VidOvation TV™ IPTV Portal for Government & Military

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VidOvation Corporation
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About VidOvation

- What is VidOvation?
  - 50 Years Experience
  - Leading technology provider delivering video and data communication systems
  - Public, private, LAN, WAN, fiber optic, coax, twisted-pair, cellular, satellite and wireless networks
  - Passionate problem solvers
  - Delivering world class technology
  - We make the “impossible” and “never been done before” a cost effective, everyday solution aligned with your business goals.
  - Broadcast, Government and Corporate AV

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VidOvation TV™ Solution

Leading edge, high-quality digital video streaming solution for delivering live and recorded video over enterprise IP networks

Advantages versus other TV broadcast solutions:

- Better quality
- Easier to deploy and maintain
- Easier to expand
- Easier to use
- Lower total cost of ownership
- More flexible

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VidOvation TV™
Solutions for Government Applications

Digital Video Audio System for special military training

- Flight simulators
- MOUT (Military Operation in Urban Terrain) ranges
- Any large venue After-Action-Reviews systems

Communications and Education

- Internal TV broadcast
- Distance learning
- Learning resource centers
- Digital library
- Entertainment systems

Other Applications

- Congressional digital meeting video system
- Surveillance for military bases, sea ports, highways, etc.

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VidOvation TV™ Key Advantages

Generating benefits from features, quality and expandability

- MPEG-1, 2, 4 H.264, High Definition (HD)
- Over existing IP networks
- Full feature Multicast & Video-On-Demand (Video-on-Demand, Music-on-Demand, Games-on-Demand, and more..)
- Industry standard network, streaming protocols, including RTSP, RTP & UDP
- IPTV with Electronic Program Guide (EPG)
- Network PVR (nPVR) and Time Shift TV (TSTV)
- TV, PC, Smartphone and Tablet clients
- Friendly and customizable user interface for PC and set top box (GUI)

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VidOvation TV™ Key Advantages

Generating benefits from features, quality and expandability

Key Features:

- Web-based solution supports 5,000 concurrent viewers from one server – no seat licenses!
- Advanced channel guide with grouping and programming information
- Security and access rights integrated with Microsoft Active Directory
- Seamless integration of TV monitors using Amino IP Set-Top-Box Module
- AES Decryption fully interoperable with Optibase encoders

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VidOvation TV™ Key Features

Comprehensive, modularized and expandable features

Graphical User Interface (GUI) & Features

- Fully Customizable, CSS Driven Interface
- User Friendly
- Multiple Language Support
- Live Local, National & International News and Weather

VidOvation provides tools for changing

- Background Wallpaper
- Color schemes
- Menu items
- Corporate logos/images

Video-On-Demand (VOD)

- Standard Definition & High Definition H.264 Support
- Play/Pause, Fast-Forward/Rewind & Bookmarking
- Highly Scalable

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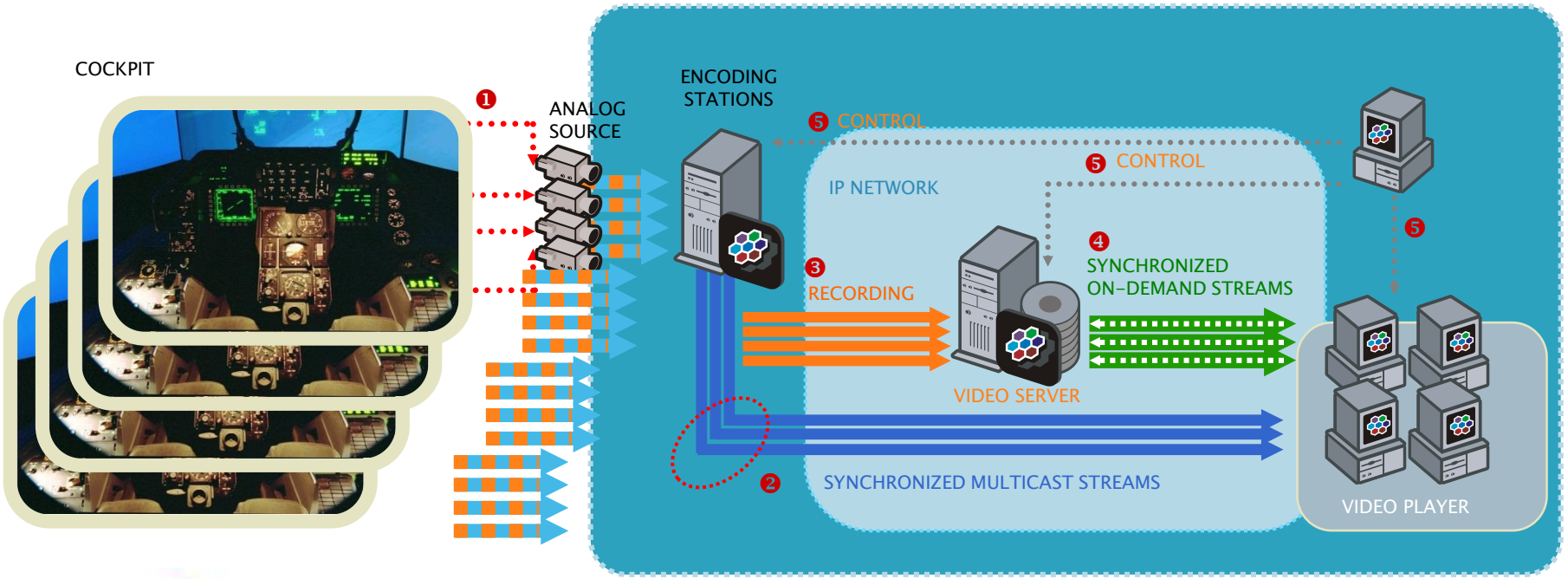
VidOvation TV™
Synchronized Simultaneous Playback

1. Content of HUD (Head Up Display) & three radars from each cockpit are encoded in high-quality MPEG2 videos in real-time
2. Multicast up to 16 live videos to viewing stations simultaneously and synchronously
3. Record up to 16 videos onto VOD server simultaneously and synchronously
4. Multiple videos are played back synchronously during After-Action-Review
5. Easy operation via a central control and friendly interface



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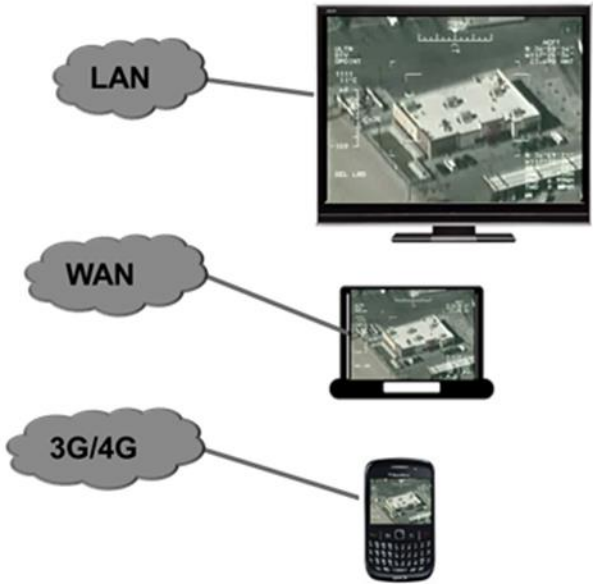
VidOvation TV IPTV SYSTEM – Real-time, HQ, Anywhere



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VidOvation TV™ Highlights

- **Synchronized high-quality digital video audio for precision after action reviews**
  - High fidelity capturing and reproduction of simulation events
  - Synchronized, simultaneous playbacks from many angles of the same venue
  - Instantaneous, interactive control of the simultaneous playbacks
  - Can be seamlessly integrated with additional simulation subsystems
  - Leverage cost-effective, commercial off-the-shelf hardware
  - Scalable, reliable, and mature
- **Successful deployments with US Army Battle Lab and US Air Force F-16 and F-15 Mission Training Center programs since 1998**

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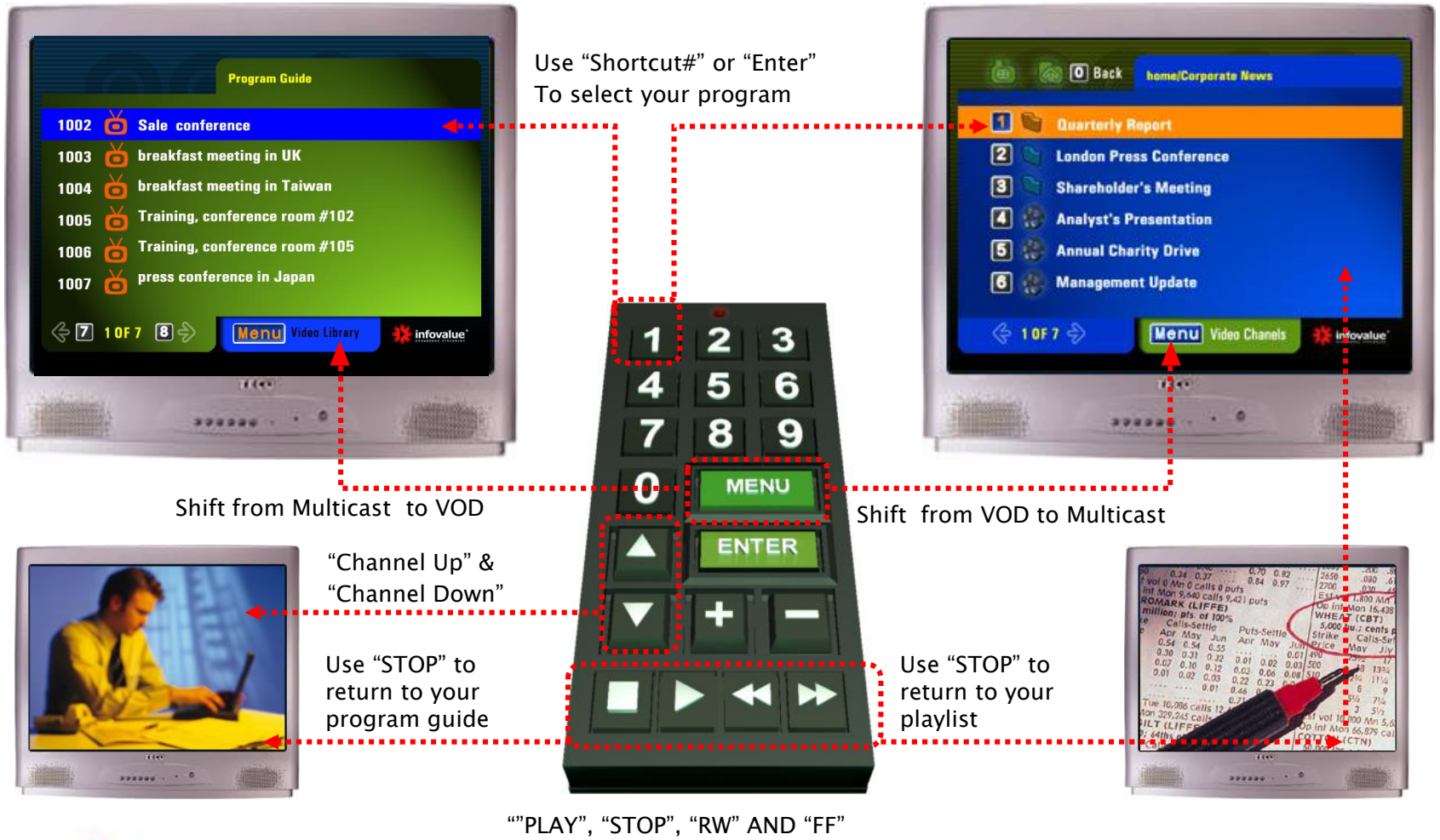
VidOvation TV™ Business & Enterprise



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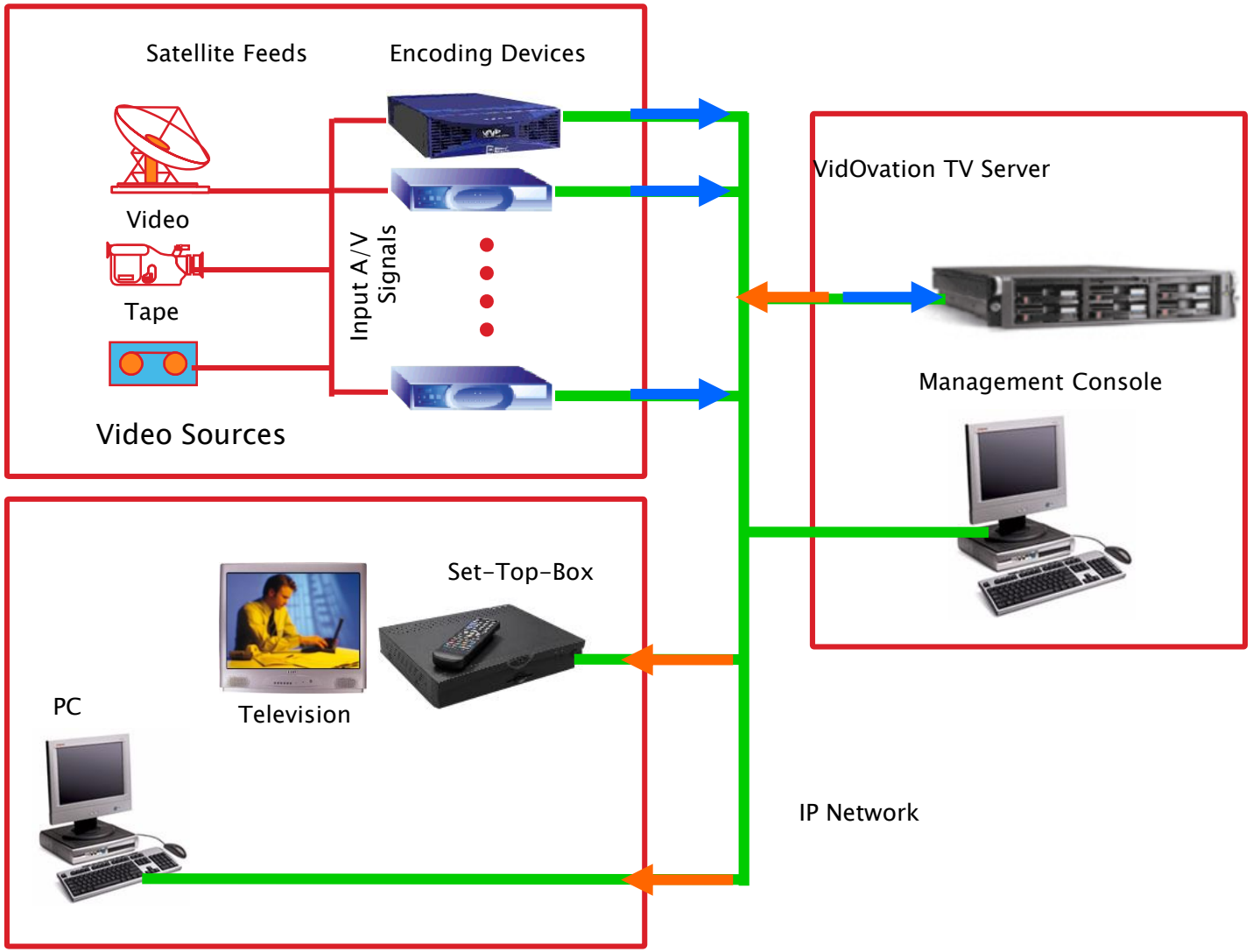
VidOvation TV™ Plug-and-Play Architecture



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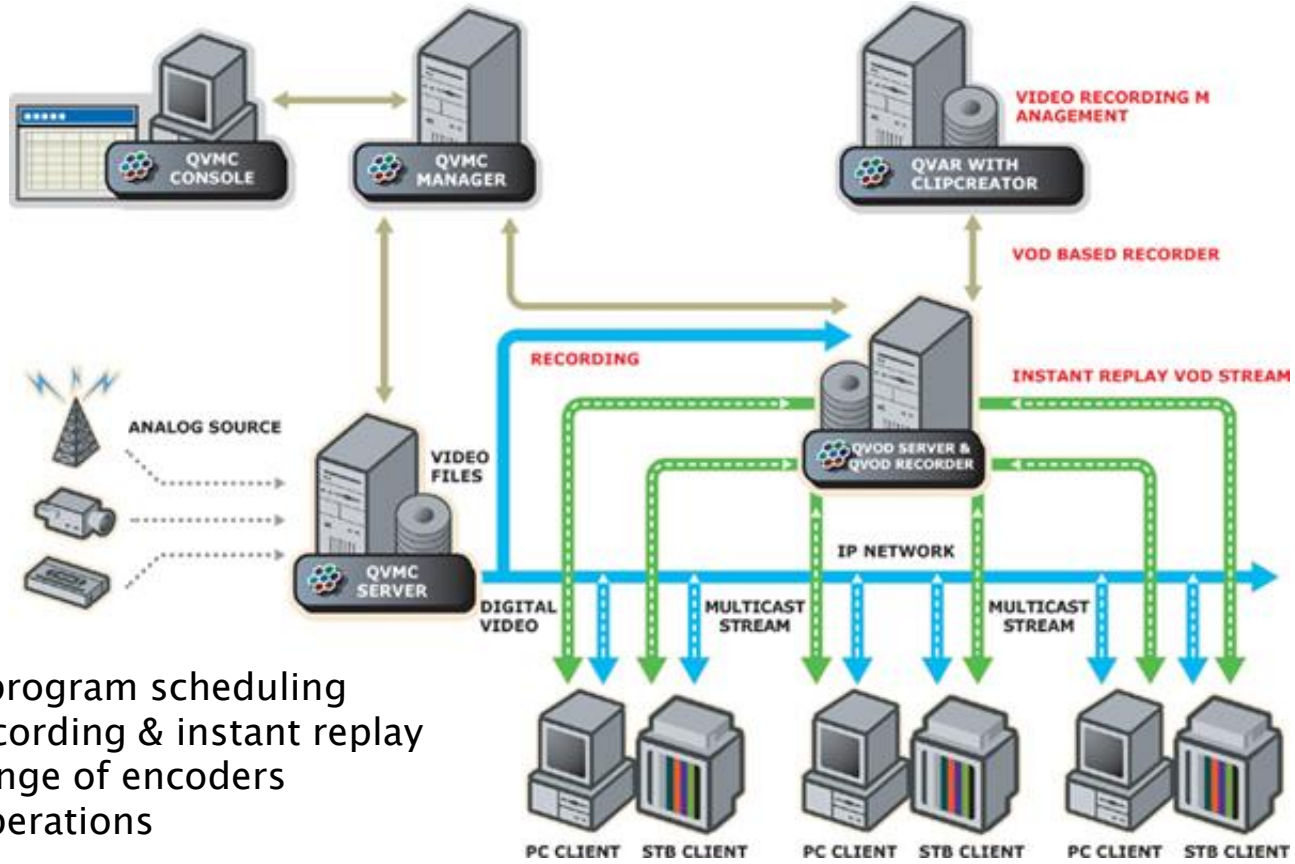
VidOvation TV™ System Architecture

Distributed, scalable architecture with modularized components and comprehensive interfaces



- Automatic multicast program scheduling
- VOD server based recording & instant replay
- Choices of a broad range of encoders
- Reliability for 24/7 operations
- Unlimited scalability

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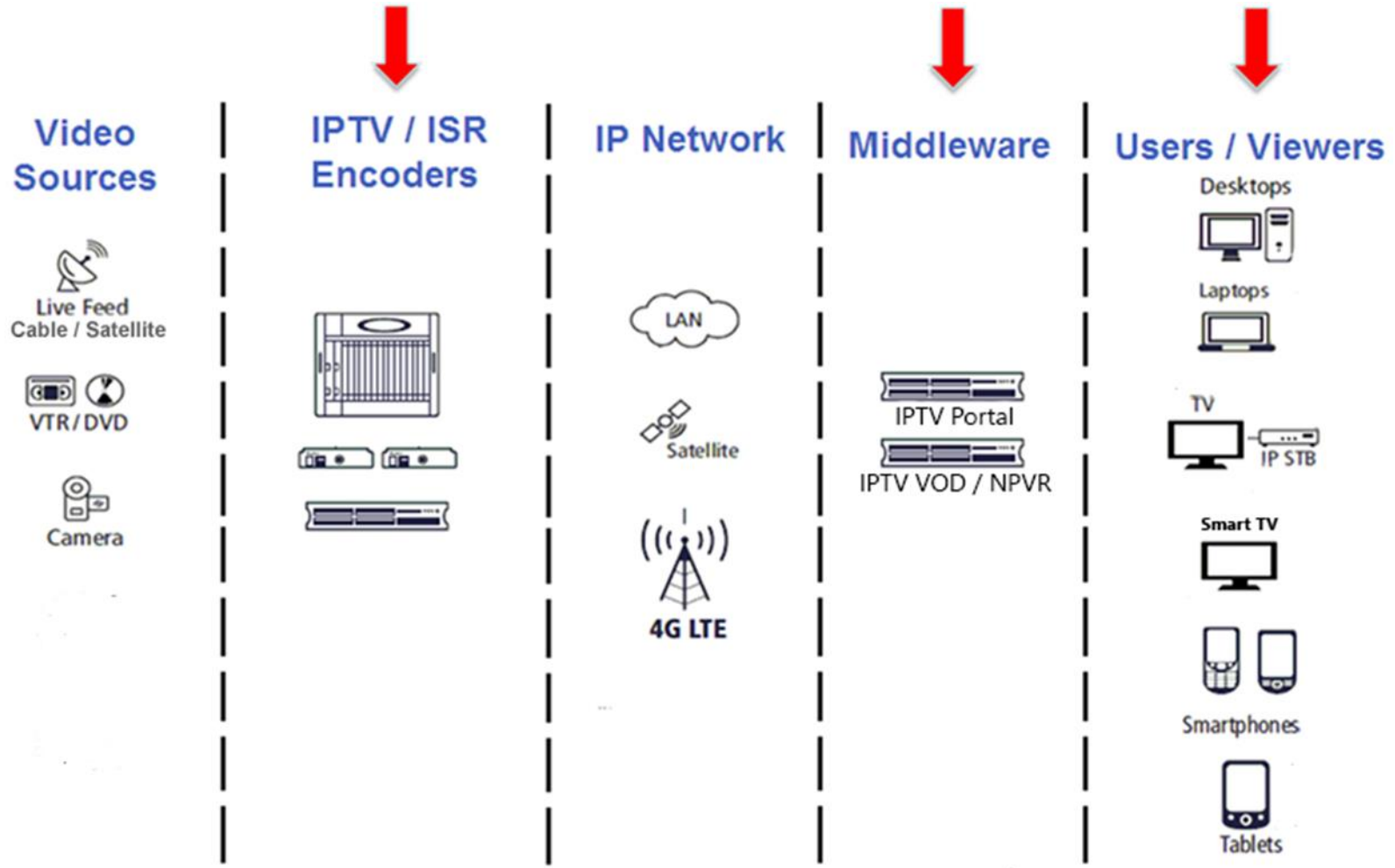
VidOvation TV™ Architecture



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VidOvation TV™ Highlights

- **Powerful business communication & training**
  - Broadcast quality video to TV/Set-Top-Box or PC
  - True TV experience with remote-control operation
  - Fully interactive control (e.g., Pause/Resume/FF/RW)
  - Secure user and content authentication
  - Leverages existing IP networks
  - Plug-and-play bundle for easy deployment
  - Easy maintenance and hassle free for MIS/support department
- **Bundled solution combining VidOvation TV QuickVO software, industry standard IP set-top boxes, and HP servers**
- **Successful deployments with PAX River Navy Air Station and Taiwan National Congress since 2000**

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VidOvation TV™ Highlights

- VidOvation TV is the industry leading broadband streaming software in
  - Comprehensive features
  - High video quality and system performance
  - Proven scalability and reliability
  - Cost effectiveness, leveraging commercial off-the-shelf hardware
- VidOvation's solutions are mature and proven via many top-tier customers and mission critical deployments

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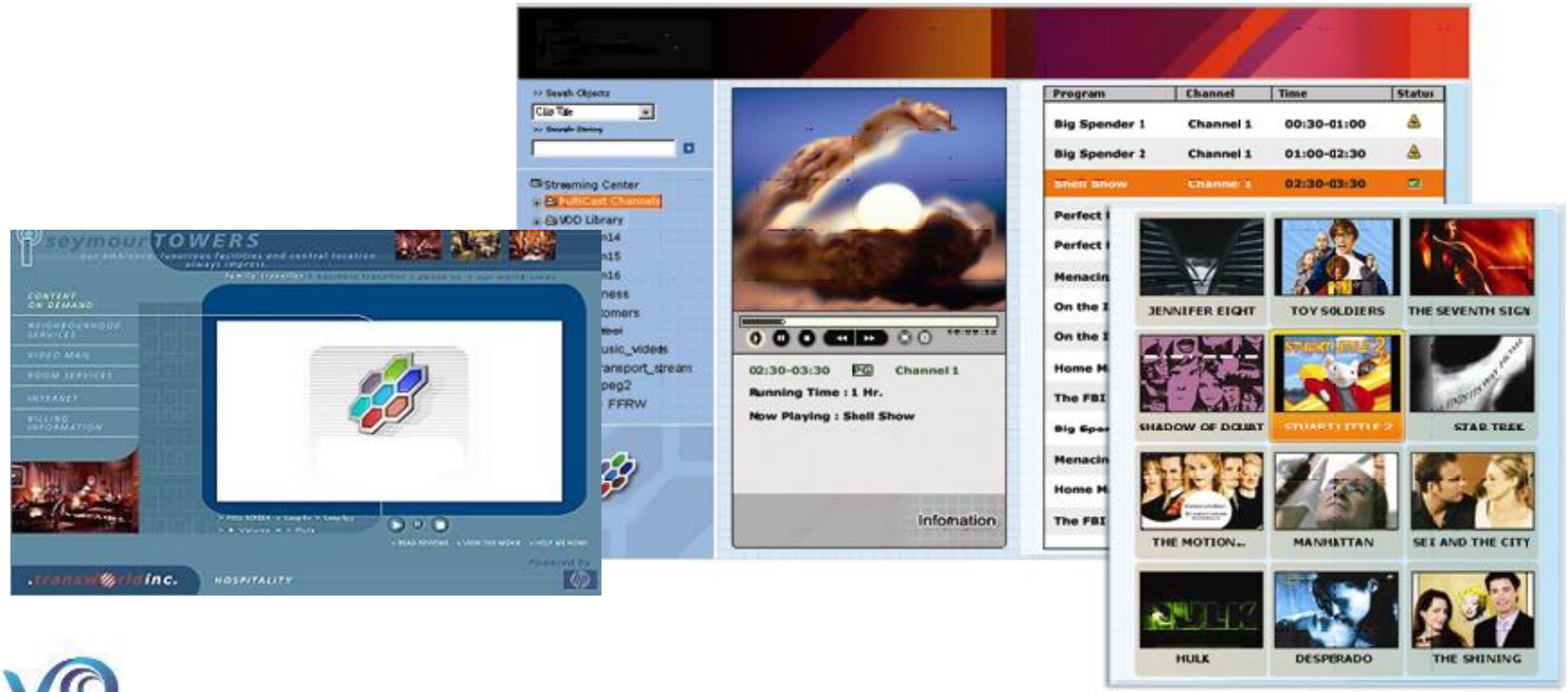
VidOvation TV™ Client

Seamlessly integrated streaming functions via user friendly & easily customizable browser interface

- Interactive VOD playback
- Multicast channels with instant replay
- Dynamic Program Guide
- MPEG-1/2/4 (SD and HD)
- Choices of a broad range of decoders
- Full screen or video window



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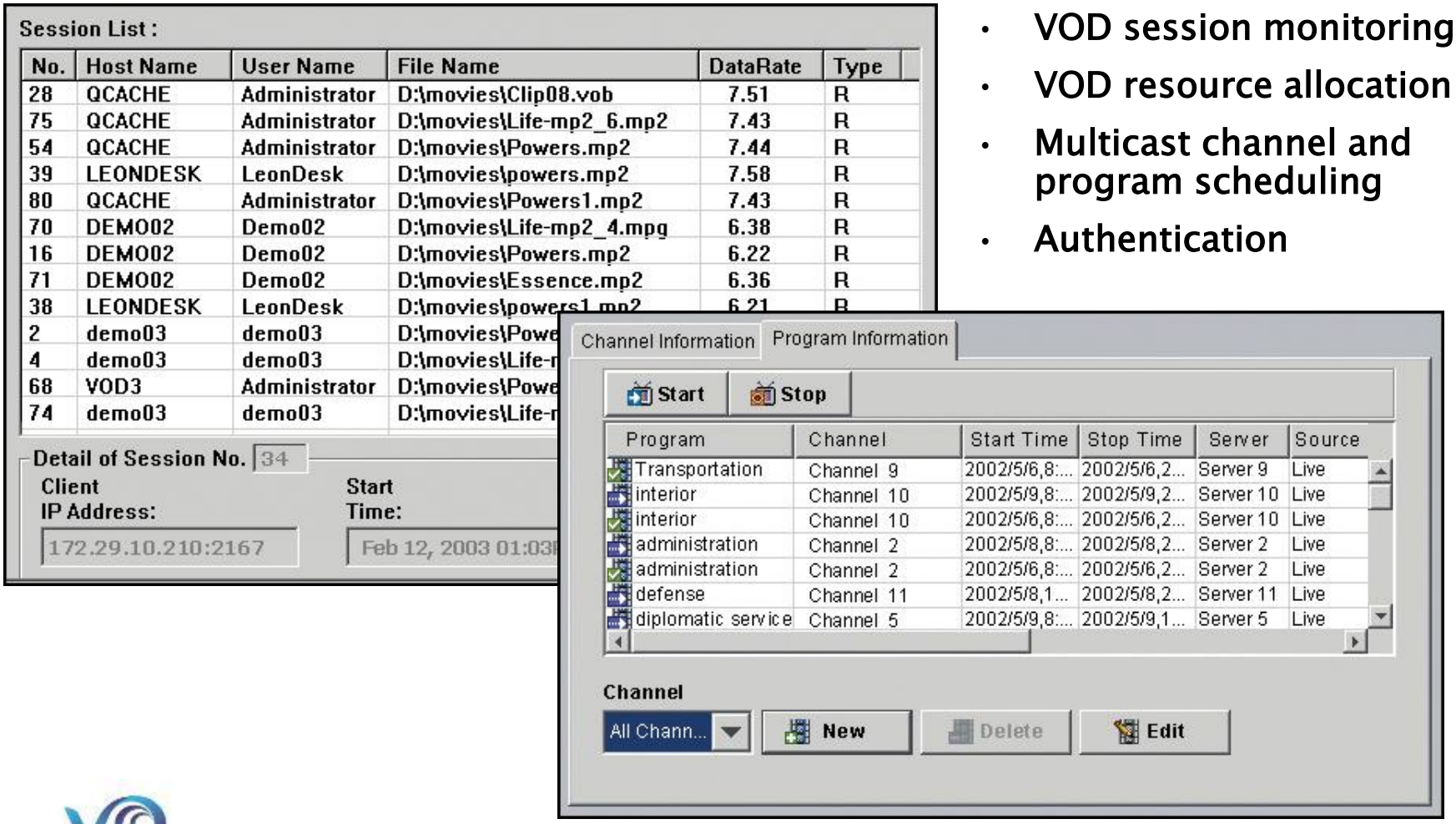
VidOvation TV™ System Management

Comprehensive, centralized management via remote browser based consoles



- VOD session monitoring
- VOD resource allocation
- Multicast channel and program scheduling
- Authentication

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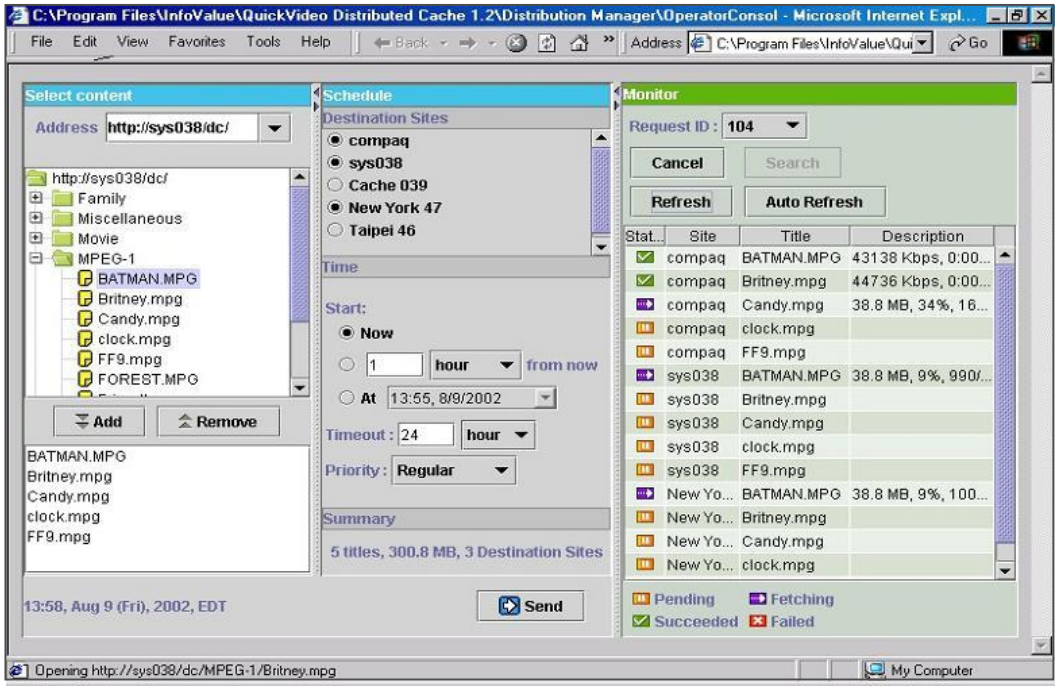
VidOvation TV™ Content Management

Intelligent content distribution, caching and indexing



- Bookmark based video indexing and archiving
- Flexible web based content publishing
- Automated & scheduled content distribution
- Persistent error-free and priority-controlled file transfer

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VidOvation TV IPTV Encoders

High Density and Stand-alone options

1. High Density Encoders:
   - VEN-5200, MPEG-4 AVC Encoder Card, Dual-Channel
   - 20 Encoder Channels in 2 RU
   - SD and HD MPEG-4 H.264
   - Unicast and Multicast
   - Open Architecture using openGear platform

2. Stand-alone Encoders:
   - VEN-2200, MPEG-4 AVC Encoder, Dual-Channel, Stand-alone or triple rack-mount
   - 6 Encoder Channels in 1 RU
   - SD and HD MPEG-4 H.264
   - Unicast and Multicast

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VidOvation TV IPTV Set-Top Box

High Definition, High Performance IPTV/OTT STB

- The H140 HD IPTV/OTT set-top box combines high performance, advanced HLS capability, new OTT trickplay and USB functionality in a rugged compact case
- Easy update of content via remote download – no more tapes or CDs to track and ship
- Remote management of the system – fewer on-site service calls
- Ability to integrate with other guest services – telephony, Internet, billin information.

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VidOvation TV™ Customer References

VidOvation and our partners have successful deployments with many top-tier government and military organizations, including

- Bettis Atomic Power Lab
- Knoll Atomic Power Lab
- Sandia National Lab
- PAX River Naval Air Station
- US Army Battle Lab at McKenna Range
- US Air Force F-16 MTC via Lockheed Martin
- US Air Force F-15 MTC via Boeing
- US Navy via General Dynamics Electric Boat
- US Navy via SPAWAR
- US Marine Corp. via General Dynamics C4S
- US Army Command & General Staff College at Ft. Leavenworth

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VidOvation TV™ Customer References

- European Space Agency
- Hong Kong Police Department
- Taiwan National Congress
- CBS
- ESPN & Disney
- Bloomberg
- Citigroup, State Street,
- Inter Continental, Hyatt
- Pfizer, Eli Lilly
- Saab Technologies
- Pittsylvania school district
- CapRock
- New York State Theater

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