

### Feature Highlights

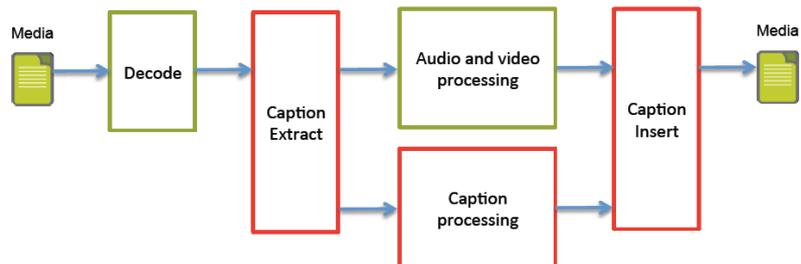
- Efficient Caption workflows in a single transcode pass
- Extension range of Caption formats
- Compliance with Accessibility regulations
- Support for common mezzanine, editing and playout formats
- Processing of legacy and current formats : CEA-608/708, WST, OP-47
- Open captions support
- Orchestration by the Dalet AmberFin Workflow Engine
- Generation of Web/XML formats

### Dalet AmberFin

Dalet AmberFin is a high quality, scalable media processing platform driven by a powerful workflow engine. Complex workflows to ingest, process, package and deliver assets reliably can be designed and monitored in a highly intuitive web-based interface.

Dalet AmberFin offers comprehensive integrated closed captioning and subtitling workflows, providing seamless processing of captioning data as part of a media operation.

A flexible underlying processing engine enables mapping of caption data from any supported input format to any supported output format by using a common intermediate processing format.



Dalet AmberFin supports insertion, extraction as well as open subtitling operations for US and European formats. When needed, captions/subtitles are converted prior to insertion or after extraction to match the incoming/expected format.

The "US Closed Captioning Insertion/Extraction Workflows" and "European Subtitling Insertion/Extraction Workflows" tables provide details of the supported input and output formats along with the underlying carriage mechanism.

The "Open Subtitling Workflows" table describes the list of subtitles formats supported when burning the captions into the video.

## US Closed Captioning Insertion/Extraction Workflows

All the insertion/extraction workflows are supported by the AF.1500 and AF.1510 nodes.

Formats	Input	Output	Notes
<b>Caption data embedded in the video file</b>			
CC in ST-436	●	●	MXF OP1a and OP Atom files
CC in GXF caption track	●	●	GXF files
CC in LXF caption track	●		LXF files
CC in Quicktime caption track	●	●	MOV files
CC in vision VBI from tall MPEG (line 21)	●	●	MPEG-2 files
CC in ATSC A53 user data	●	●	MPEG2 TS, ES, PS
CC in MPEG-4 Elementary Stream (ANSI/SCTE 128)	●	●	MPEG4 AVC (H.264) files
CC in AVC-Intra user data (Unregistered SEI)	●	●	AVC-Intra files
<b>Caption data in a separate file</b>			
SCC	●	●	
SMPTE-TT (Safe tunnelling mode)	●	●	SMPTE Profile of TTML as per SMPTE ST 2052
DPTXus	●	●	Dalet Pivot format (CEA-608 in ST 436 data only MXF file)
PAC, RAC, CHK, SRT, SUB, 890, XIF, CAP, TXT	○		Requires the workflow engine with the advanced stencilset and AF.OPT.CAP.CONV
TTML, SMPTE-TT, FF, NetflixTT, ITT, Web-VTT, SMIL, Cinecanvas XML and SRT		○	Requires the workflow engine with the advanced stencilset and AF.OPT.CAP.WEB
Other formats: contact your local Dalet channel partner.			

## European Subtitling Insertion/Extraction Workflows

All the insertion/extraction workflows are supported by the AF.1500 and AF.1510 nodes.

Formats	Input	Output	Notes
<b>Caption data embedded in the video file</b>			
WST (World System Teletext)	●	●	MPEG-2 SD files
OP-47 WST	●	●	MXF OP1a HD files
<b>Caption data in a separate file</b>			
DPTXeu	●	●	Dalet Pivot format (WST OP-47 in ST 436 data only MXF file)
STL (EBU Tech 3264)	●	●	
EBU-TT	○	○	Requires the workflow engine with the advanced stencilset and AF.OPT.CAP.CONV
PAC, RAC, CHK, SRT, SUB, 890, XIF, TXT	○		Requires the workflow engine with the advanced stencilset and AF.OPT.CAP.CONV
TTML, SMPTE-TT, FF, NetflixTT, ITT, Web-VTT, SMIL, Cinecanvas XML and SRT		○	Requires the workflow engine with the advanced stencilset and AF.OPT.CAP.WEB
Other formats: contact your local Dalet channel partner.			

## Open Subtitling Workflows

The ability to burn captions in the video requires the workflow engine with the advanced stencilset and the option AF.OPT.CAP.OPEN.

Formats	Burn In
STL, SCC, PAC, RAC, CHK, SRT, SUB, 890, XIF, CAP, TXT	●
Other formats: contact your local Dalet channel partner.	

### Want to know more?

Dalet Digital Media Systems software solutions are used by Content Owners, Broadcasters, Sports Organizations and Post Production Facilities worldwide. Training information on captions is available at the Dalet Academy. There are webinars, white papers and Bruce's Shorts.

To find out more, contact your local Dalet channel partner, or contact Dalet:

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