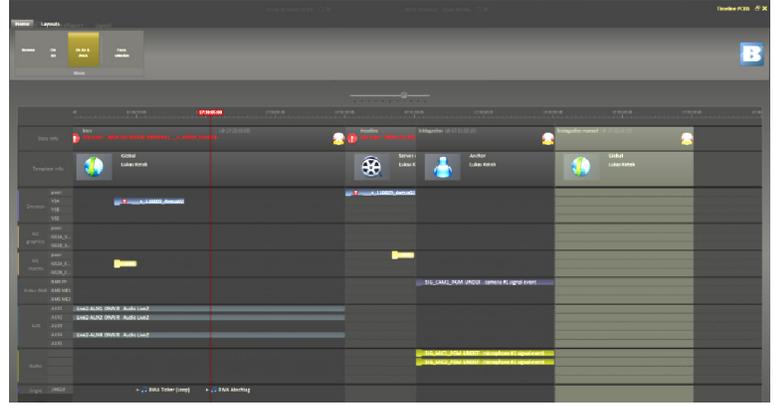




# ASTRA Studio 2

## Studio Automation Solutions

With ASTRA Studio 2, a single operator can easily produce a complex live newscast. ASTRA Studio 2 controls all of your existing studio equipment, while the operator sets the pace of the newscast. This lets operators focus on how the show should look rather than the technical details behind the scenes. Advanced features reduce the chance for errors and improves the on-air look and feel of a broadcast.



### ASTRA Studio 2

Learning from customer feedback from the first version of Studio, Studio 2 has been completely redesigned. While expanding its undisputed automation qualities, a new GUI has been designed to provide better control and use. Additionally, new journalist tools have been developed to simplify story development as well as tools for recording and editing of produced shows.

### Journalist's Point of View

With Studio 2, journalists have two options: they can do their jobs as they currently do today and let the director decide how to air the story, or now they can define how the story is aired using Studio 2's new journalist tools called templates.

### Studio Operation

With Studio 2, a single operator can control a complex live production from the control pane while the application controls all the equipment involved with the broadcast. Studio 2 even enables the anchor to control the show himself. A single button control activates new stories with proper camera angles, lighting, audio, and mixer effects.

### New GUI Front End

Studio 2's new user interface provides a more tactical interface that runs on Windows, Apple, or Linux—while the underlying ASTRA control technology remains on QNX, a robust real-time operating system, proven with years of on-air operation.

The new GUI provides timeline views, list views, and touchscreen operation which can be customized by each user. Multiple hardware panels are supported giving operators various options for running the show.

### New Concept: Shots

The story in the NRCS looks simple. However, in the studio it must be translated into many machine control events, where all the signal sources, transitions, rear projections, on-set monitors, and graphics, have to work in harmony.

Shots collect all of the corresponding control events and deliver them to the operator on one button. The button shows a Ready/Not Ready status. When ready, pressing the button starts the complex set of control events to broadcast the show as defined by the journalist and the news producer.

## Key Features

- Single operator control for most newscasts and programs
- Consistent look and feel for shows
- Configurable multiplatform GUI
- Multi-color, programmable 32 & 64 button control panels
- Preproduction mode for recording and editing pre-produced shows
- *Intelligent Splicing* protects against on-air mistakes when editing
- *Shots* simplify the control and story presentation for operators
- Works with existing equipment and infrastructures
- Tight integration with NRCS systems consistent with current workflows
- Easy to learn and operate with minimal technical knowledge by journalists and operators

## New Feature: Preproduction

Often, a studio production is recorded rather than broadcast live. For these instances, Studio 2 now includes a Preproduction Mode to make it easy to start/stop and rerecord portions of the show.

As the show is being recorded, an operator can preview what is being recorded to the videosever.

If a problem occurs that requires re-recording, Studio 2 lets the operator stop the show, identify an appropriate splice point, and continue. Studio 2's Intelligent Splicing feature protects the operator from splicing at points that will be highly noticeable such as areas of high audio levels, fades, or other points that would distract the viewer. This process emulates a VTR's "assemble edit" and can work in single channel and multichannel shoots.

When finished, Studio 2 exports the assembled clip to storage and registers it with a MAM or the NRCS.

## Behind the Screen: Storyboards and Templates

*Storyboards* are commonly used to define the styles in which the shows, bulletins, and individual stories are to be presented.

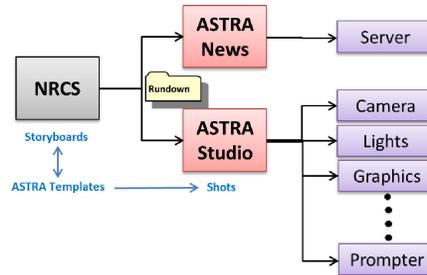
*Templates* are computerized representation of Storyboards in Studio 2. Templates interpret the stories received from NRCS via MOS.

Templates define, with optional parameters passed to them, how to control the broadcast equipment such as videosevers, cameras, audio, lighting, graphics, and other devices used in the studio. Offsets, durations, signal levels, transitions, etc. are parameters passed to the templates.

Templates also group relevant control events into shots. The shots are then available for the operators to select as required.

For example an "Interview for 3" template could be defined as an interviewer talking with three people. It might have three cameras, their locations, two CGs, four microphones, one videosever, etc.

Templates are stored in a library and shared with the NRCS system which enables the journalist to pick the appropriate template for the story – in this case "Interview for 3" and drag it into the storyboard.



TYPICAL WORKFLOW WITH ASTRA STUDIO AND ASTRA NEWS

## Works with Existing Infrastructure

A key advantage of Studio 2 over competitive offerings is that it works with all of your existing equipment. There's no need to purchase new broadcast equipment or be tied to a certain vendor's brand.

## Designing the Newscast

Journalists can create a story in NRCS the way they always have. If they want more control, they can drag and drop the template from the library into the story. If even more control is required, they can enter various parameters for the templates. This eliminates the need for journalists to understand the underlying technology used to put a show to air; they can focus on the story, not the technology.

Studio 2 receives the story from NRCS via MOS. Through the template and optional parameters, the story is transformed into control events that manage the equipment and those events are then grouped into shots. The story is presented to the operator in a timeline view, on the shotbox

control panel, and optionally in a list view.

## Producing the Show

The operator sees the stories and shots in the ASTRA GUI. The GUI will indicate if the shot is ready and if it is automatic or needs to be manually triggered.

The operator lets the automatic shots flow until input is required to control the pace or when there is a choice of alternatives. Stories can be skipped or interrupted with breaking news where the operator can then control everything manually.

The operator uses a touchscreen, a PC keyboard, and mouse or the ASTRA shotbox control panel. The control panel has 32 or 64 programmable context sensitive buttons that change based on the current event. These are programmed with the appropriate shots enabling the operator to direct the show while at the same time, reducing the chance for errors.



ASTRA PROGRAMMABLE SHOTBOX CONTROL PANEL

## Summary

ASTRA Studio 2 offers a great deal of flexibility in producing and broadcasting live newscasts and programs. It does not restrict or dictate the workflow. Users can start with minimal features and grow into Studio 2's full capabilities or jump right in and take full advantage to reduce costs and improve quality.

The ability to work in existing infrastructures with existing equipment and applications makes for a lower initial investment than competing solutions. Studio 2 lets you decide your workflow and equipment.