ASTRA MCR

Master Control Automation Tools

Specializing in multi-channel systems, ASTRA MCR automates all master control room functions controlling ingest, QC, playout, routers, switchers/vision mixers, graphics and other devices. Single and multi-site operations are supported with full redundancy or selected redundancy as needed.

ASTRA Suite of Tools

At its core, the ASTRA CMS content management system provides a common database and set of tools for all ASTRA applications. Having all your tools tightly integrated around a common content management system enables better interoperability, lower costs and simpler workflows.

ASTRA MCR

Reliability, dependability, 24/7/365 operation, scalability and flexibility are the key reasons for ASTRA's success. Systems can be as small as a single channel with minimal redundancy and scale up to 32 or more channels with full redundancy.

Understanding that one model does not fit all users, ASTRA's flexible architecture offers a variety of designs with various levels of redundancy to meet your budget.

Traffic Interface

The traffic system is the business side of broadcast. A tight integration between ASTRA MCR and your traffic system enables the sales department to sell spots throughout the day and be assured that they will play flawlessly at the right time.

ASTRA MCR's user interface also allows operators to manually make last minute changes in the playlist to delete or replace any item.

Interfaces are available for most traffic systems on the market or a new interface can be easily created.

24/7/365 Redundancy

Mistakes in master control are expensive. ASTRA is unique in its core design. Built on a powerful Real-Time Operating System (RTOS), it is not impacted by viruses that threaten most PC-based systems. Hardware and software module failures can be protected with complete mirroring. An "N+1" model offers a costeffective playout solution that in most scenarios provides seamless failover.

Hot Swappable Software Modules

ASTRA can be easily upgraded, repaired or new capabilities added quickly and transparently with its design around Hot Swappable modules. These modules or applications are separate from the operating system such that the system continues to run while new modules are added.

Key Features

- Supports small to large systems for ingest and playout
- Comprehensive traffic interfaces
- Support for centralized and Hub & Spoke operations
- Multi-site support and Disaster Recovery options

- Distributed architecture for easy expansion and control
- Multi-path architecture for flexiblecontrol and redundancy options
- Various redundancy options from full mirroring to "N+1" models

- Expansion, upgrades, repairs possible while still on-line with "Hot Swappable" modules
- Comprehensive device library
- Built on a robust Real-Time OS used for military/medical/avionics applications
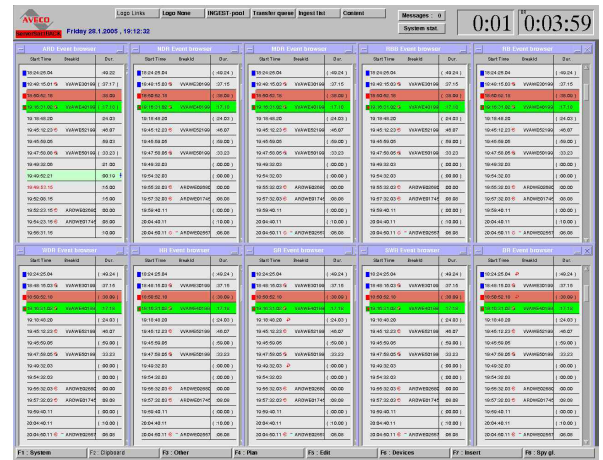
Device Control

With over 18 years of experience, ASTRA has developed a huge library of supported devices and continues to add new devices as they come to market.

Standalone MCR System

A basic ASTRA MCR system consists of an ASTRA server running all ASTRA applications on a robust industrialgrade server. It includes the ability to control up to 48 devices under serial control. Up to eight playlists can be run on this entry-level system. Mirroring is an option for full redundancy.
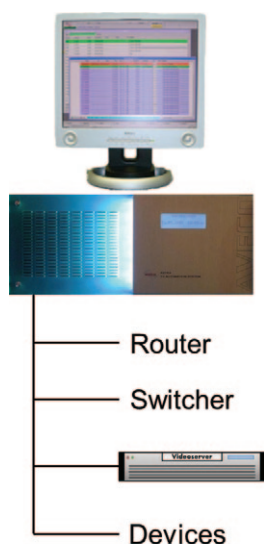
ENTRY LEVEL ASTRA MCR

Multi-Site Operation

ASTRA provides support for various multi-site operations. From a fully centralized operation to a Hub & Spoke design, ASTRA can customize each channel for localized commercials. Control can either come from the central site for all channels or remote sites can control their own channels.
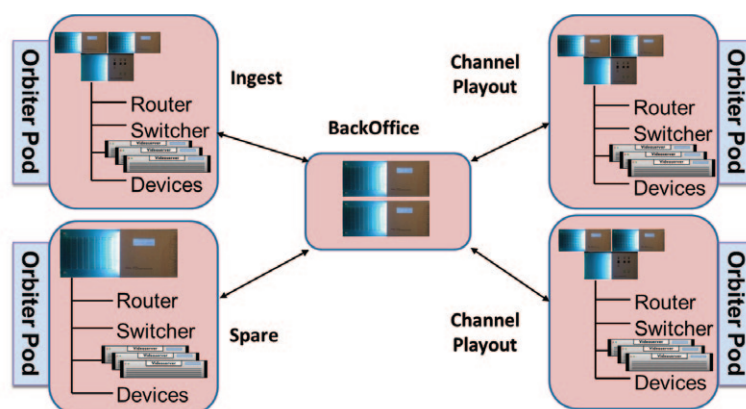
ORBITER DISTRIBUTED ARCHITECTURE WITH „N+1" REDUNDANCY AND SELECTIVE MIRRORING

Orbiter Distributed Architecture

The Orbiter design is a distributed model in which functions are separated into application specific modules. Orbiter facilitates the control of high channel count systems and provides various levels of redundancy. Costs can be saved by sharing resources between servers without jeopardizing reliability. Additional channels can usually be added while the rest are still on-air.

BackOffice – Contains the centralized database and system functionality. This is generally mirrored to provide absolute protection of the database and the system.

Playout Orbiters – These pods control the broadcast chain for playout. They can be mirrored as needed with seamless switchover in case of failure.

Ingest Orbiters – Since ingest is often separate from playout, a dedicated Orbiter can be used for this purpose and shared by all Playout Orbiters.

"N+1" Redundancy – A spare Orbiter pod can be used to replace another Orbiter in case of a failure, for testing or for occasional use as additional playout or ingest channels.

SHS Multi-path Architecture

For larger systems, SHS offers another cost effective redundancy option. In this design, any control room can use any set of equipment that may be assigned to another control room. This "Network Transparency" provides many options for channel control, facility upgrades, and device failures.
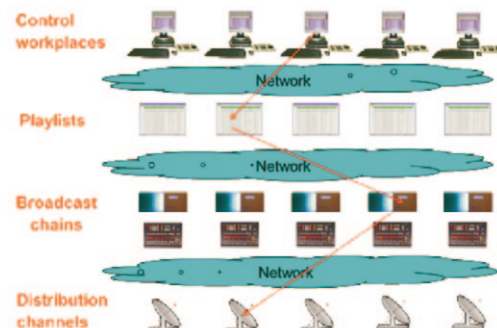
SHS MULTI-PATH ARCHITECTURE

Disaster Recovery Sites

ASTRA offers various options for a Disaster Recovery site. Both Orbiter and SHS architectures can be used depending on the user requirements, budget and workflow. ASTRA system engineers are available to consult with you for the most cost-effective solution.

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