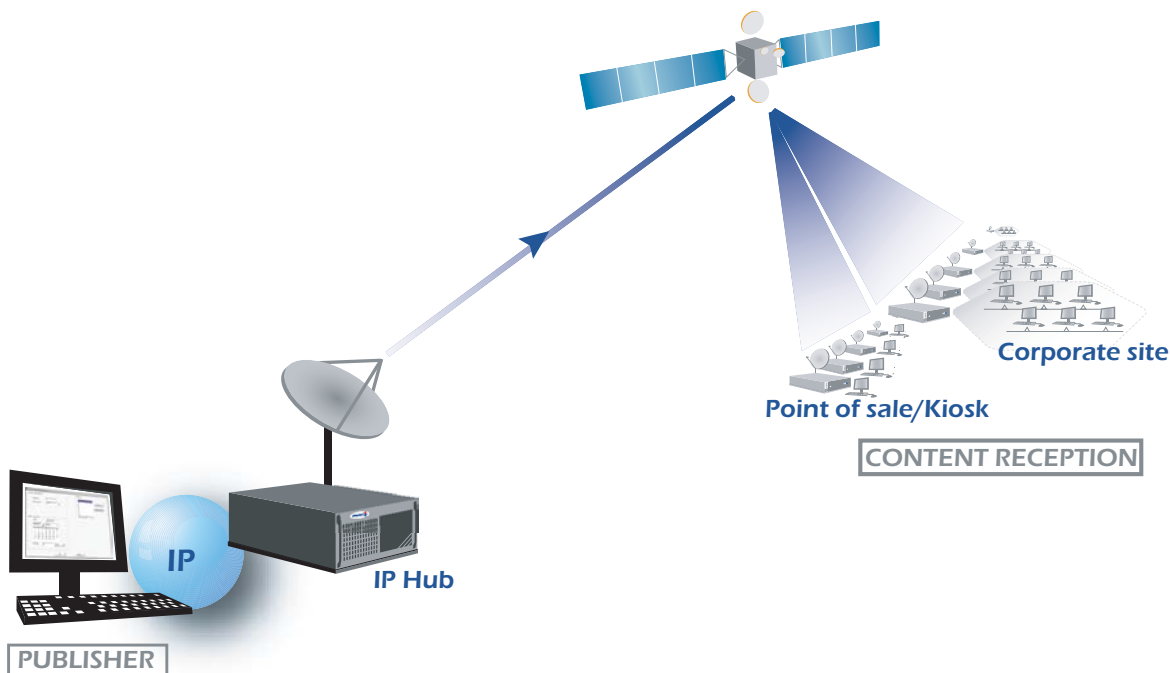


IP Datacasting solution

- Managed content distribution
- End-to-end solution
- Integrated software & hardware solution



IP Datacasting

01 Description

IP datacasting is the distribution of content to multiple destination sites. Using IP multicast, IP datacasting takes full advantage of broadcast media's distribution capabilities. In one go a file can be rapidly delivered to a number of sites. When compared to point-to-point content distribution, IP datacasting enables rapid return on investment.

IP datacasting is well suited to enterprise CDN, database and document tele-distribution, distance learning and training, and point of sale animation.

UDcast's **datacasting** solution benefits from the entire range of IP technologies, enabling the construction of content distribution infrastructures. Relying on IP standards, UDcast's solution enables the building of an end-to-end datacasting architecture, from the content production site to the delivery point where the content is used.

In order to meet service provider's needs, UDcast has developed and integrated all the essential components needed to build a complete solution within a high quality appliance. These include a reliable multicasting application, strong security, multicast routing, return channel management, DVB encapsulation, DVB reception. The application manages the transfer mechanism and bandwidth allocation. Upon reception of the content the application automatically kicks off specific actions such as file sharing on the local network.

IP Datacasting

02 Key advantages

- + Reliable transfer over broadcast media**
 - . Multicast data transfer application
 - . Dynamic error correction mechanism
 - . End-to-end control based on ACKs or NACKs
- + Total transfer control**
 - . Immediate or scheduled transfers, single or carousel mode
 - . Priority based simultaneous transfer control: Urgent, Standard, Best Effort
 - . Bandwidth allocation management with minimum guaranteed bandwidth and maximum burstable bandwidth
- + Integrated solution**
 - . Complete IP datacasting hub, from the application server to the ASI interface
 - . All-in-one receiver, from DVB reception to file sharing on local network
 - . Solution including file management, transfer application, strong security, dynamic multicast routing, return channel management, DVB encapsulation

03 Architecture benefits

- + Strong security**
 - . Strong authentication of reception sites
 - . Encrypted multicast transfer
 - . Dynamic key distribution mechanism
- + End-to-end solution**
 - . Transfer/content delivery application: from content source to end-user
 - . TCP unicast information collection from the entire IP network prior to multicast distribution over broadcast media
 - . Complete multicast routing enabling content delivery to the end-user
- + Mixed support for passive and return channel enabled modes**
 - . Content distribution and security management in passive mode
 - . Standardized return channel management for those sites that have them
 - . Global analysis of feedback from non-passive sites
- + Content distribution architecture**
 - . Shared content distribution: shared distribution server at satellite hub with bandwidth allocated to datacasting service providers' clients. The content providers can manage their content distribution via a publisher application
 - . Dedicated content distribution: IP hub offering complete datacasting management located on content provider's site
- + Content reception architecture**
 - . Distributed content reception: embedded DVB reception, multicasting, site security and receiving appliance with direct routing to end-users.
 - . Centralised content reception: all in one appliance with embedded DVB receiver handling content or sharing on LAN