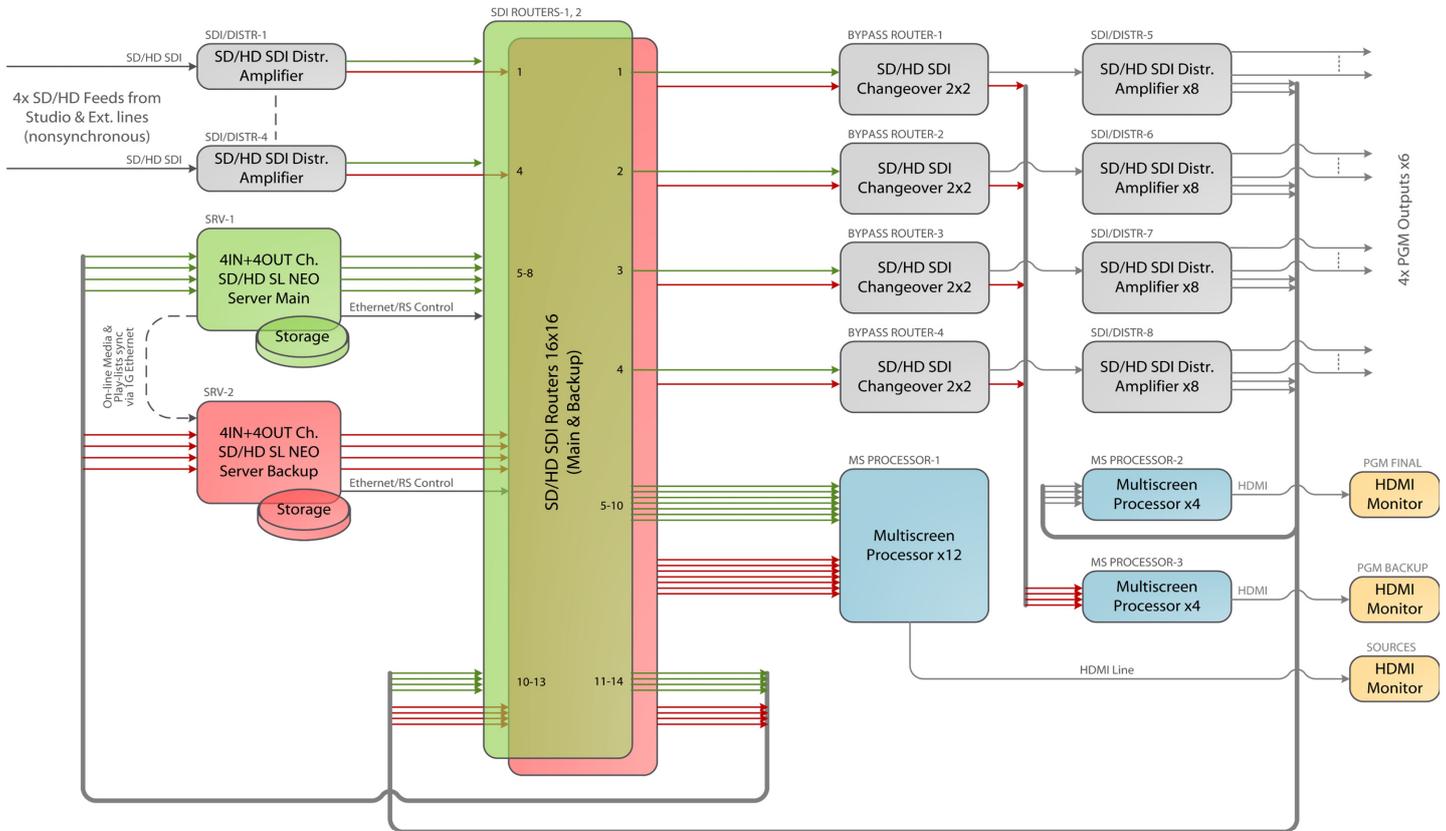# Concept Diagram

SkyLark

4 Ch. Broadcast Automation System Concept Diagram Example

Multi-Channel Ingest & Playout with Automated Source Switching

"Internal" Switching Mode.

As long as the "Channel-in-a-Box" technology's popularity grows, servers begin to carry out more and more functions, what simplifies the scheme of broadcast system creating.

SL NEO server is now not only a source, it is capable to implement internal clean switching of the "not-in-sync" input signals with those ones that are generated during files playback, according to the play-lists. This server also creates graphic design of several channels.

The main advantage of this approach is essential money saving, since there are no requirements about genlock of all external sources with REF: only one server implements the frame synchronizing function by jointless "clean" switching of the input signals with playback files. This scheme requires no sync generators, DSK/LOGO modules or extra graphic design servers.

The main and backup servers & routers work simultaneously and synchronously, graphics is also backed up. Routing switchers implement only preliminary switching to server inputs and switching to server rec-channels (automatically or manually).

Automated Local Insertions

The SL NEO 3000 series servers allow user to pass signals from its inputs directly to the outputs and perform "internal" program switching. For instance, after playing back an ad-block the server can be configured to automatically switch the output from file content to the input's AV signal. This function allows performing local insertions into the AV signal from a central station. The SL NEO media-server may trigger ad-block playback in manual mode as well as fully automatically by means of decoding DTMF cue tones, GPI in VBI commands and by video sample matching.

Graphics and Channel Branding

Being a part of broadcasting or live-production studio, the SL NEO server may be used as a multi-functional graphics design & playout station, which will tie graphics into the propagating video and format multi-layered compositions consisting of captions, scrolling text, video effects, on-screen graphics, logos, animated banners, live video fragments, Chroma Key, and DVE effects.

Each output (program) channel of SL NEO 3000 contains up to eight simultaneously functioning virtual channels for graphics output. Each channel contains its own playlist, with playing back graphic events. Each event may contain a multi-layered combination (without limitation on the number of layers) of text/graphic events.

Dynamic compositions technology is designed for Branding, Promo, TV News, Weather Forecasts, Economic information, Music Channels, etc. In addition to text and animation, compositions may contain 2D effects, elements of PIP, video, and live sources from server inputs, and audio track mixes.

Functions for the automatic parameterization of text objects contained in compositions have been implemented in SL NEO 3000 server line. A flash video shows an example of the composition using PIP and simple captions. Animation may be played in the form of a file chain or from avi/mov files from alpha-channel.

Logos, captions, scrolling and crawling text are played back on dynamic backgrounds. Number of these objects is unlimited; upon generation of the format, they may be combined free-form with any other graphic objects. In addition to text, images may be used as moving objects. The content of scrolling text may change dynamically due to the reading of RSS information.