

SeaChange Multiverse Applications Platform™

The SeaChange Multiverse Applications Platform™ is a complete software product that enables the packaging, promotion, administration and delivery of IP video services over broadband networks, including xDSL and FTTH networks.

SeaChange Multiverse™ is a client/server application based on open, industry-accepted standards (J2EE, Linux, XML, etc.) for building and delivering a wide variety of live and on-demand IP video service offerings.

SeaChange® provides Multiverse™ with pre-integrated end-to-end solutions for IP video that include content protection, IP STBs, IPTV headend systems, and other SeaChange components including:

- SeaChange Axiom Open Suite™
- SeaChange MediaServer™
- SeaChange Axiom Recording Service™

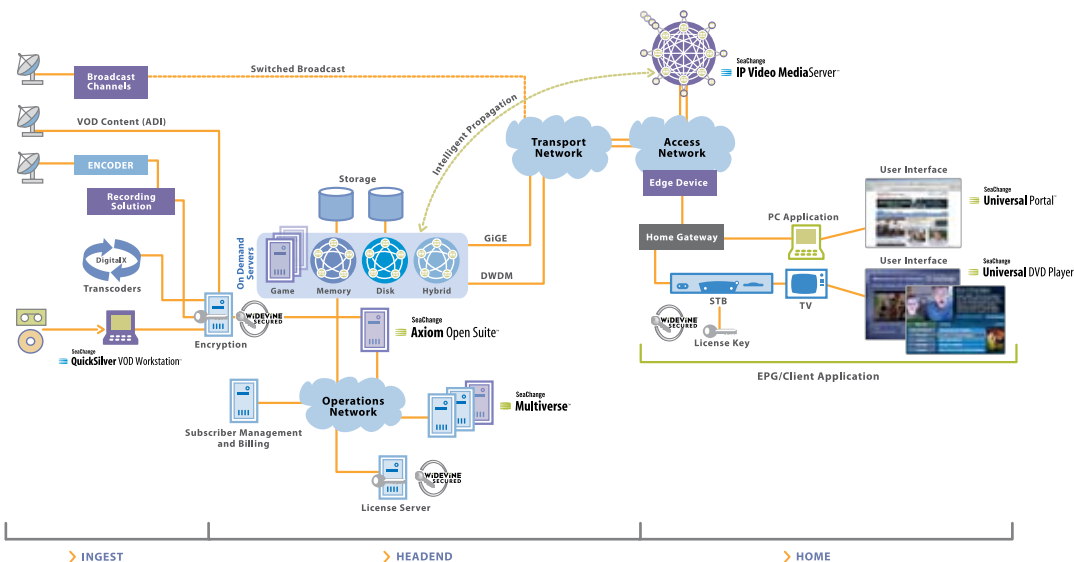
Service providers can select a pre-integrated IP video solution, or select best-of-breed components from multiple sources that can be integrated with SeaChange Professional Services.™

The Multiverse Platform includes a back-office component that provides a comprehensive set of tools to enable and provision subscribers, manage content acquisition, generate electronic program guides, create and price service packages, generate billing records, generate usage reports and more.

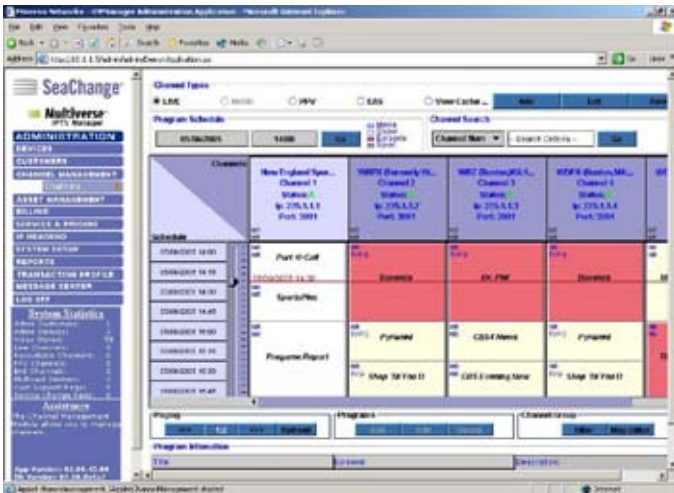
The client components of the Multiverse Platform deliver superior response on cost effective IP set-top boxes. With Multiverse Platform, subscribers have access to a variety of video services including live television, electronic program guide (EPG), video on demand (VOD), subscription VOD (SVOD), pay-per-view (PPV), event notification (e.g., caller ID), nPVR (network-based personal video recording), time-shifted television, emergency alerts, and more.

The user interface can be easily customized using standard C/C++ or HTML code, allowing use of widely-available tools to develop and tune STB applications.

The complete back-office administration tools and services, together with the interactive and easy-to-navigate client, enable service operators to deploy compelling and profitable offerings.



The SeaChange
IP Video Solution™



SEACHANGE MULTIVERSE IP VIDEO MANAGER™

The Multiverse IP Video Manager Web browser interface displays a management interface to control broadcast channel configuration, EPG configuration, Subscriber data, VOD asset metadata and pricing, package management, message control center, and system usage statistics.

SeaChange IP Video Manager is built on Oracle's database engine, which delivers carrier-class scalability and reliability.

Key features of the SeaChange Multiverse IP Video Manager™ include:

- Menu Bar customization based on the Administrator authority level
- System statistics information display
- Online help
- Provisioning and management of STBs and other devices
- Subscriber Management System (SMS) for service activation, service requests, viewing billing record
- Channel Management package for building and maintaining channel line ups, including broadcast, PPV, and Emergency Alert Service (EAS) channels
- Content Management for maintaining VOD asset metadata
- Billing and Invoicing, including support for management billing period, tax rates, surcharges, and invoice generation
- Services and Pricing management for creation and maintenance of channel packages, subscription packages, service packages VOD asset pricing, and VOD bundles
- IP Headend system and network configuration and management, including configuration of broadcast channel encoders and video servers

- System configuration of Business and Administrator accounts, EAS configuration management, business rules management, and STB configuration
- Report Generation for tracking system usage, VOD and content usage
- Message Center for sending messages or alerts to subscribers
- Enterprise Application Integration (EAI) interface for integrating service operator's legacy systems using XML and XSL data interfaces
- CDK API for interfacing customer, service provisioning, and STB inventory data with external systems
- Billing Connector for extraction and integration of Billing Records with external systems
- NTSC and PAL support

SEACHANGE MULTIVERSE™ CLIENT FRAMEWORK

The Multiverse Client Framework includes a fully extensible STB Menu bar which allows subscribers to launch applications built for the Multiverse Platform. These applications include Subscriber Sign-in, EPG, VOD Client, Parental Control, Vault, Settings, Favorites, Search, E-mail, and Web.

An EPG is also included to access live channels and programming information. Subscribers can select programs for viewing or previewing, purchase PPV, and set program reminders.

STB Menu Bar

- Subscriber Sign-in that supports multiple users within a single household
- **EPG** – link to launch the Multiverse EPG
- **VOD Client** – link to launch the Multiverse VOD Client application
- **Parental Control** – enables the primary user to temporarily unlock parental controls
- **Vault** – contains a list of rented videos, PPV programs, program reminder flags, messages, and Caller-ID messages
- **Settings** – allows modification of user preferences, parental controls, view billing information, and upgrading packages
- **Favorites** – enables the subscriber to choose a list of favorite channels which can be displayed in the EPG
- **Search** – Searching through the EPG and VOD assets, including popup keyboard display
- **E-mail and Web** – ability to offering access to email and the web through the STB

Program Guide

- Program listings by channel and time
- Display of up to 7 days of program data
- Ability to scroll through the guide horizontally (by time/date) or vertically (by channel number/name)
- Program information overlay display
- ¼ Screen Broadcast Video window in EPG
- Configurable viewable channel listings and hours of programming information
- Customizable EPG layout
- Program Reminders with subscriber notification and auto-tune option
- Favorites Channel Listings
- Optional 'barker' channel within EPG
- PPV within EPG, including single programs, a series of programs, or all-day ticket
- On-Screen Caller-ID
- Operator Messaging
- EAS messaging or auto-tuning

STB VOD Client

- Category based VOD listings
- Display of ADI metadata values
- Poster board display
- Preview
- Bookmarking of purchased VOD content
- Configurable PIN confirmation





About SeaChange®

SeaChange International™ provides digital video systems that are changing television. Its powerful server and software systems enable television operators to provide new on-demand services and to gain greater efficiencies in advertising and content delivery.

Visit www.seachange.tv today.