

# Versio™ Redundancy

## Channel Redundancy Builder

Versio™ Redundancy is an application that provides flexible channel redundancy in the Versio™ ecosystem. It can keep up to five playout channels mirrored and synchronized, including automatic failover based on real-time health and status monitoring.

Versio™ Redundancy provides a powerful and scalable redundancy solution, specifically designed for geo-dispersed deployments, helping to manage channel backups in case of a loss of connectivity during playback. Used for managing redundant Versio™ instances, it provides operators with the information they need to take the correct actions to protect channel playout.

## Benefits

- **Maximum channel protection:** Create and arrange redundancy stacks in seconds, up to 5 Versio instances per stack
- **N+M redundancy** controlling pools of shared backup Versio instances
- **Manual or automatic failover** with configurable criteria; control of external automatic changeover device
- **Active/Active mode support** when controlling two parallel broadcast chains, synchronizing main and backup schedules
- **Elastic channel redundancy**, adding – with drag & drop – extra backup Versio instances for a given playout channel: double, triple, or quadruple backup
- **Ideal for Disaster Recovery:** Synchronize schedules on a DR system deployed in a different location, on-prem or in the cloud

## Features

- Unified dashboard to monitor the status of all Primary/Follow channel instances on their assigned stacks
- Switch over to a Follow channel instance if the Primary channel instance loses network connectivity or has video playback issues
- Backup channel pools: Assign Versio instances to “pools”; if a Primary failure occurs, a backup instance is selected from the pool (if one is available) and assigned as the backup system. When the Primary returns online, the backup is returned to the pool and can be used if another Primary fails
- Channel synchronization: Changes made on a Primary channel (manual edits or updates coming from Traffic) are replicated to Follow channels assigned to the channel Stack
- Continuity check: The automation system checks and corrects the running point of all schedules in a redundant stack so that the schedules can be kept synchronized
- Aggregate as-run logs: The system remembers which instances from the redundancy stack were active so it can send as-run data back to the traffic system. For example, if failover occurs from instance A to B, the as-run log sent to traffic includes events from A before the failover, and B after it
- Different failover modes supported:
  - Automatic channel failover (Primary to a designated Follow) should an error condition occur on the Primary instance that could impact playout, multiple monitoring fault conditions can be configured
  - An operator can manually perform a channel failover from the current Primary instance to a selected Follow channel instance
- Instances can be promoted / demoted in the stack hierarchy
- Quarantine or un-quarantine instances
- Ability to disable sync or sync check to a particular channel redundancy stack, allowing manual control on individual channels with the automation or master control panels
- Password protection: A password can be set for modifying stacks in UI, preventing someone from accidentally changing a redundancy stack configuration
- Router control on failover (LRC protocol)
- Supports both Versio Automation and ADC Automation channel synchronization

- GPI changeover support (optional) using a Sealevel SeaMAX 410E GPI/O unit to assign GPOs to a channel instance and send a trigger to an external changeover switch following failover actions on the redundancy control UI