutionary solution provider to the media industry; ADTH offers a combination of traditional media broadcasting and modern social networking solutions, where media content can be shared under the control, and be fully traceable, by the media content provider or the system operator; creating new business opportunities that are developed and expanded from the users behavior and relationships.