

SeaChange® AdPulse™ On Demand Advertising System

The SeaChange® AdPulse™ On Demand Advertising System automates the dynamic insertion of advertisements into on-demand video streams. It enables critical back-office operations such as:

- **Definition and management of on-demand advertising inventory**
- **Placement of orders against defined inventory and management of those orders**
- **Definition of ad placement rules that control run-time decision making about which advertising assets are streamed**
- **Distribution of ad insertion instructions to multiple VOD systems**
- **Comprehensive tracking and reporting on order execution across multiple VOD systems**

The SeaChange AdPulse System uses core technology for playlists, splicing, and tracking provided in SeaChange® Axiom™ Content Dynamics.

Together, the SeaChange AdPulse System and SeaChange Axiom Content Dynamics provide a platform for generating new advertising revenue. They enable on-the-fly insertion of advertising into on-demand content and detailed tracking and reporting of the views and usage of inserted ads.

COMPONENTS

The key functional element of the SeaChange AdPulse System is the SeaChange® AdPulse™ On Demand Ad Manager. It provides:

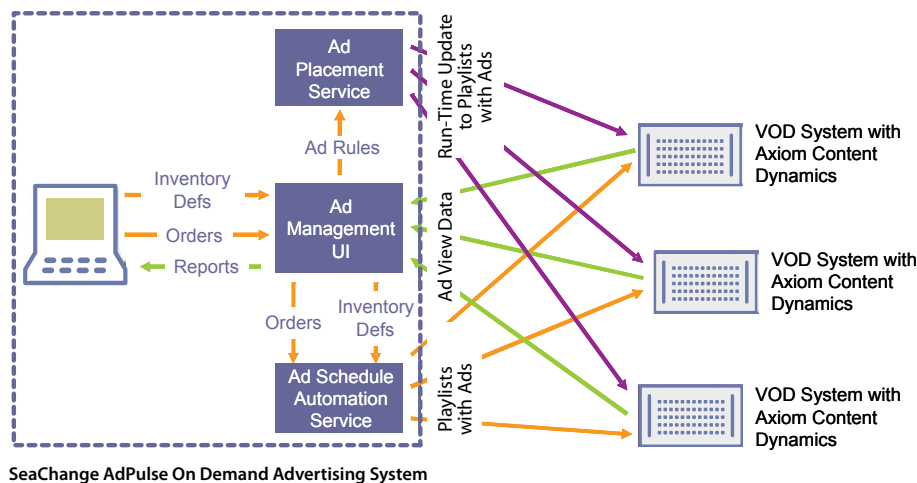
- A web-based user interface to define inventory, enter orders, enter metadata for ad copy, and view reports aggregated from multiple VOD systems on ad execution and user actions during ads

- An ad schedule automation service that delivers ad insertion instructions to multiple VOD servers based on inventory definitions and orders
- An ad placement service that evaluates ad placement rules at run-time to determine which ads to play out in a VOD stream.

FEATURES

The key features of the SeaChange AdPulse System include:

- **Inventory management** – the ability to define advertising avails in on-demand content. Inventory definition includes first specifying a content group (by program, provider, or content category) to which the inventory definition will apply, then specifying the number and placement of ad breaks and the number of spots per break for programs in that content group.
- **Order entry** – the ability to specify the rules by which different ad copy will be inserted into on-demand content by assigning advertising copy to defined inventory.
- **Dynamic ad placement decisions** – the ability to modify a playlist at run-time to add, delete, or change ads played with assets based on defined ad placement rules.
- **Operational reporting** – the ability to view and track aspects of the overall operation of the SeaChange AdPulse System such as whether copy required to execute an order has been received and propagated.
- **Business reporting** – the ability to view and track specific business aspects of the SeaChange AdPulse System such as which inventory has been sold and which is unsold, summary of orders from a specific client, etc.
- **Verification reporting** – the ability to track and view data about execution of orders, views of specific ad copy, and user action during the ad views.



SPECIFICATIONS

- Includes a web-based user interface for inventory definition, order entry, and ad metadata entry
- Requires at least one (1) SeaChange AdPulse On Demand Ad Manager Server per DMA; total depends on traffic
- The SeaChange AdPulse On Demand Ad Manager Server must run the following software:
 - SeaChange AdPulse On Demand Ad Manager v1.0
 - Microsoft® Windows® 2003
 - Microsoft® SQL Server 2000
 - Microsoft® IIS
 - .NET v1.1_4378 runtime
- Requires two (2) SeaChange® AdPulse™ On Demand Ad Placement Servers per VOD Command Center (a Legato CoStandby pair providing a warm standby capability), which may be the same server pairs running SeaChange Axiom Content Dynamics if traffic permits
- The SeaChange AdPulse On Demand Ad Placement Server must run the following software:
 - SeaChange® AdPulse™ On Demand Ad Placement Service

PREREQUISITES

The SeaChange AdPulse On Demand Advertising System requires that the following other components be installed in the VOD system:

- SeaChange Axiom Content Dynamics v1.0 or greater

OPTIONAL COMPONENTS

The SeaChange AdPulse On Demand Advertising System may be used in conjunction with the following other components depending on site requirements:

- SeaChange® QuickSilver™ Input Workstation with SeaChange® Ad Metadata Editor™ to ingest ads from tape
- SeaChange® DigitalX™ Ad Automation Transcoder to automatically pull ads from an ad storage system

LIMITATIONS

- All ads must be at least 15 seconds in length

Sales Order Number	Description
To Be Determined	SeaChange AdPulse On Demand Ad Manager Server (minimum 1 per DMA depending on traffic)
To Be Determined	SeaChange AdPulse On Demand Ad Placement Server (1 server pair or more per Command Center depending on traffic; may share server pair with SeaChange Axiom Content Dynamics if traffic permits)
To Be Determined	SeaChange AdPulse On Demand Advertising System software license — DMAs 1-49 (includes SeaChange AdPulse On Demand Ad Manager and SeaChange AdPulse On Demand Ad Placement Service; 1 per DMA)
To Be Determined	SeaChange AdPulse On Demand Advertising System software license — DMAs 50+ (includes SeaChange AdPulse On Demand Ad Manager and SeaChange AdPulse On Demand Ad Placement Service; 1 per DMA)