

Server Solutions

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Introduction

The RTSW Newsroom/Playout solutions require applications running on a Server type platform.

These include:

- Repository
- MediaWatcher
- DataServer
- MOSGateway

In a small system all of these could be run on a single server. For larger systems it may be beneficial to split these applications across 2 or more servers.

When choosing server hardware consideration should be given to the resilience to failure, potential loss of data and the acceptable down-time when a failure occurs. RT Software offer 3 levels of server:

Type	Description	Failover	Downtime	Cost
Single Standalone	Single server, dual PSU, dual network ports. Scripted backups to custom storage	Manual. Acquire new hardware, restore data from backups	Hours	£
Dual System	2 Servers - 1 Live and 1 Backup. Data duplication from live to backup	Manual. Reconfigure Backup to Live settings	Minutes	££
Cluster System	2 Servers - 1 Live and 1 Backup using Microsoft Failover Cluster software. Data duplication from live to backup	Totally automatic failover from Live to Backup	Seconds	£££££

Single Standalone

Single server with redundant PSUs running Windows 10/11. Regular scripted backups to customer supplied storage. On failure a totally manual process. Obvious chance of data loss for the time between the last backup and the failure. Downtime dependent on time to acquire/configure replacement hardware and restore backups.

Dual System

Two identical servers with redundant PSUs running Windows 10/11. Servers referred to as the "Live" and the "Backup" server. During normal operation only the Live system is active and data is duplicated in near real-time from the Live to the Backup system. On failure a manual process to shutdown the "Live" system and substitute it with the "Backup" system. Downtime only a few minutes with engineering support. Data loss unlikely.

Cluster System

Two identical servers with redundant PSUs running Windows Server and Microsoft Failover Clustering. Servers referred to as the "Live" and the "Backup" server. During normal operation only the Live system is active and data is duplicated in near real-time from the Live to the Backup system. On failure the clustering software swaps the active server from the "Live" to the "Backup" hardware with no manual intervention. Downtime only a few seconds. Data loss unlikely. Requires a customer-supplied "Witness" disk - a small SMB mount on a resilient server.

Windows Server requires Client Access Licenses (CALs) for each machine/person using the server. This can get expensive on big systems.