RELEASE NOTES
SONOS MEDIA PLAYER DEMO

Version 2.1.0

KNOWN ISSUES

1. If you only have one Sonos in your system, make sure you remove the Groups button from the touch screen.

CONTENTS

OVERVIEW

This sample program demonstrates programming a Smart Graphics Media Player to interact with Sonos audio devices. The Sonos devices that can be controlled are the Play:1, Play:3, Play:5, Playbar, Connect and Connect:Amp.

Sonos does not act like a traditional centralized audio distribution source, instead, it can act as both a "source" and the "room". The Sonos user can use the Sonos app and play different content in each room if they desire, or they can choose to group rooms together to make the content track. For system design considerations and an explanation of the architecture of a Sonos and Crestron system together, see the details in the How-To guide available from: https://www.crestron.com/microsites/integrated-partners-manufacturers/partners_sonos.html

There are two methods to integrate with the Sonos system:

1. ***(Recommended)*** Using the Sonos Device modules in combination with the Media Player object.
    a. Each Sonos Device module represents a Sonos zone.
    b. The Media Player object is used to display each zone's information.
    c. The Media Server Object Router v4.0 module is used to switch between different Sonos zones.
2. Using the Sonos UI module.
    a. The Sonos UI module will provide an interface for the whole Sonos system. Via the group list you can switch between the different Sonos groups and control them.
    b. This module is only needed if you are using a pre-Smart Graphics era touch screen.

This demo demonstrates the recommended Method 1.

FEATURES

The implemented features represents the current state of the Sonos API. As additional Sonos APIs become available, these modules will also expand to include new capabilities.

- Ability to use Sonos transport controls.
- Ability to browse Sonos Favorites.
- Ability to control Volume/Mute on each Sonos device.
- Ability to view and edit Sonos groups.
- Returning metadata for the currently playing content

EQUIPMENT

This program is designed to work with the following hardware/software:

ETHERNET DEVICES

Device	IP ID
RMC3 Control System	N/A
CEN-RFGW-EX	04
Xpanel	05
TSW-1052	06
TSW-1060	07
TSW-752	08
Crestron App	09

RF DEVICES

Device	RF ID
HR-150	10

FIRMWARE AND SOFTWARE

Device	Firmware Version
RMC3	1.501.2867.30341 or later
CEN-RFGW-EX	2.009.0000 or later
TSW-1052	1.002.0013.004 or later
TSW-752	1.002.0013.004 or later
TSW-1060	1.00.0031 or later
HR-100	1.000.0095 or later

Software	Version
Simpl Windows:	4.05.04.00
Simpl+:	4.04.01
Device Database:	81.00.002.00 or later
Crestron Database:	61.05.003.00 or later
VTPro-e:	6.1.04 or later
Smart Graphics Controls:	2.12.04.00 or later
Toolbox:	2.42.541.00 or later

DEFAULT SONOS DEVICE NAMES

If you are using this sample project, unmodified, use the below list of the names to name each Sonos device on your network (using the Sonos App). If your Sonos device names differ, see instructions in the section, “Add Sonos Players”.

The following table maps the Sonos Player Names to the corresponding devices in this sample project:

Sonos Name	Sonos Device for Room #
“Office”	Room 1
“Living Room”	Room 2
“Dining Room”	Room 3
“Kitchen”	Room 4
“Bedroom”	Room 5

IMPORTANT NOTES

Please read each note thoroughly for successful configuring of a Crestron and Sonos system.

This sample relies on 3-Series firmware version, 1.501.2867.30341, or later.

The Touch screens and Sonos devices cannot reside a control subnet.

PRO3, AV3, OR CP3N USAGE

If the program is to be modified to use a PRO3, AV3, or CP3N, the IP Port Number and Ethernet Adapter Type may need to be specified to accommodate a custom installation. For details, refer to Page 14 of the Smart Graphics Media Player Programming Guide.

ADDING SONOS PLAYERS

To accurately add Sonos devices to your Crestron system, use the following guidelines:

1. Start with all Sonos speakers ungrouped.
    a. This can be done via the Sonos PC/mobile app.
2. Add a **Sonos Device Module v2.1** to represent each physical Sonos device. This is required when using the Smart Graphics Media Player integration. As stated above, please be sure to add this module AFTER the **Sonos System v2.1** for correct initialization of the Sonos logic.
3. Set the **Player Name** parameter to the correct Sonos group/zone name. This name should match exactly to the name given to the Sonos device via the Sonos app. This field is not case sensitive, but all spaces and other characters much match exactly for the link to occur.
    a. This field is what links the physical Sonos device to the Crestron system, therefore it is important to communicate to the end-user that they should not rename their Sonos device.
4. Copy the signals from an existing Sonos Device Module and rename the Room_x prefix.
5. Make the new player available to User Interfaces by updating the logic in the Room Signals folder to route the UI signals to the newly added player when it is selected on the UI.
    a. This can be achieved easily by copying one of the folders for an existing room and then rename the Room_x prefix.

ADD ADDITIONAL UIS

Adding additional Media Player UIs is detailed in the Media Server Object Router v4.0.cmc module's help file. This can be accessed in SIMPL by selecting the module and press **F1**.

Adding Media Player Logic:

1. Add the touch screen to the control system program and import the .CED file from the sample program zip file. For details, refer to Page 4 of the Smart Graphics Media Player Programming Guide.
2. Copy all the signals and smart graphics programming from the TSW-1052 on IP ID 6 to the added panel. Then rename the signals for the newly added panel. E.g. Rename UI_2 to UI_5.
3. In the logic section: Copy the TSW-1052 folder (S-4.3.2) and do the same signal rename as in step 2.
4. Delete the added Media Server Object Router v4.0 module that was added when the smart graphics extenders were loaded for the newly added touch panel.

Adding Sonos UI module:

1. Add the touch screen to the control system program and import the .CED/.SGD file from the sample program zip file. For details, refer to Page 4 of the Smart Graphics Media Player Programming Guide.
2. Copy all the signals and smart graphics programming from the TSW-1052 on IP ID 7 to the added panel. Then rename the signals for the newly added panel. E.g. Rename UI_3 to UI_5.
3. In the logic section: Copy the TSW-1052 folder (S-3.1) and do the same signal rename as in step 2.

LOADING THE PROGRAM AND PROJECT FILES

Load the compiled program and project files in the following order:

1. Smart Graphics Media Player program to the control system.
2. Each touch screen project to the corresponding touch screen hardware.