# Scaffold v0.2020.1102-alpha.preview.1.0

## Alpha Testing and Technology Preview Release 1.0

### Background

This revision concludes the **Conversational** sprint of late October 2020, the major focus of which was to bring the operational capabilities of the application up to the level of practical creation and testing of the following types of interactive learning modules.

* Branching.
* Conversational.
* Scenario-based.
* Situational.

Support for the following media has been added on Nodes and Sockets.

* Audio.
* Image.
* Link.
* Video.

A chatbot emulation script has been added to allow you to test your node layout in real time.

### Bugs Fixed

No bugs were reported from the previous version.

### Feature Tasks Completed

The following tasks were completed during the **Conversational** sprint.

* **ADO1888 - Chatbot - Conversation Emulator**. The first version of the conversation emulator is running.
* **ADO1900 - Chatbot - Audio Delivery**. Audio resources can now be delivered with chatbot output.
* **ADO1854 - Chatbot - Image Delivery**. All common image formats can now be delivered by direct reference to their tickets on the resources collection of the node file.
* **ADO1901 - Chatbot - Link Delivery**. Link content defined on nodes and sockets can now be delivered with chatbot content.
* **ADO1851 - Chatbot - Video Delivery**. The video can now be delivered directly by reference to its ticket on the resources collection.
* **ADO1894 - Deployment - Add FFMPEG Runtime to Program Files Folder**. For purposes of Frame <-> Video <-> Thumbnail conversion, FFMPEG runtime has been added to the Scaffold project. XmlManage application has also been adopted as the main application for maintaining the Wix setup configuration files.
* **ADO1886 - Documentation - Describe All Menus And Keyboard Shortcuts**. The menus, mouse behaviors, and keyboard shortcuts have been documented and printed to the github page.
* **ADO1887 - Documentation - Installation And Configuration Process**. The installation instructions for pre-release versions have been posted on the site <https://github.com/ascendantdesign/Scaffold>
* **ADO1892 - Documentation - Node Data Structure**. Current node data structure has been documented.
* **ADO1878 - Infrastructure - Autosave**. Open SVG or node files can now be saved every 5 minutes. However, that feature will be temporarily disabled while the application is still in the early phases of testing.
* **ADO1897 - Infrastructure - Embedded Resource Node Serialization Mode**. When saving for publication, the serializer is now able to convert all URI references into Data URIs.
* **ADO1856 - Node Editor - Add Image And Thumbnail To Node**. The image and its thumbnail have been added to the node. The image resource is stored in a separate resources table, and the record is referenced by ticket under the property *MediaImage*. During runtime, the thumbnail is stored as a non-static property in the node named *ThumbImage*.
* **ADO1881 - Node Editor - Add Properties Grid To Node Dialog**. A Property / Control association handler has been written to synchronize values between controls and the Universal properties list. The node dialog now allows full properties editing of permanent and non-permanent values.
* **ADO1882 - Node Editor - Add Properties Grid To Socket Dialog**. The socket dialog properties grid has been added and tested.
* **ADO1841 - Node Editor - Add Storyboard Properties to Node and Socket Dialogs**. Additional storyboard properties *StoryPageHorizontalPlacement*, *StoryPageVerticalPlacement*, and *StoryPageWidth* have been added to the storyboard pages of the node and socket dialogs.
* **ADO1839 - Node Editor - Alignment and Distribution Functions**. The following basic shape alignment functions have been added to the **Edit / Align and Distribute** menu.
  + Align bottom.
  + Align center horizontal.
  + Align left.
  + Align middle vertical.
  + Align right.
  + Align top.
  + Distribute evenly on horizontal.
  + Distribute evenly on vertical.
* **ADO1855 - Node Editor - Create New Node Socket Type: Delay and Continue**. A new node type named *Delay* is available. A delay amount, in seconds, can be set on the node dialog.
* **ADO1891 - Node Editor - Double-click or [Edit] on Property Opens Associated Editor**. Properties grid values can now be set using multiple editor types. Currently, *Name/Value* and *Color* are supported.
* **ADO1869 - Node Editor - Hero Card Generator**. The user will be able to experience the same type of functionality as offered by the Microsoft HERO card. The media types Audio, Image, Link, and Video are all now directly supported.
* **ADO1857 - Node Editor - Node Color**. The user is now able to set node text and background color on every node.
* **ADO1898 - Node Editor - Resource Gallery Form**. The Resource Gallery dialog is now available for selecting resources.
* **ADO1880 - Node Editor - Undo Button**. The Undo feature is now functional for version 1. It relies upon time-sensitive captures of multiple actions into a series of stacks that are acted upon as a group for each undoable action. This tends to make the undo action for the user much easier to see while providing handling for an enumerable number of possible objects and properties per user action.