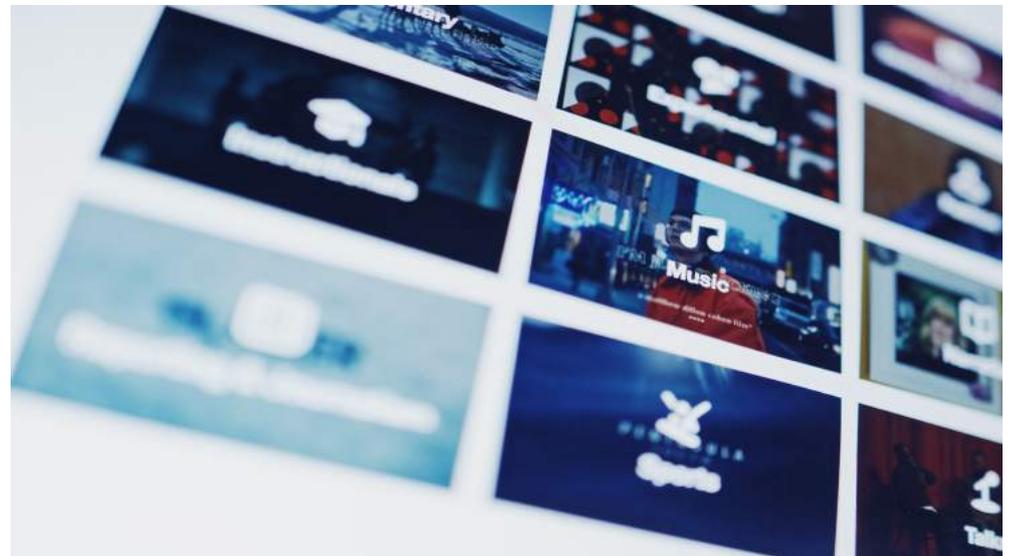# ivitec MediaSeeker Core Platform™

Configurable Content Identification Engine

Anyone who works in the media business will tell you that tracking, identifying, and controlling media as it passes through the various stages of the content lifecycle from creation to distribution across multiple platforms is a daunting task – and it's only getting more difficult. Digitization of massive archives, global collaboration, and a coincident explosion in the nature and number of distribution platforms only adds yet another layer of complexity to this.

The ivitec MediaSeeker Core Platform™ was specifically designed for these complex media management needs and more. Based on ivitec's world class video fingerprinting technology, the Core Platform™ is a lightweight, scalable video indexing and identification engine that can be deployed and seamlessly integrated into any pre–existing workflow or serve as the engine behind any of the new breed of content identification-based applications. It is also at the heart of all of ivitec's state-of-the-art content identification-based products, solutions, and services.

ivitec MediaSeeker Core Platform™: Unlimited Media Applications

The concept behind the ivitec MediaSeeker Core Platform™ is a simple one: just as one glove doesn't comfortably fit every hand, one video fingerprinting technique won't capture every use case or application. With ivitec's Adaptive Fingerprinting Technology™, customers are offered the ability to tweak the density and granularity of fingerprints. Moreover, the system is video format agnostic and is easily interfaced through a collection of standard APIs. This means that the ivitec MediaSeeker Core Platform™ is the industry's only fully parameterizable system able to meet the full range of content identification demands of a variety of complex media-centric business processes, all of this without compromising the accuracy or efficiency of the system (see Figure 1).

less dense

Lightweight
- Rapid, Large Scale Search
- **Internet**

Adjustable Fingerprint Density

Balanced Search
- Quick Video Search
- Scene Level Comparison
- **Archives, Enterprise Search**

Key Frame
- Multi-Purpose Search
- Scene-Level Comparison
- Intra-Frame Comparison
- **TV Monitoring**

more dense

Frame Intensive
- Detail-Oriented Comparison
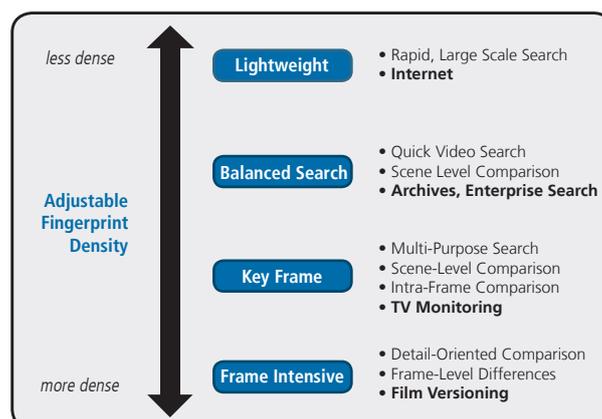- Frame-Level Differences
- **Film Versioning**

Figure 1: ivitec Adaptive Video Fingerprinting Technology™

Features

ivitec MediaSeeker™ delivers several video indexing and identification feature sets, particularly:

▶▶ **Flexibility:** Granularity of comparison can be tweaked down to frame level depending on specific use case

▶▶ **Catalogs:** Organize related content into unique groupings in order to increase search performance

▶▶ **Video Format Independant:** Visual-based fingerprinting technology supports most standard formats

▶▶ **Distribution Platform independent:** Flexible design supporting multiple distribution platforms (broadcast, internet, digital archive, etc.)

▶▶ **Region-of-Interest Detection:** Identify "picture within picture" unique content displayed in a distinct region of the screen

▶▶ **Difference Detection:** Frame by frame differences between query video and reference content

▶▶ **Video and Audio Comparison:** Image-based with optional audio-based comparison

Applications

ivitec MediaSeeker™ can be integrated into any business process or application with minimal integration effort:

▶▶ **On-Screen Content:** Rapidly compare and differentiate multiple versions of related video content down to the frame level. Identify frame/scene transpositions, deletions, additions, or graphic overlays / changes in on screen content.

▶▶ **Metadata Maintenance and Retrieval:** Store and retrieve metadata as content passes through the various stages of the media asset lifecycle.

▶▶ **Media Redundancy Prevention (MRP):** Eliminate duplicates and link related content, thereby reducing maintenance and storage expenses.

▶▶ **DAM / MAM System Integration:** Integrate with DAM / MAM systems to combine the above-mentioned functionalities and enable content to be tracked and controlled along every step of the workflow.

▶▶ **UGC Sites:** Integrate into user-generated content sites in order to identify and ultimately monetize content.

Interfacing with ivitec MediaSeeker Core Platform™

ivitec MediaSeeker™ gives access to its functionality via Web service-based API (Figure 2):

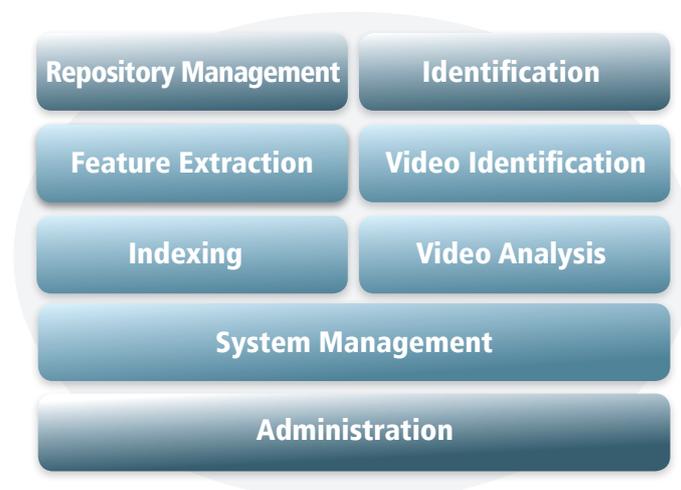| Repository Management | Identification |
Feature Extraction	Video Identification
Indexing	Video Analysis
System Management	
Administration	

Figure 2: ivitec MediaSeeker™ Building Blocks

The Repository Management Interface is used to import and index videos inside the core platform. Videos are decomposed into representative frames and an optimal set of image features is extracted from each frame in order to compose a fingerprint. The extracted fingerprint is stored in the fingerprint repository and added to several internal indices for further analysis.

The Identification Interface allows users to specify various search mode parameters for the video content to be tracked. The matching reports, together with difference detection results are summarized in the form of detection reports.

The Administration Interface allows users to configure and monitor the ivitec MediaSeeker™ services.

For more information about ivitec's products, services and solutions, or to schedule a live demonstration, email us at **info@ivitec.com.**

ivitec enables the automatic identification, control, and ultimately monetization of media content at any point along the media asset lifecycle. iPharro content identification solu-tions can be deployed and seamlessly integrated into any preexisting workflow or serve as the engine behind any of a new breed of content identification-based applications.

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