

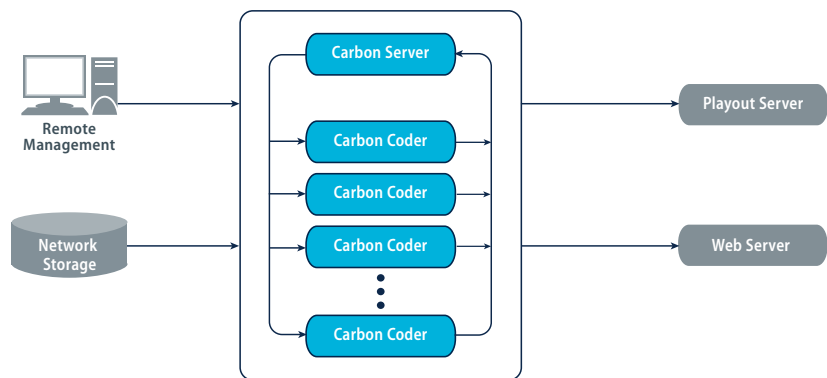
HIGHLIGHTS

- Scalable Transcoding
- Automated Operation
- Transcoder Failover
- XML-based API
- FTP Transfer Control
- Intuitive Interface

Multiple Carbon Coder nodes can be configured as a transcoding farm, controlled by one or more Carbon Servers. Carbon Server allows for automated processing of high-volume transcoding tasks, server-controlled failover of Carbon Coder nodes, and managing functions such as job distribution, job prioritization, load balancing, FTP transfer, status monitoring, and job notification.

Interaction with the server software is through an administrative application that runs on the Carbon Server machine, or via an XML-based API that is included with the product. The same API controls both Carbon Coder and Carbon Server. A web interface that can be accessed from remote machines is also available.

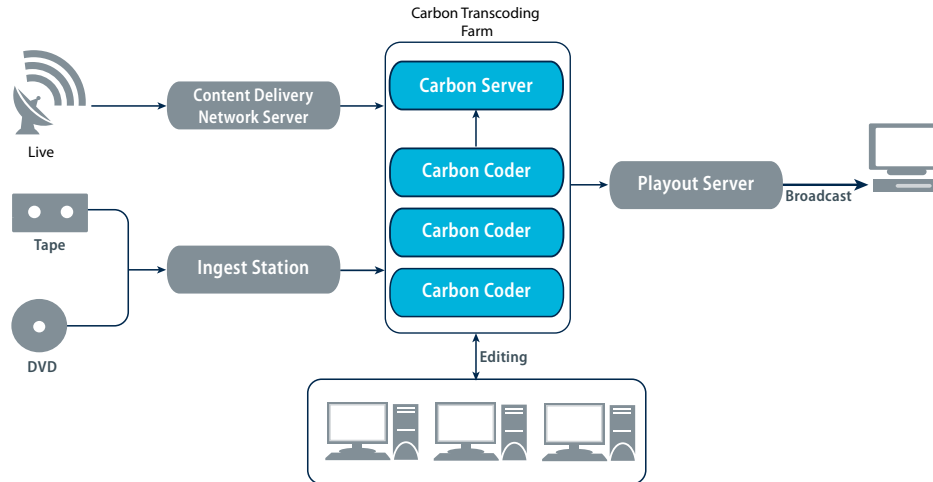
Carbon Server is well suited for simpler transcoding environments, managing a handful of Carbon Coder nodes. For more complex transcoding environments requiring high volume throughput, integrated third party operations, or more complex workflows, we recommend using the Rhozet Workflow System instead.



FEATURES

- **Scalable Transcoding** - For large tasks, multiple Carbon Coders can be configured as a transcoding farm, under the control of Carbon Server or the Rhozet Workflow System software. Carbon Server and WFS manage job distribution, prioritization, load balancing, FTP transfers, status monitoring and job notification. Interaction with the server software is through an administrative application, Carbon Admin.
- **Automated Operation** - Carbon Server runs in an automated mode, where watch folders and FTP transfers automatically transcode any input files that are moved to specified locations, and place the results into designated output locations. Encoding parameters and output formats are all maintained by Carbon Server as user-editable presets.
- **Transcoder Failover** - When deployed as part of a transcoding farm, Carbon Server can detect the malfunctioning of a Carbon Coder machine, and automatically re-route existing transcoding jobs that were assigned to that machine to a different Carbon Coder. When the malfunctioning machine is restored, Carbon Server will add it to the farm again, and resume sending it new transcoding jobs.
- **XML-based API** - Carbon Coder and Carbon Server can be controlled directly via an XML-based API provided with the software. Every aspect of the transcoding process can be controlled by the API, including source/target destinations, transcoding parameters, filtering, compositing, ad insertion, titling, notifications, etc.

A small transcoding workgroup, consisting of one Carbon Server and a few Carbon Coder nodes, can detect media that is being ingested, or placed on a CDN server. The media can then be made available in formats suitable for editing, and after editing the output can be converted to various playout server formats.



**SUPPORTED VIDEO CODECS**

- MPEG-1
- MPEG-2
- MPEG-4
- H.263
- H.264
- VC-1
- Flash
- DV25, DV50, DV100, DVCPro
- DPS
- DivX
- JPEG 2000
- DNxHD, AVCIntra
- Image Sequences
- Windows Media, RealVideo

**SUPPORTED MEDIA CONTAINERS**

- AVI
- Quicktime
- HDV
- MXF (OP1a, OPAAtom)
- MPEG-2 PS, MPEG-2 TS
- WAV, Broadcast WAV
- Apple Adaptive HTTP Live Streaming
- LXF, GXF
- WMV, WMA, ASF
- VOB
- 3GPP
- 3G2
- Microsoft Smooth Streaming

**SUPPORTED AUDIO CODECS**

- Dolby Digital
- Dolby Digital Plus
- PCM
- MPEG-1 Layer II, MP3
- AAC
- AMR-NB
- Windows Media Audio
- RealAudio

**SUPPORTED SYSTEMS**

- ATSC, DVB, CableLabs
- Panasonic P2
- Sony XDCam
- Leitch VR, Nexio
- Grass Valley Profile, K2
- Omneon Spectrum
- Quantel sQ
- Avid MediaStream
- Apple Final Cut Pro
- Adobe Premiere Pro
- Grass Valley Edius

**BASIC OPERATIONS**

- Frame size conversion
- Frame rate conversion
- Color space conversion
- Aspect ratio conversion
- Interlace/de-interlace
- Telecine/inverse telecine
- PAL/NTSC conversion
- SD/HD conversion
- Cropping
- Key-frame extraction
- Multiple target outputs
- Batch processing

**ADVANCED OPERATIONS**

- Compliance checking
- Timecode imprint
- Subtitle/CC imprint
- XML controllable titler
- Metadata transport/conversion
- Line 21/CC conversion
- CEA-608 to 708 caption conversion
- Logo insertion
- 601/709 color space support
- Optional video capture board support
- Remote job submission
- Watch folder automation
- Segment extraction/insertion
- Teletext, STL handling

**VIDEO FILTERING**

- Fade in/out
- Median
- Blur
- Sharpen
- NTSC-safe
- Deblocking
- Rotate
- Black/white correction
- Color correction
- Gamma correction
- Temporal noise reduction
- Motion compensated temporal filter

**AUDIO FILTERING**

- ITU 1770 Normalize
- Low-pass
- Fade In/Out
- Volume
- Dynamic range compressor