

**Feature Highlights**

- Workflow engine for orchestration of activities
- User intuitive web interface to design, manage and monitor workflows
- Automated and manual (user) tasks
- Native activities and integration with 3rd party
- BPMN 2.0 standardized notation
- Clearly defined, documented and extensible RESTful API
- Analytics for real-time search and reporting
- Scalable architecture
- Proven interoperability in multi-vendor environments

**Dalet AmberFin**

Dalet AmberFin is a high quality, scalable media processing platform driven by a powerful workflow engine.

Dalet AmberFin Workflow Engine can leverage the unique technologies of AmberFin Ingest, AmberFin Dark and AmberFin Play to ingest, process, package and deliver assets reliably while ensuring your media assets retain the highest quality from new media content to 4K resolutions.

Third party systems such as file based QC or accelerated file transfer solutions can be controlled by the Dalet AmberFin Workflow Engine and combined with native activities.

Activities requiring a human intervention can take part of complex workflows streamlining day to day operations.

To ease integration in any environment a rich RESTful API is available to trigger, manage, monitor and compute statistics for your workflows.

Dalet AmberFin Workflow Engine software runs on cost-effective, commodity IT hardware that can adapt and grow from a single application specific product to a large-scale enterprise-class farm.

**New in this version:**

- File Catalyst Transfer Acceleration activities (Upload and Download)
- FTP Download activity
- Ability to convert and/or overlay subtitles
- Watchfolder start event enhancements for growing and updated files
- SQL Server support for the AmberFin Workflow Engine database

**New in the previous Version (v11.1):**

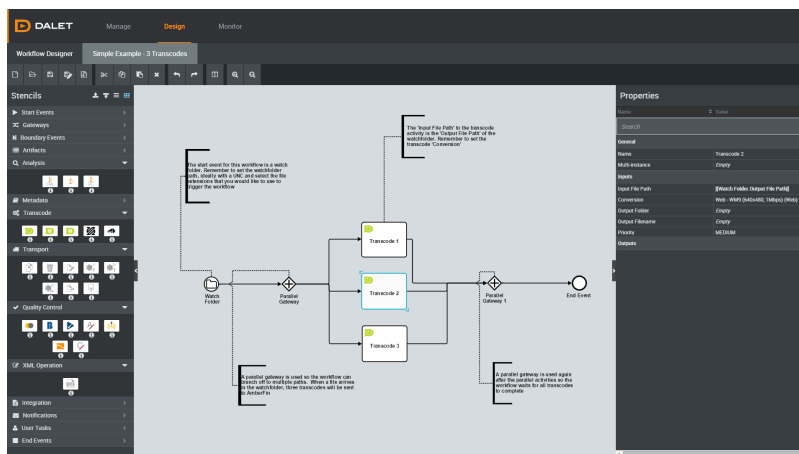
- User tasks assignment and management for manual QC and external tasks.
- Advanced stencil set with S3 watchfolder/upload/download/copy and distributed command line activities.
- Aspera FASPEX and FASP stencils to manage accelerated file transfers using Aspera
- Analytics to gather and expose orchestration and processing data for real-time search and analysis.

| Stencils   | Entry | Advanced | User Tasks | Notes  |
|--|-------|----------|------------|--|
| The Entry stencil set is delivered by default with the workflow engine (AF.900.FARM.PILOT or AF.OPT.FARM.PILOT). |       |          |            |  |
| The Advanced stencil set requires the option AF.OPT.FARM.PILOT.ADV (one per site).                               |       |          |            |  |
| The UserTasks requires the option AF.OPT.FARM.PILOT.TASKS (one per site).  |       |          |            |  |
| <b>Start Events</b>  |       |          |            |  |
| Start Event  | ●     |          |            |  |
| Start with Parameters Event  | ●     |          |            | Start event offering a fast upgrade path from AmberFin Dark API                        |
| Start Timer Event  | ●     |          |            |  |
| Watch Folder   | ●     |          |            |  |
| S3 Watch Folder  |       | ●        |            |  |
| Workflow Error Event   | ●     |          |            |  |
| <b>Gateways</b>  |       |          |            |  |
| Exclusive/Inclusive/Parallel Gateway   | ●     |          |            |  |
| <b>Boundary Events</b>   |       |          |            |  |
| Boundary Error Event   | ●     |          |            |  |
| Boundary Timer (Non-)Interrupting Event  | ●     |          |            |  |
| <b>Analysis</b>  |       |          |            |  |
| Analyse Media  | ●     |          |            |  |
| Analyse Media (XML)  | ●     |          |            | Extended media analysis outputting an XML.   |
| Analyse QCML   | ●     |          |            | File based QC report analysis to retrieve the overall result.                          |
| <b>Metadata</b>  |       |          |            |  |
| Insert/Extract ASO3 Metadata   | ●     |          |            |  |
| Insert/Extract DPP Metadata  | ●     |          |            |  |
| <b>Transcode</b>   |       |          |            |  |
| Transcode  | ●     |          |            |  |
| Transcode with Parameters  | ●     |          |            | Activity exposing all the transcode control overrides.                                 |
| <b>Transport</b>   |       |          |            |  |
| Copy/Delete/Rename/Move  | ●     |          |            |  |
| FTP Download/upload  | ●     |          |            |  |
| S3 Download/Upload/Copy  |       | ●        |            | Supports S3 compatible storages.   |
| Aspera Faspex Send/Dropbox Submit  |       | ●        |            |  |
| Aspera FASP/Server Transfer  |       | ●        |            |  |
| File Catalyst Download/Upload  |       | ●        |            |  |
| <b>Quality Control</b>   |       |          |            |  |
| Metaglug MXFixer   | ●     |          |            | Requires the Unifier license (AF.1600) and the Metaglug plugin (AF.UQC.R.MXFIXER.UNI). |
| Interra Baton  | ●     |          |            | Requires the Unifier license (AF.1600) and the Interra plugin (contact Interra).       |
| VidCheck VidChecker  | ●     |          |            | Requires the Unifier license (AF.1600) and the VidCheck plugin (contact VidCheck).     |
| Tektronix Aurora   | ●     |          |            | Requires the Unifier license (AF.1600) and the Tektronix plugin (AF.UQC.I.AURORA.UNI). |
| Nexidia Nexidia QC   | ●     |          |            | Requires the Unifier license (AF.1600) and the Nexidia plugin (AF.UQC.R.NXIDIA.UNI).   |
| Venera Pulsar  | ●     |          |            | Requires the Unifier license (AF.1600) and the Venera plugin (contact Venera).         |
| Tektronix Cerify   | ●     |          |            | Requires the Unifier license (AF.1600) and the Tektronix plugin (AF.UQC.I.CERIFY.UNI). |
| <b>XML Operation</b>   |       |          |            |  |
| XML Transform  | ●     |          |            |  |
| <b>Integration</b>   |       |          |            |  |
| Execute Command  |       | ●        |            |  |
| Script   |       | ●        |            |  |
| <b>Notifications</b>   |       |          |            |  |
| Email  | ●     |          |            |  |
| <b>User Tasks</b>  |       |          |            |  |
| Manual QC  |       |          | ●          | Requires a player license (AF.200.PLY).  |
| External Task  |       |          | ●          |  |

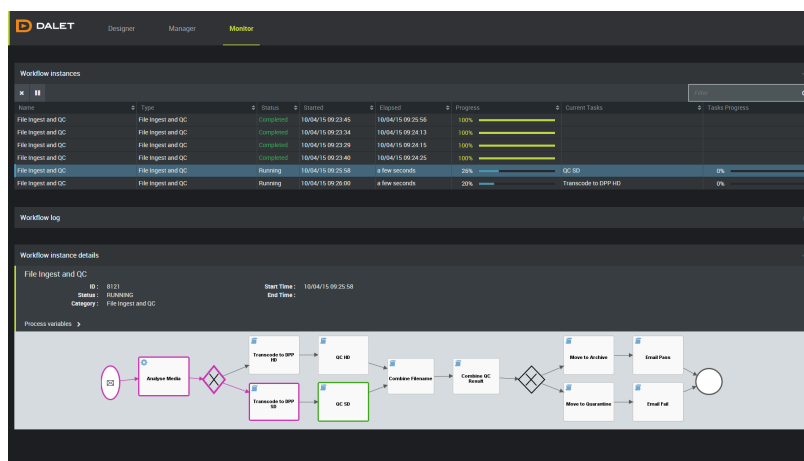
● = Native activity   ● = Integration with a third party   ? = Check availability

## Web User Interface

Any workflow related operation can be done using the web user interface which allows any user to create, deploy and monitor workflows from any computer on the network.



Design Tab



Monitor Tab

## Architecture

The Dalet AmberFin Workflow Engine runs on top of AmberFin Dark to automate complex workflows. An existing AmberFin Dark installation can be upgraded with the workflow engine using the option AF.OPT.FARM.PILOT. A brand new installation with AF.goo.FARM.PILOT includes the Workflow Engine. Depending on high availability expectations, different configurations are possible, the typical ones being:

- 1 Stand-alone host for the Workflow Engine/Farm controller and N processing hosts
- 2 Clustered hosts for the Workflow Engine/Farm controller and N processing hosts

Each processing host has a configurable number of transcode, transport, QC and command engines to execute the automatic tasks.

### Want to know more?

Dalet Digital Media Systems software solutions are used by Content Owners, Broadcasters, Sports Organizations and Post Production Facilities worldwide.

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

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