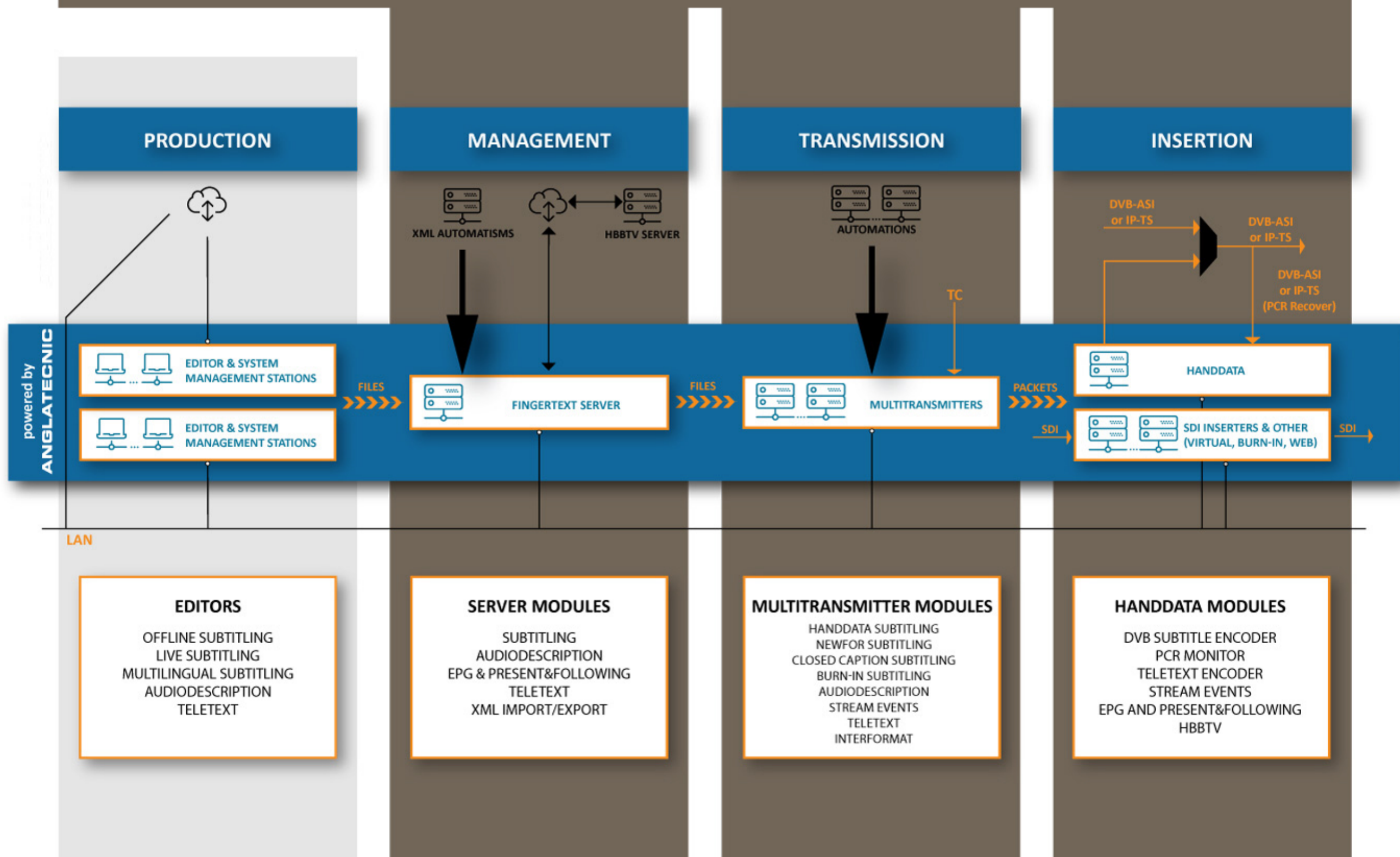




# ANGLATECNIC

## BROADCASTING TOOLS FOR ACCESSIBILITY AND DATA IN TV

Discover the set of solutions that makes easy the management and emission of accessibility-oriented content (subtitling and audiodescription) and data content (EPG, Present&Following, Teletext, Stream Events and HbbTV) for TV stations



## MANAGEMENT

The Fingertext Server is a password controlled web-based system for the administration of the Fingertext system and management of its contents (teletext pages, subtitles, audiodescriptions) and EPG's according to the user profile.



- The administration site allows to manage users and profiles, modify the settings of the system modules and go through the registered events.
- The management site allows to load, edit and catalogue all the accessibility contents and put them on-air manually or automatically.
- The left section displays the containers (Folders, Real/Virtual Bulletins/Channels) which the user can view depending on his privileges.
- The centre section displays all of the contents, allowing these to be copied, moved, wiped, etc.
- The right section displays an accurate preview of the content (teletext page, subtitling, audiodescription, EPG), together with its corresponding settings (id, title, fasttext, control bits, etc.). Clicking on the Edit button will open the corresponding editor.
- The person with "air" privileges can see Real Channels (which contain the contents being broadcasted), execute play/stop of any subtitling or audiodescription, publish an EPG and edit the Present&Following.
- The Server system notifies to the corresponding Transmitters of any relevant changes through IP messages (add/modify/remove content) so it can update its emission on the TV channel.
- Manual and automatic subtitling export to SBT, STL, SRT, TTML, EBU-TT(D) and WebVTT files.

Fingertext also updates automatically its contents such as teletext pages when XML files are received in the Server.

## TRANSMISSION

The Multitransmitter prepares in real-time the teletext pages, subtitles, audiodescription segments and the Stream Events of one TV channel and communicates with the corresponding Inserters.



- Commands related to the programme (Cue, Play, Stop) received from the main automation systems (Harris, Peeble Beach, VSN Multicon, etc.), from Fingertext Server or its own interface.
- Reading of time code: VITC, TC-ANC (SDI signal), LTC or SOM (Start of Media).
- Simultaneously transmits all the contents corresponding to the programme: subtitling in several languages, audiodescription and teletext.
- Asynchronous management of content through IP messaging (modification/removal/insertion).
- Teletext page, subtitling and audiodescription gathering from the database.
- It can work stand-alone in case of disconnection with database.
- Receives live subtitles and prepares them for the Inserters.
- It can record an offline subtitle file created automatically from the received live subtitles and TC and then upload it to the Fingertext server to be used in re-emissions of the tv programme.

Fingertext also has the Virtual Transmitter for testing the subtitlings and audiodescriptions in a video window instead of in the signal that is being broadcasted.

## INSERTION

Fingertext uses HandData for the insertion of its contents in a Transport Stream which is send to the broadcaster multiplexer where the components and signaling are re-multiplexed in one or more output services.



- The HandData can generate and/or insert the following data types: EPG (Electronic Programme Guide): Generation of EIT scheduled tables.
- Present & Following: Generation of the present and following EIT tables.
- HbbTV interactive applications signaling in broadcast accessible via IP channel.
- DVB Subtitling (according to the ETSI EN 300 743 European standard): Generation of DVB graphic subtitles in PES packets and the DVB PSI tables. Sync of subtitles with the videos of a Transport Stream. Allows multiple captioning components with their corresponding PIDs (possibility of subtitling in multiple languages and allows multiple channels simultaneously).
- Teletext: Generates teletext components and their signaling associated with the PMT. It allows for multiple different teletext, each with their corresponding PID.
- Events Notification and private sections: Generation of Stream Events.
- Service Information: Generation of tables MPEG2 PSI, DVB-SI and AIT for HbbTV applications.

Fingertext is also compatible with SDI Inserters for teletext and teletext subtitling, OP47 subtitling and Closed Captions.