NOVAnews
Digital Signage System
Guidelines

Office of Marketing and Communications
Northern Virginia Community College
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NOVAnews Digital Signage System Guidelines

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I. Overview

NOVAnews Digital Signage is a new communications system available at Northern Virginia Community College (NOVA). NOVA has installed more than 100 large format flat screen monitors in public areas around the college’s six campuses as part of the new communications system. NOVAnews provides NOVA’s six campuses with programming specific to each campus, as well as news and information concerning the College as a whole.

In the event of an emergency, all the Digital Signage monitors on a specific campus are used for the immediate posting of emergency messages. Under normal conditions, the digital signage system is used to display campus-specific and college-wide information, such as events, activities, meetings, programs and services, with the college community.

Goals of Digital Signage

1. Provide a means to post emergency information.
2. Enhance communication on NOVA’s six campuses.
3. Provide a means of conveying visual messages to the NOVA community that will increase interest in events, news, activities and instructional information.
4. Reduce the use of paper to create a more ecologically friendly environment.

Hours of Operation

The screens are automatically turned on at 6:30 a.m. and off at 11:00 p.m. Monday through Saturday.

NOTE: Power to the Digital Media Players (DMPs) and monitors must not be turned off at individual locations during the stated hours of operation.

Location of Monitors

The monitors are in a variety of locations. Monitors may be placed in hallways and lounge-type areas as well as outside or inside offices and departments, such as Student Services. The campus IT managers are responsible for keeping the inventories for the monitors on their campuses. The Project Management Office of the Office of Instructional and Information Technology maintains a record of all purchases of the Digital Signage System monitors.

In locations where there are multiple monitors, such as a campus cafeteria, at least half of the monitors must be dedicated to Digital Signage material, while the others may be used to display other content. All content for all campus monitors must be reviewed and approved by the provost-designated Campus NOVAnews Digital Signage Content Manager. In addition, ALL MONITORS must be connected to the
Digital Signage System so that in the event of an emergency, all monitors will display the emergency notifications.

**Point of Contact**

Each campus has a provost-designated point of contact person, the campus NOVAnews Digital Signage Content Manager, who manages the use and content of all monitors in the Digital Signage System. This person is responsible for campus-specific items on the monitors. The Office of Marketing and Communications is the point of contact for college-wide content. The campus and college IT units provide support to the system.

The designated individual at each campus works with the College Marketing and Communications Office to ensure appropriate coordination of the campus and college messages are displayed.

**Users**

Only College offices, campus divisions/offices, college and campus governance units, college committees and registered student organizations are permitted to display content on the NOVAnews Digital Signage system. The content must be submitted to the campus NOVAnews Digital Signage Content Manager for campus content and the Office of Marketing and Communications for college content for review and approval for posting.

**Content Selection**

In the event of an emergency, all the Digital Signage monitors on a specific campus are controlled by the Provost Staff Emergency Notification Group for the immediate posting of emergency messages on that campus. Once the college-wide emergency command center is established, the command center coordinates the emergency messages, and they are posted by the College-Wide Emergency Notification Group.

For that reason, power to the monitors must **not** be turned off at individual locations during stated hours of operation. It is the responsibility of the campus IT Managers or their designee to ensure all monitors are on during the stated hours.

At other times, the campus NOVAnews Digital Signage Content Manager manages the review, approval and posting of campus-specific content, and the Office of Marketing and Communications manages the review, approval and posting of college-wide content. The College has a list of approved broadcast channels from which the campus NOVAnews Digital Signage Content Manager may choose to display in the streaming window. The campus IT or Information Technology Support Services for the college assists the campus Digital Signage content managers or the Office of Marketing and Communications with the streaming.

Content includes college-wide information, campus-specific information, IT updates and approved streamed programming.
II. Guidelines for NOVAnews Digital Signage System

The creation of content for the NOVAnews Digital Signage System requires consideration of technical, legal and aesthetic factors. The technical considerations deal with the system's capabilities and limitations. The aesthetic considerations relate to making the digital slides visually effective.

Emergency Notification

In the event of an emergency on a specific campus, the Provost Staff Emergency Notification Group initiates emergency messages on the Digital Signage System (DSS) until the college-wide Emergency Command Center is established. The campus Provost Staff Emergency Notification Group performs the following functions:

- Power on all Digital Media System (DMS) displays that are not currently powered on.
- Configure all DMS displays to receive input from the DMS system (typically connected to one of the display’s HDMI ports).
- Configure all DMS displays with an increased audio volume.
- Push the related emergency information message to the DMS displays.
- Notifies the Office Emergency Planning and the Office of the President.
- Recover from emergency notifications.

Once the college-wide Emergency Command Center is established, the command center coordinates the emergency messages on all campuses, and they are posted by the College-wide Emergency Notification Group. Questions about this process should be sent to the Office of Emergency Planning.

Content Specifications

All campus content must be submitted electronically to the campus NOVAnews Digital Signage System Content Manager and all college content must be submitted electronically to the Office of Marketing and Communications. It is the responsibility of the person who is making a submission to provide accurate information. The campus NOVAnews Digital Signage content managers do not write the content. The campus NOVAnews Digital Signage System content managers and the Office of Marketing and Communications reserve the right to edit messages for spelling, grammar, structure, brevity and style.

a. Descriptions of Acceptable Content

- College-wide emergency information
- College and/or campus sponsored events
- Academic notices – registration, payment, etc. deadlines
- Promotion of department programs and courses
- Support services notices – facilities (buildings), parking, NOVACard, campus police (non emergency)
- Materials that can be distributed through Digital Signage
o College-Wide
  ▪ Special Events
  ▪ Faculty/Staff News
  ▪ Congratulatory, Professional Achievements, Welcome Messages
  ▪ News or Announces that affect all students
  ▪ Regional weather updates, maps, radar, etc.
  ▪ Approved college-wide paid advertising

o Campus-Wide
  ▪ Special Events
  ▪ Campus News
  ▪ Student News
  ▪ Department Notices
  ▪ Class / Course Promotion
  ▪ Facility News (HVAC Issues, Power Outages, etc.)
  ▪ SGA / Student Activities
  ▪ Academic News
  ▪ Congratulatory, Professional Achievements, Welcome Messages (Specific to the Campus Faculty/Staff)

o IT / Infrastructure / Applications Information
  ▪ Network outages
  ▪ Application outages
  ▪ Scheduled maintenance
  ▪ Virus warnings
  ▪ Other news items posted by the IT Helpdesk

o Streaming Video Broadcast
  ▪ Current events or news worthy programming
  ▪ Live broadcasts of executive addresses, town hall meetings, other events that would be of interest to the entire College
  ▪ The College will have the right to override all broadcasts in the event of an emergency or college-wide event

b. Restricted Content

Restrictions on the use of content are listed below.

- Digital Signage content that promotes or condones behavior that violates college or VCCS policies, or local, state or federal law will not be approved for display.
- Digital Signage content that includes references to the sale or consumption of alcohol or other drugs will not be approved for display.
- Personal messages and messages that are considered inappropriate will not be posted.
• Advertisement of commercial products or services is prohibited, unless it has been approved by the Office of Financial and Administrative Services and the Office of Marketing and Communications.
• Use of solid red backgrounds in digital slides and digital video is reserved for Emergency Communications only. Digital Signage content submitted with a solid red background will not be scheduled for display.
• Digital Signage content that is entirely in caps will not be approved. In appropriate cases, some words may be in all caps, such as an acronym.
• Digital Signage content that is illegal or offensive material (drugs, sex, language etc.) will not be posted.
• Digital signage content that infringes on the copyrighted or trademarked works of others will not be approved for display. Copyrighted and trademarked material may include, but is not limited to, logos, digital images, photographs, paintings, movies, videos and written works.
• For an overview of Copyright and Fair Use topics visit: http://fairuse.stanford.edu/Copyright_and_Fair_Use_Overview

Violations of these guidelines may result in sanctions against the submitter including, but not limited to, removal of material and/or denial of further access to the system.

Format

Content submitted for display on the Digital Signage System must meet the following requirements before it will be approved and scheduled for display.

1. Anyone with material to be run on NOVAnews Digital Signage System should preferably store the material as a PowerPoint presentation. Materials in the form of .jpeg, Adobe Acrobat, Photoshop, or Microsoft Publisher may be submitted also.
2. The PowerPoint presentation should be one to 10 PowerPoint slides.
3. The PowerPoint presentation should be exported to the designated campus or college folder.

The submitted material will then be reviewed by the Campus NOVAnews Digital Signage Content Manager or Office of Marketing and Communications who will save the material as JPEG slides and program them into the Digital Signage system. However, any item that needs changes other than minor PowerPoint editing will be returned to the submitter for revisions and resubmission.
a. Templates

Several different template options are available on the monitors. The default template has the NOVA logo in the upper left portion of the screen. The rest of the screen’s left side is for campus-wide information. The upper right quadrant features a tuner to broadcast television channels or live video feeds from NOVA. The bottom right is dedicated to college-wide information. A crawl runs across the bottom of the screen with NOVA IT updates, noted as the News Ticker in the template below.

The second template available on the monitors has the NOVA logo in the upper left portion of the screen. The rest of the screen’s left side is for college-wide information. The upper right quadrant features a tuner to broadcast television channels or live video feeds from NOVA. The bottom right is dedicated to campus-wide information. A crawl runs across the bottom of the screen with NOVA IT system updates, noted as the News Ticker in the template below.
The third template on the monitors has the NOVA logo in the upper left portion of the screen. A single full screen field alternates campus and college content. A crawl runs across the top right of the screen, titled News Ticker in the template below, for NOVA IT system updates. This format can be used on the smaller 32 inch monitors but should not be used on the larger screen monitors.

News Ticker (Optional)

The NOVA logo must be in the upper left portion of the screen no matter what template is used. The Director of IT Project Management in the Office of Instructional and Information Technology coordinates the templates. Each screen is controlled by its own media manager, a black box on the back of the screens, which allows each monitor to be programmed separately if needed.

b. Digital Slides

Digital slides can be produced in any program that can create a JPEG (Joint Photographic Experts Group) file, such as Microsoft Office PowerPoint, Microsoft Office Publisher and Photoshop. The preferred program is Microsoft Office PowerPoint. Once the slides are completed according to the specifications below, they will be stored in a folder on the network where they can be reviewed and approved. Once the slides have been sent to the campus NOVAnews Digital Signage Content Manager or Office of Marketing and Communications for review and approval, the campus NOVAnews Digital Signage content managers or the Office of Marketing and Communications will place the JPEG slides in the appropriate location for automatic posting.

- Digital slides must be in JPEG format.
- Digital slides are typically displayed for 7 to 10 seconds at a time; it is best practice to limit the number of elements (text and graphic
images) in a digital slide so that viewers have sufficient time to read the slide.

- One to 10 slides per event/announcement or specific office or department information may be displayed.
- Limit the number of characters (letters, spaces, etc.) in a line and the number of lines on a slide. Forty characters or less is a preferred line length. A maximum of 10 lines per slide is a good target. Be sure to allow sufficient white space between and around text so that it appears balanced and visually pleasing.
- The resolution limitations of the Digital Signage displays require the use of simple, bold text or type but should not be in all caps unless it is required, such as the acronym “NOVA.” As a general rule of thumb, avoid font sizes smaller than 32 pt. font.
- When using graphic images in digital slides, be sure to use images that are visually compatible with the other elements in the slide. Use images whose formats are compatible with creating slides in JPEG formats.
- Use sufficient contrast between text and background colors for readability.
- When preparing digital slides, the width of the slide should be approximately 1.77 times greater than the height. Digital slides with the following dimensions display best on the Digital Signage system: 1280 x 720 pixels, 1600 x 900 pixels, and 1920 x 1080 pixels.
- All slides must be numbered. Be sure to use double-digit numbers by including a zero in front of any slides numbered 1-9.
- Compatible digital video file formats are: .asf, .asx, .avi, .m2v, .mp2, .mp4, .mpg, .mpg1, .mpg2, .mv2, .vob, and .wmv
- Digital slides or digital video using a solid red background will not be scheduled for display. Solid red backgrounds are reserved for Emergency Communication only.
- Full screen windows should be readable at a distance of more than 15 ft. on a 47” monitor.
- Do not incorporate elements into digital signage content that violate copyright laws.

Submissions

Content is submitted to the campus NOVAnews Digital Signage System content managers for campus-specific messages and to the Office of Marketing and Communications for college-wide messages (email: wsdm@nvcc.edu). Content may be submitted to run on an individual monitor, on a select campus or college-wide field. It is the responsibility of the person who is making a posting request to provide accurate information. The campus NOVAnews Digital Signage System content managers do not write the content.

The campus NOVAnews Digital Signage System content managers and the Office of Marketing and Communications reserve the right to (1) edit messages for spelling,
grammar, structure, brevity and convention compliance, (2) decline to display any portion or an entire message at the campus NOVAnews Digital Signage System Content Manager’s discretion, (3) change the locations in which a particular message is running at any time and for any reason, (4) change the start and/or end dates of a particular message at any time and for any reason.

a. College-Wide and Campus-Specific Content

1. Material must be submitted at least five business days prior to the first date it is intended to be displayed. Failure to give proper time to post the content may result in it not being displayed. All postings will be based on availability and will be accepted on a first-come, first-served basis.
2. Submission requests must indicate the date and time when the message should begin broadcasting and the date and time when the message should end broadcasting so that dated material does not appear on the screens.
3. Campus submissions are sent to the campus NOVAnews Digital Signage System Content Manager to review, edit, and approve for posting. The material is to be exported to the campus designated folder.
4. Content intended for distribution across the entire college should be submitted to the Office of Marketing and Communications (email: wsdm@nvcc.edu) to review, edit and approve for posting. The material is to be exported to the college-wide Draft Digital Signage folder.

b. Types of Television Programming to Be Displayed

As part of the NOVAnews Digital Signage System, broadcast signals are transmitted to a portion of most monitors. On any given monitor only one video window can be displayed at a time so on that monitor two channels cannot play simultaneously.

The system currently supports only one broadcast channel per campus due to the current number of encoders needed to stream the channel. Multiple channels can be transmitted to the Digital Signage System with the purchase of an additional encoder per channel up to two more for a maximum of three encoders per campus. All purchases of additional encoders must be coordinated through Information Technology Support Services.

Note: Broadcasting a channel through any means other than the use of encoders to the streaming video window in the digital signage presentation templates is prohibited.
Approved Television Broadcasts

- Emergency information: In the event of an emergency, all the monitors can be controlled to provide emergency information.
- The default channel: CNN
- Other information channels that could be streamed: C-SPAN, Discovery Channel, PBS, Weather Channel.
- Local News: Channels 4, 5, 7, 8, 9, Fairfax County Government Channel
- Campus productions: NVCC-TV
- Live, streaming video of events on campus: such as an address by Dr. Templin

c. Advertising

The Office of Financial and Administrative Services and the Office of Institutional Advancement coordinate relevant advertising that will appear on the monitors. An addendum will be added to this document after the Vice President of the Office of Financial and Administrative Services and the Vice President of Institutional Advancement finalize the details of the protocol for advertising.

d. IT Updates Crawl

The Office of Instructional and Information Technology will provide the content for the IT Updates Crawl.

System Support

Campus IT Managers and their staff are responsible for supporting the NOVAnews Digital Signage System. Their responsibilities include

- Ensure network connectivity to the Digital Media Players (DMPs).
- Ensure overall system operability at the campus level.
- Manage assets [displays, Digital Media Encoders (DMEs) and Players].
- Inspect equipment regarding safety and functional issues.
- Maintain campus head-end operations.
- Oversee and manage vendor services for installation, cabling and repair.
- Notify Information Technology Support Services (ITSS) when requesting additional DMS devices.
- Assist with posting campus-specific emergency notifications.
- Publish presentation templates to displays when necessary.
- Use college-wide ticketing system to address and document system outages and issues.

Staff from the Information Technology Support Services and the Project Management Office of the Office of Instructional and Information Technology are responsible for maintaining the system’s back-end.
Contact Information

The college-wide and campus content for the NOVAnews Digital Signage System is coordinated by the Office Marketing and Communications. If you have any questions, please email publicinformationpublications@nvcc.edu or phone 703.323.3196. To submit campus information, please contact your campus NOVAnews Digital Signage System Content Manager.
Appendix A

Brief Glossary of Terms

**DMS (Digital Media System)** – The collection of video displays, media players, encoders and other devices along with any presentation templates and software applications that make up the College-wide digital signage and emergency video alert system.

**DMM (Digital Media Manager)** – A browser-based application driven server platform that is used for managing presentation templates, general media content, playlists, devices and other aspects of the Digital Media System.

**DME (Digital Media Encoder)** – A hardware device that takes any standard analog audio/video signal and converts it to a real-time digital multicast data stream for distribution across an Ethernet network. The data stream created by this device is present at all times on the network, regardless of the number of client devices that are connected to it.

**DMP (Digital Media Player)** – An IP-based network hardware device with a High-Definition video output (typically connected to an HD-Compatible TV or video monitor). These units can display presentation templates (purpose-built web pages) with no more than one simultaneous audio/video stream or file. These units can also control aspects of commercial-grade video displays including power and volume when connected via the appropriate RS-232C control cable.

**Commercial-Grade Video Display** – Typically a large format LCD, LED or Plasma video monitor (either with or without a built-in television tuner). The NOVA standard video display includes at least one HDMI (High-Definition) input (to be dedicated for use with the Digital Media System) and an industry standard RS-232C control port. Speakers may either be built in to the display or external, depending on the needs for each location.
Appendix B

Members of the Digital Signage System Working Group:
The members of this Working Group were appointed by the campus provost or vice president for their unit.

Cathy A. Simpson (Chair)
David L. Williams (AL)
William Van Robertson (AL)
Damon Green (AN)
Kevin F. Kelley (LO)
Lynn Bowers (MA)
Patricia Martin-Mattocks (MEC)
Michael Blackwell (MEC)
Tanya L. Kern (WO)
Aaron M. Raffle (ITSS - CS)
Jessica Baxter (PIO – CS)
Kimberly Evering (WSDM - CS)