media:scape Administrator Guide

media:scape Connection and Configuration Steelcase Application Server 3.3.2 media:scape Manager 3.3.2



Current Software Versions

It's important to keep all of your media:scape hardware and software up to date for the latest bug fixes, security updates and feature enhancements.

Go to info.steelcase.com/technologyproductsregistry to receive email updates about any or all of Steelcase's technology product enhancements.

media:scape Manager 3.3.2

Release Notes

- Updated security patches and updates. Known Defects
- The switcher goes offline when a physical PUCK is disconnected.
- The switcher, when set to a 60-minute standby time in media:scape Manager, shows offline and unavailable instead of standby mode.

Steelcase Application Server (SAS) 3.3.2

Release Notes

- Fixed passcode duplication problem while in sharing mode when using many receivers.
- Security patches and updates.

Known Defects

• SAS 3.3.2 Virtual PUCK passcode flickering while in sharing mode when using many receivers.

Virtual PUCK Software Client 3.2.0

Release Notes

- Virtual PUCK Client now supports audio on Windows devices (requires Virtual PUCK receiver firmware v3.2.0 or higher for audio to work).
- Virtual PUCK Client has been minimized to take less screen real estate.
- Virtual PUCK Client can now snap to the edge of your monitor instead of floating within the screen.

Known Defects

• Surface Pro 4 with Windows will occasionally not default to the correct sound drivers automatically. You will need to manually select the correct audio device as the default after install and restart.

Digital Switcher Firmware 2.0.8

Release Notes

• Fixes flashing/blinking HDMI video related to unstable video signal.

Known Defects

None.

Virtual PUCK Firmware 3.2.5

Release Notes

- This update provides additional fixes for meltdown and Spectre.
- Updated Virtual PUCK receiver OS with Ubuntu's official Spectre fix.
- Software update v3.2.5 allows Intel NUC Version: NUC7i3DNKE to support software upgrade from BIOS 0040 to BIOS 0047 or 0059.
- Software update v3.0.1 must be applied first if Receiver's version number is prior to v3.0.1 before updating to v3.2.5.
- Software update v3.2.5 must be applied before updating the BIOS 0040 to 0047/0059 for Intel NUC version NUC7i3DNKE.

Known Defects

- If the BIOS update is done before the software update, the Virtual PUCK receiver becomes unreachable in the network; the BIOS will need to be reverted to the previous version 0040 to recover the device.
- When booting up the NUC7i3DNKE receiver, the user may see the error message "A TPM error (-1) occurred continue selftest." The error message will disappear and does not impact Virtual PUCK.
- Update process fails if the browser is refreshed or closed during the "uploading" phase.
- Firmware uploads using Windows 7 and Internet Explorer will fail with media:scape Manager if the browser security settings are set to disable "include local directory path when uploading."

media:scape Connection and Configuration

04 CONNECTION

- 04 Digital Switcher
- 07 Physical PUCKs
- 09 Digital Scaler
- 10 Wake-up Button
- 11 Virtual PUCK Receiver
- 13 Virtual PUCK Wake-up Button USB Adapter

14 CONFIGURATION

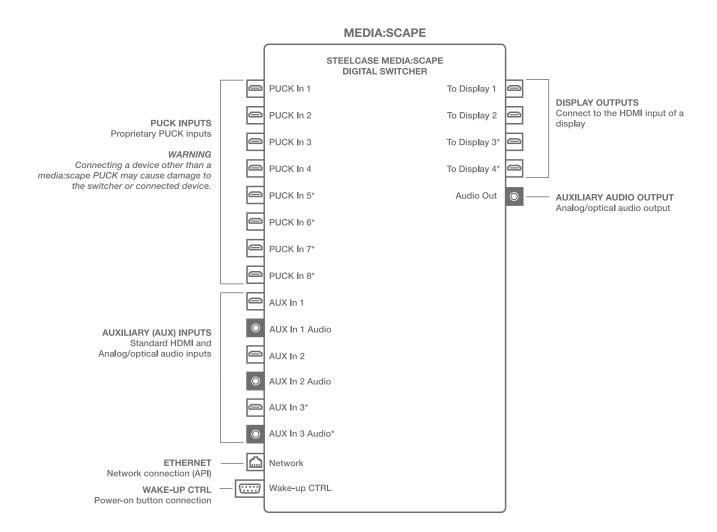
- 14 Digital Switcher
- 17 Digital Scaler
- 19 Virtual PUCK
- 21 Displays

22 RECOMMENDED SETTINGS

- 22 Physical PUCKs: Single Display
- 23 Physical PUCKs: Dual Display
- 24 Virtual PUCK: Single Display
- 24 Virtual PUCK: Dual Display
- 25 Physical PUCK & Virtual PUCK: Single Display
- 26 Physical PUCK & Virtual PUCK: Dual Display
- 27 Physical PUCKs & Video Conferencing: Dual Display
- 28 Physical PUCKs, Virtual PUCK & Video Conferencing: Dual Display

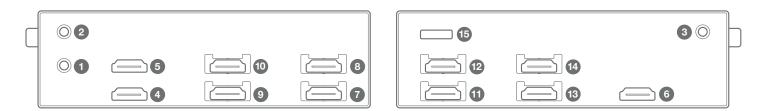
Digital Switcher

Wiring Diagram Reference

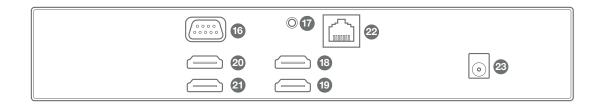


*Only available on the 8x4 digital switcher.

Hardware Reference



NUMBER	NAME	DESCRIPTION
1	AUX In 1 Audio	Analog/SPDIF 3.5mm Audio Input (not supported)
2	AUX In 2 Audio	Analog/SPDIF 3.5mm Audio Input (not supported)
3	AUX In 3 Audio*	Analog/SPDIF 3.5mm Audio Input (not supported)
4	AUX In 1	HDMI Auxiliary Input
5	AUX In 2	HDMI Auxiliary Input
6	AUX In 3*	HDMI Auxiliary Input
7	PUCK In 1	Proprietary media:scape PUCK Input (required for configuration)
8	PUCK In 2	Proprietary media:scape PUCK Input
9	PUCK In 3	Proprietary media:scape PUCK Input
10	PUCK In 4	Proprietary media:scape PUCK Input
11	PUCK In 5*	Proprietary media:scape PUCK Input
12	PUCK In 6*	Proprietary media:scape PUCK Input
13	PUCK In 7*	Proprietary media:scape PUCK Input
14	PUCK In 8*	Proprietary media:scape PUCK Input
15	USB Drive	Walk-up Experience Memory (custom videos not supported)



NUMBER	NAME	DESCRIPTION	
16	Wake-up CTRL	Wake-up Button Connection	
17	Audio Out	Analog/SPDIF Audio Output (not supported)	
18	HDMI Output 1	Output to Display 1	
19	HDMI Output 2	Output to Display 2	
20	HDMI Output 3*	Output to Display 3	
21	HDMI Output 4*	Output to Display 4	
22	Ethernet RJ45	Network (LAN) Connection	
23	DC Power	Only use the power supply included with the switcher	

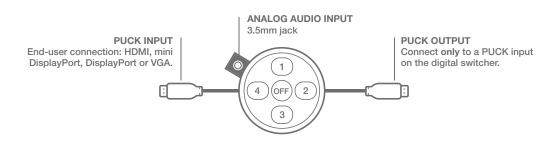
What's Included?

- 1 media:scape digital switcher
- 2 Cable ties
- **3** DC power supply
- 4 AC power cord (NEMA 5-15 pictured)



Physical PUCKs

Wiring Diagram Reference



Hardware Reference

- 1 HDMI
- 2 Mini DisplayPort
- 3 DisplayPort
- 4 VGA



What's Included?

- 1 Laptop dongle (HDMI, mDP, DP or VGA)
- 2 PUCK body
- 3 PUCK output



PUCK Extension Cables

WARNING

Do not use standard HDMI adapters or cables to extend media:scape PUCKs. This could result in damage to the switcher and/or PUCKs.

50 in. (1.3m) PUCK Extension Cable

Cable can be used in media:scape tables with more than one media well (e.g., media:scape offset).

25 ft. (7.6m) PUCK Extension Cable

Cable can be used together with a 50 in. PUCK extension cable in media:scape settings with multiple media wells in separate tables (e.g., media:scape TeamStudio).

Digital Scaler

Wiring Diagram Reference

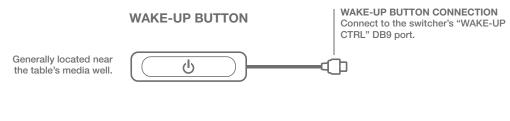


Hardware Reference



Wake-up Button

Wiring Diagram Reference



Hardware Reference

- 1 DB9 (not standard RS-232)
- 2 Wake-up button with LEDs



Wake-up Button Y-Cable

To support two wake-up buttons, install the wake-up button Y-cable between the switcher and the wake-up buttons.

Wake-up Button 25 ft. (7.6m) Extension Cable

This cable is the equivalent of a standard straight-through (pin to pin) DB9 male-to-female cable.

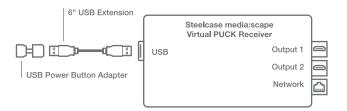
WARNING

Do not use a null modem or custom serial cable with the 25 ft. extension cable. This could damage the switcher and/or wake-up button.

Virtual PUCK Receiver

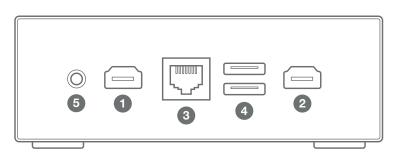
Wiring Diagram Reference

MEDIA:SCAPE VIRTUAL PUCK



Hardware Reference

NUMBER	NAME	DESCRIPTION
1	Output 1	HDMI Output (primary)
2	Output 2	HDMI Output (secondary)
3	Network	10/100/1000 Mbps Ethernet
4	USB 3.0	Used for wake-up button USB adapter (optional)
5	DC Power	Use the supplied DC power adapter only



What's Included?

- 1 Virtual PUCK receiver
- 2 Power cable
- 3 DC power adapter
- 4 Mounting hardware
- 5 Two 3' (1m) HDMI cables



Virtual PUCK Wake-up Button USB Adapter

The wake-up button USB adapter allows Virtual PUCK to operate, on its own, with the same media:scape wake-up button as used with digital switchers.

This adapter is proprietary and works only with compatible media:scape wake-up buttons.

What's Included?

- 1 Wake-up button USB adapter
- 2 6" USB extension cable



Configuration

Digital Switcher

Status and configuration menus can be accessed via the digital switcher's on-screen display.

IMPORTANT

A PUCK must be connected to digital switcher PUCK input 1 to access switcher configuration.



MEDIA:SCAPE POWER-ON BUTTON

MEDIA:SCAPE PUCK

Accessing the Status Menu (view-only, no configuration possible)

- 1. Press and hold the power-on button for approximately 5 seconds.
- 2. The PUCK connected to switcher PUCK input 1 will illuminate white.Use the "2" and "4" PUCK icons to navigate right and left.

Accessing the Configuration Menu

- 1. While viewing the Status Menu, enter the code "1-3-4-2" on the illuminated PUCK.
- 2. The PUCK connected to switcher PUCK input 1 will change from white to green.
 - Use the "1" and "3" PUCK icons to navigate up/down.
 - Use the "2" and "4" PUCK icons to modify the currently selected setting.

Exiting the Status or Configuration Menu

1. Press the power button to commit the settings and return media:scape to its normal operation.

or

2. The system will automatically return to normal operation after 3 minutes of inactivity.

The digital switcher can also be configured from media:scape Manager (see the media:scape Manager section for more information).

Switcher Configuration Menu



SWITCHER CONFIGURATION SCREEN

NUMBER	SETTING	VALUES	DESCRIPTION
1	NUM OF OUT	1, 2, 3, 4	NUM OF OUT = Number of Outputs Sets the number of outputs that will be used for sharing content with PUCKs.
2	SYS STND BY	0–180 (in 2-minute steps)	SYS STND BY = System Standby Timer Sets the number of minutes before the system goes into standby mode (only if all PUCKs and AUX inputs are inactive).
3	AUX STND BY	00.0–12.0 (in 0.5-hour steps)	AUX STND BY = Auxiliary Standby Timer Sets the number of hours before the system goes into standby mode (only if all PUCKs are inactive).
4	WALK UP	1–8	WALK UP = Walk-up Experience Selection Sets the walk-up experience type (1=default, 2=default + video conferencing, 3=default + Virtual PUCK, 7=default + video conferencing + Virtual PUCK).
5	AUX FORC CTL	Y/N	AUX FORC CTL = Auxiliary Forces Control Mode Y = Disables/locks the PUCKs while any AUX input is active. N = Normal operation.
6	WALK-UP EN	1, 12, 13, 14, 123, 124, 134, 1234	WALK-UP EN = Walk-up Experience Enable Displays in this list will play the walk-up experience video. Displays not in this list will result in no video sync (used for video conferencing).
7	DATA SHARE	x, 2, 3, 23, 4, 24, 34, 234	DATA SHARE = Data Share Selection Select output(s) to use as data-sharing outputs – last PUCK pressed is routed to data share. (Data share cannot be enabled for outputs that are used by NUM OF OUT. For example, if NUM OF OUT = 2, outputs 1 and 2 cannot be used for DATA SHARE.)
8	COOLDWN	NONE, 15s–15m (in 15-second steps)	COOLDWN = Cool-down Timer Locks usage of the switcher when entering standby for the amount of time specified. Commonly used for projectors that require time to cool down.
9	OUT1 AUX OVR	X, 1, 2, 3, A	OUT1 AUX OVR = Output 1 Auxiliary Override Auto-switches the AUX input to output 1 when the AUX input becomes active. (The setting "A" uses priority routing where 3 has priority over 2, and 2 has priority over 1.)
10	OUT2 AUX OVR	X, 1, 2, 3, A	OUT2 AUX OVR = Output 2 Auxiliary Override Auto-switches the AUX input to output 2 when the AUX input becomes active. (The setting "A" uses priority routing where 3 has priority over 2, and 2 has priority over 1.)
11	OUT3 AUX OVR	X, 1, 2, 3, A	OUT3 AUX OVR = Output 3 Auxiliary Override Auto-switches the AUX input to output 3 when the AUX input becomes active. (The setting "A" uses priority routing where 3 has priority over 2, and 2 has priority over 1.)
12	OUT4 AUX OVR	X, 1, 2, 3, A	OUT4 AUX OVR = Output 4 Auxiliary Override Auto-switches the AUX input to output 4 when the AUX input becomes active. (The setting "A" uses priority routing where 3 has priority over 2, and 2 has priority over 1.)
13	WAKEUP AUX	X, 1, 2, 3, 123	WAKEUP AUX = Wake-up on Auxiliary Input Wakes the switcher when HDMI sync is sensed on an AUX input included in the list.
14	CEC POWER TEST	n/a	CEC POWER TEST = Display CEC Power Test Use the 2 and 4 icons to test CEC power control.
15	MODE 1	Collab, Control	MODE 1 = Switcher Mode "Collab" is used for normal operation. "Control" disables PUCK usage and allows control only via the network API.
16	BLK SCR EN	 	BLK SCR EN = Black Screen Enable If an output is not included in the WALK-UP EN setting list and is included in the BLK SCR EN, the list of outputs selected will output a black screen instead of no video sync.

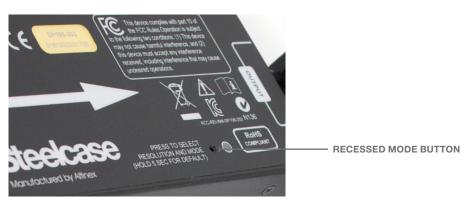
17	IN HDCP	AUTO, ON, OFF	IN HDCP = HDCP Mode Enables/disables HDCP support. AUTO will read the HDCP compatibility for each output and turn HDCP off if there is any output that does not support HDCP.
18	PLAY MODE	1, 2, 10s-90s	PLAY MODE = Walk-up Experience Play Mode Specifies the length of the walk-up experience video.
19	INTRO	VIDEO, STILL, USB	INTRO = Introduction (Walk-up Experience) Specifies the type of walk-up experience video. VIDEO plays the video and then switches to a still image.

STILL only shows the still image. USB plays the video and then loops a video that appears as a still image.

Configuration

Digital Scaler

Status and configuration menus can be accessed via the digital scaler's on-screen display.



MEDIA:SCAPE DIGITAL SCALER

Status and Configuration Menu

- 1. Use a paper clip or pin to press and release the recessed button to view the menu.
- 2. Press the mode button to move to the selected field.
- 3. Once the desired field is selected, wait a few moments for it to be automatically input.

Factory Reset

Press and hold the recessed button for 5 seconds to reset the scaler's configuration.

Output Resolution

SETTING	DESCRIPTION
Native(DFLT)	Determines the connected display's preferred resolution and outputs that resolution (if compatible).
720p 50/60	Sets the output resolution to 720p50/60 (16:9).
1080i 50/60	Sets the output resolution to 1080i50/60 (16:9).
1080p 50/60	Sets the output resolution to 1080p50/60 (16:9).
1024x768	Sets the output resolution to XGA (4:3).
1280x800	Sets the output resolution to WXGA (16:10).
1366x768	Sets the output resolution to WXGA (16:9).
1600x900	Sets the output resolution to HD+ (16:9).
1680x1050	Sets the output resolution to WSXGA+ (16:10).
1920x1200	Sets the output resolution to WUXGA (16:10).

Output Sync

SETTING	DESCRIPTION
CONT(DFLT)	Continuously outputs HDMI video.
INTR(VC)	Outputs HDMI video only if HDMI video is present on the input.

HDCP In

SETTING	DESCRIPTION
AUTO	Determines if the output is HDCP compatible.
ON	Forces HDCP to ON.
OFF	Forces HDCP to OFF.

HDCP Out

SETTING	DESCRIPTION
Follow source	Scaler output is encrypted with HDCP only if the source requires it.
Protected	Scaler output is always encrypted with HDCP.

Miscellaneous

SETTING	DESCRIPTION
Info	Shows information about the scaler and its connected devices.
Exit	Exits the on-screen display.

Configuration

Virtual PUCK

Virtual PUCK is configured using media:scape Manager v3.0.0 (or above). Some advanced settings are available via a web interface running on the Virtual PUCK receiver.

Basic Configuration

See media:scape Manager 3.3.2 section for adding and configuring Virtual PUCK.

Advanced Settings

The default credentials to log in to the Virtual PUCK Manager are:

Username: **admin** Password: **adminvpuck**

SECURITY RISK!

Change the administrator password for the Virtual PUCK using Virtual PUCK Manager to restrict access to this web page.

To access the advanced settings on the Virtual PUCK, open a web browser and type the IP address into the browser's search bar (you may have to add http:// to the beginning of the IP address).

			- Office	al Number: 123455789
Configuration I	Logs media:scape Manaj	ger		
Unconfigured Server Status	Disconnected Switcher	Disconnected Registry (App Server)	0 Connected Users	0 Sharing Users
Room Name				
located. This name will ap	ation where the media:scape is pear in the drop-down list of	Name	Untitled	
choices if a user needs to	display the code on a screen.			
choices if a user needs to Advanced Set				
Advanced Set Software Update Upload a Virtual PUCK ser After the package has bee	tings Max V	Software Update	Choose File No file cho	200

Tip: To obtain the IP address, power cycle the Virtual PUCK receiver and watch for the IP address in the lower-left corner of the display.

SETTING	DESCRIPTION	
Software Update	Use this section to update the Virtual PUCK's firmware using a .puck file available at techsupport.steelcase.com.	
Change Admin Password	Change the admin password required to log in to this web page.	
Steelcase Application Server Address	Use this field to specify a custom IP address or DNS name that points to the Steelcase Application Server and media:scape Manager.	
	If a custom IP address or DNS name is used, users will also have to modify settings in their Virtual PUCK client software to use Virtual PUCKs.	
	The default partially qualified domain name is scs-virtualpuck-registry. See the Steelcase Application Server (SAS) 3.3.2 section for more information.	

Virtual PUCK Port Usage

To support Virtual PUCK across firewalled subnets, a network administrator may be required to add rules to the firewalls to allow communication over these ports.

All three Virtual PUCK components must be able to communicate over a local area network.

Virtual PUCK Components

- Virtual PUCK client software (user laptops)
- Virtual PUCK receivers
- Steelcase Application Server

The Virtual PUCK client software does not bind any Virtual PUCK receiver ports.

PORTS	PROTOCOL	USAGE
80	TCP	web configuration
5000-5005	TCP	API
50000-59999	TCP & UDP	content streaming (client software to Virtual PUCK receiver)

Configuration

Displays

media:scape can work with many different brands and sizes of displays. For a display to seamlessly integrate with media:scape, some conditions must be met.

Display Requirements

Must have at least one HDMI input

Both media:scape digital switchers and Virtual PUCK output audio, video and control signals via HDMI.

Must support both power-on and power-off CEC commands (digital switchers only)

media:scape digital switchers send a power-on command when the system wakes up and a power-off command when the system goes to sleep, using CEC (Consumer Electronics Control).

You may have to consult the display's user manual and, in some cases, contact the display manufacturer's technical support staff to determine (a) whether the display supports this functionality and (b) how to enable this functionality.

Must support wake and sleep based on the presence of HDMI video sync (Virtual PUCK only)

Virtual PUCK does not use CEC to turn displays on and off. Instead, it turns its HDMI output on and off and relies on display functionality to sleep and wake with the presence of its HDMI signal.

You may have to consult the display's user manual and, in some cases, contact the display manufacturer's technical support staff to determine (a) whether the display supports this functionality and (b) how to enable this functionality.

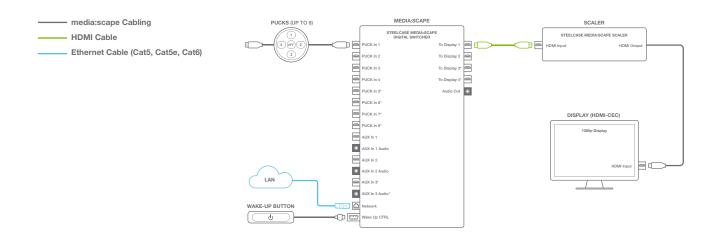
Should be a commercial-grade display

media:scape will work with noncommercial-grade displays; however, most noncommercial-grade displays do not support long periods of continuous usage.

Double-check the warranty restrictions before purchasing a display to ensure the warranty will not be voided if the display is installed in a commercial environment.

Physical PUCKs

Single Display



Switcher Configuration

SETTING	VALUE	
NUM OF OUT	1*	
SYS STND BY	6	
AUX STND BY	00.0	
WALK UP	1*	
AUX FORC CTL	Ν	
WALK-UP EN	1234	
DATA SHARE	Х	
COOLDWN	NONE	
OUT1 AUX OVR	Х	
OUT2 AUX OVR	Х	
OUT3 AUX OVR	Х	
OUT4 AUX OVR	Х	
WAKEUP AUX	123	
MODE 1	Collab	
BLK SCR EN	<blank></blank>	
IN HDCP	AUTO	
PLAY MODE	1	
INTRO	VIDEO	

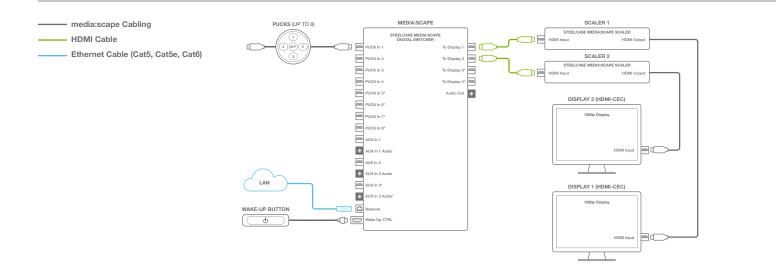
Scaler Configuration

SETTING	VALUE	
CONT(DFLT)	Х	
INTR(VC)		
HDCP		
AUTO	Х	
ON		
OFF		

*Required setting.

Physical PUCKs

Dual Display



Switcher Configuration

VALUE	
2*	
6	
00.0	
1*	
Ν	
1234	
Х	
NONE	
Х	
Х	
Х	
Х	
Х	
Collab	
<blank></blank>	
AUTO	
1	
VIDEO	
	2* 6 00.0 1* N 1234 X NONE X X X X X X X X X Collab <blank> AUTO 1</blank>

Scaler 1 Configuration

SETTING	VALUE	
CONT(DFLT)	Х	
INTR(VC)		
HDCP		
AUTO	Х	
ON		
OFF		

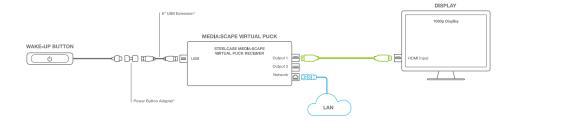
Scaler 2 Configuration

SETTING	VALUE	
CONT(DFLT)	Х	
INTR(VC)		
HDCP		
AUTO	Х	
ON		
OFF		

*Required setting.

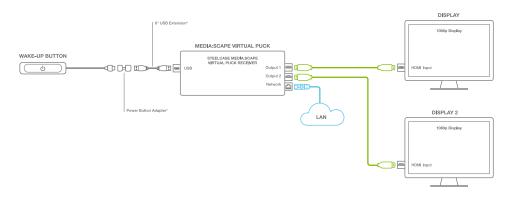
Virtual PUCK







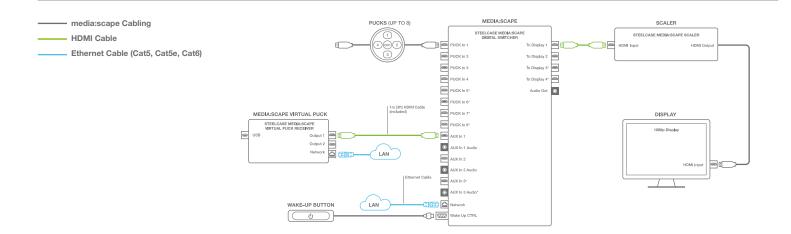
Dual Display



Use media:scape Manager v3.0.0 (or above) to configure the Virtual PUCK receiver.

Physical PUCK & Virtual PUCK

Single Display



Use media:scape Manager v3.0.0 (or above) to configure and pair the Virtual PUCK with the digital switcher.

Switcher Configuration

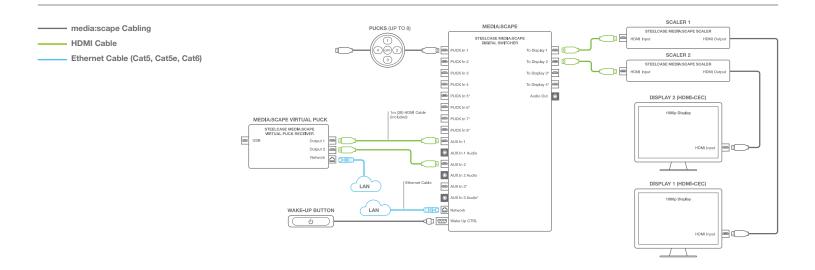
VALUE
1*
6
00.0
3*
Ν
1234
Х
NONE
1*
Х
Х
Х
123
Collab
<blank></blank>
AUTO
1
VIDEO

Scaler Configuration

SETTING	VALUE	
CONT(DFLT)	Х	
INTR(VC)		
HDCP		
AUTO	Х	
ON		
OFF		

Physical PUCK & Virtual PUCK

Dual Display



Use media:scape Manager v3.0.0 (or above) to configure and pair the Virtual PUCK with the digital switcher.

Switcher Configuration

SETTING	VALUE	
NUM OF OUT	2*	
SYS STND BY	6	
AUX STND BY	00.0	
WALK UP	3*	
AUX FORC CTL	Ν	
WALK-UP EN	1234	
DATA SHARE	Х	
COOLDWN	NONE	
OUT1 AUX OVR	1*	
OUT2 AUX OVR	2*	
OUT3 AUX OVR	Х	
OUT4 AUX OVR	Х	
WAKEUP AUX	123	
MODE 1	Collab	
BLK SCR EN	 k>	
IN HDCP	AUTO	
PLAY MODE	1	
INTRO	VIDEO	

Scaler 1 Configuration

SETTING	VALUE	
CONT(DFLT)	Х	
INTR(VC)		
HDCP		
AUTO	Х	
ON		
OFF		

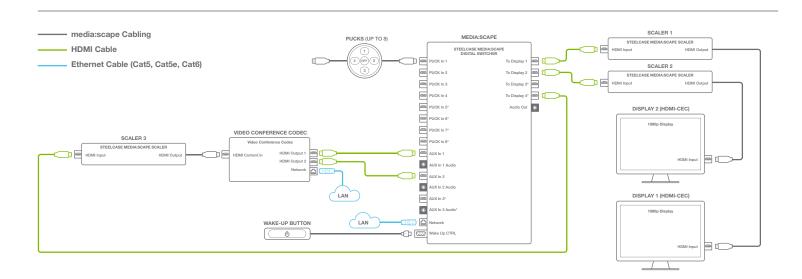
Scaler 2 Configuration

SETTING	VALUE	
CONT(DFLT)	Х	
INTR(VC)		
HDCP		
AUTO	Х	
ON		
OFF		

*Required setting.

Physical PUCKs & Video Conferencing

Dual Display (single display is not recommended)



Switcher Configuration

SETTING	VALUE
NUM OF OUT	2*
SYS STND BY	6
AUX STND BY	00.0
WALK UP	2*
AUX FORC CTL	Ν
WALK-UP EN	123*
DATA SHARE	4*
COOLDWN	NONE
OUT1 AUX OVR	1*
OUT2 AUX OVR	2*
OUT3 AUX OVR	Х
OUT4 AUX OVR	Х
WAKEUP AUX	123*
MODE 1	Collab
BLK SCR EN	<blank></blank>
IN HDCP	OFF*
PLAY MODE	1
INTRO	VIDEO

Scaler 1 Configuration

SETTING	VALUE	
CONT(DFLT)	Х	
INTR(VC)		
HDCP		
AUTO	Х	
ON		
OFF		

Scaler 2 Configuration

VALUE	
Х	
Х	
	X

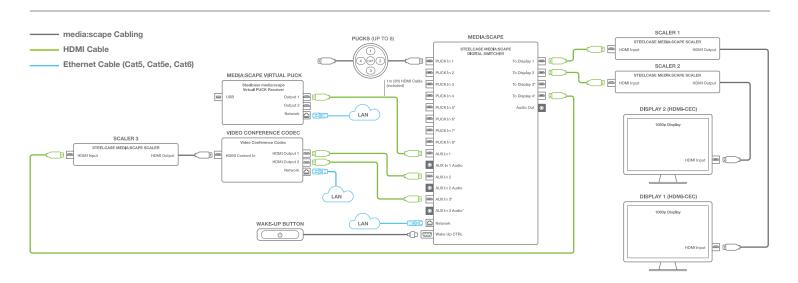
Scaler 3 Configuration

SETTING	VALUE	
CONT(DFLT)		
INTR(VC)	X*	
HDCP		
AUTO	Х	
ON		
OFF		

*Required setting.

Physical PUCKs, Virtual PUCK & Video Conferencing

Dual Display (single display is not supported)



Use media:scape Manager v3.0.0 (or above) to configure and pair the Virtual PUCK with the digital switcher and enable Virtual PUCK's HDVC Compatibility option.

Switcher Configuration

2*
2
6
00.0
7*
Ν
123*
4*
NONE
2*
3*
Х
Х
123
Collab
<blank></blank>
OFF
1
VIDEO

Scaler 1 Configuration

SETTING	VALUE
CONT(DFLT)	Х
INTR(VC)	
HDCP	
AUTO	Х
ON	
OFF	

Scaler 2 Configuration

SETTING	VALUE	
CONT(DFLT)	Х	
INTR(VC)		
HDCP		
AUTO	Х	
ON		
OFF		

Scaler 3 Configuration

SETTING	VALUE	
CONT(DFLT)		
INTR(VC)	Х*	
HDCP		
AUTO	Х	
ON		
OFF		

Steelcase Application Server (SAS) 3.3.2

30 INTRODUCTION

- 30 Features
- 30 Downloads and Documentation
- 30 Installation Overview

31 SYSTEM REQUIREMENTS

- 31 Minimum Requirements
- 31 Technical Specifications

32 SYSTEM CONTEXT DIAGRAM

33 CONFIGURING DNS FOR VIRTUAL PUCK

- 33 Why Virtual PUCK Uses a PQDN
- 33 Specifying a Different Domain Name or IP Address

34 IMPORTING THE SAS INTO A HYPERVISOR

- 34 VMware vSphere
- 34 Microsoft Hyper-V
- 35 Citrix XenServer

36 CONFIGURING A NEW INSTALLATION

- 36 Restarting the Configuration
- 37 SSL Certificate Installation

38 UPDATING FROM AN EXISTING INSTALLATION

- 38 Create an Archive of the Existing SAS
- 38 Get Network Configuration of the Existing SAS
- 38 Shut Down the Existing SAS
- 38 Copy the Archive to the New SAS
- 38 Restore the Archive to the New SAS
- 39 Configure Network Settings

40 MANAGEMENT AND MONITORING

- 40 Command Line Interface (CLI)
- 40 Verifying the SAS Version
- 40 Viewing the SAS Configuration
- 40 Backups
- 41 SNMP
- 41 Built-in Monitoring
- 41 Enterprise Monitoring (Third Party)
- 41 Technical Support Requests

Introduction

The Steelcase Application Server (SAS) is a prepackaged virtual appliance available for download and is compatible with multiple hypervisors. It is required for media:scape Virtual PUCK and can also be used to manage and configure media:scape digital switcher.

Features

- Enables configuration and management of media:scape digital systems (physical PUCKs).
- Enables configuration and management of Virtual PUCKs.
- Manages and distributes unique four-digit codes to all connected Virtual PUCKs.
- · Eases installation and utilization of Virtual PUCKs.

Downloads and Documentation

The SAS can be downloaded from techsupport.steelcase.com.

Americas

To use media:scape Manager with media:scape digital switchers, you must have an active Maintenance Agreement. If you are unsure or do not have an active media:scape Maintenance Agreement, contact MAs@steelcase.com.

Europe, Middle East, Africa and Asia

To use media:scape Manager with media:scape digital switchers, a media:scape Manager license key may be obtained by purchasing it from an authorized Steelcase dealer.

media:scape Manager is available to all users of all regions for Virtual PUCK stand-alone (not integrated with a digital switcher).

All other downloads and documentation can be found at techsupport.steelcase.com.

Installation Overview

- 1. Import the SAS image file into a compatible hypervisor.
- 2. Configure a new or update an existing installation.
 - a. Configure a new installation
 - i. Change the root password
 - ii. Change the admin password (Note: SSH access is enabled only for the admin user)
 - iii. Assign a static IP address
 - iv. Choose the time zone
 - v. Install SSL certificates
 - b. Update an existing installation
 - i. Assign a static IP address
 - ii. Migrate database and configuration
- 3. For Virtual PUCK, add the A record scs-virtualpuck-registry to your DNS server that resolves to the IP address of the SAS (see Configuring DNS for Virtual PUCK).
- 4. Enter the media:scape Manager license key and accept the EULA using the web interface (see media:scape Manager section for more information). Note: This step is necessary only for new installs that include media:scape switchers. Migrated installs will preserve the license key.

System Requirements

Minimum Requirements

STEELCASE APPLICATION SERVER 3.3.2

Compatible Hypervisor	VMware vSphere ESXi 6.x Microsoft Hyper-V 2016 Citrix XenServer 6.x or 7.x
vCPUs	2
RAM	4 GB
Storage	40 GB
Partially Qualified Domain Name	scs-virtualpuck-registry
Static IP Address	1

MEDIA:SCAPE MANAGER 3.3.2

Supported Browsers	Chrome v46 Firefox v41 Internet Explorer 11 Edge v20.1
	Edge V20.1 Safari 9.01

VIRTUAL PUCK

Firmware	v3.0.0 or higher
Ethernet Connection	1

DIGITAL SWITCHER

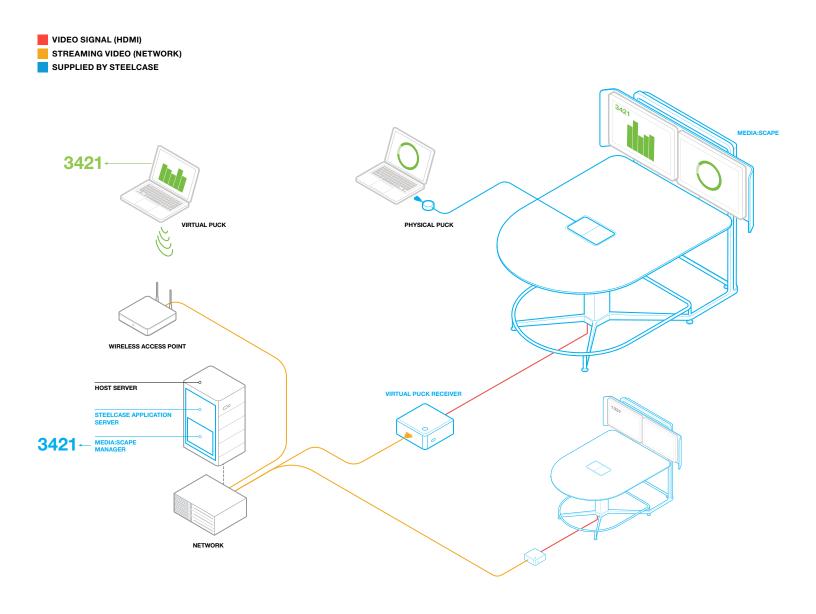
Firmware	v2.0.6 or higher
Ethernet Connection	1
Active Maintenance Agreement	Yes

Technical Specifications

STEELCASE APPLICATION SERVER 3.3.2

Virtual Appliance Format	VMware vSphere ESXi: OVA Microsoft Hyper-V: Archived Folder (ZIP) Citrix XenServer: Compressed OVA (TAR.GZ)
Operating System	CentOS Linux v7 x86-64
Hosted Applications	media:scape Manager 3.3.2
Database	PostgreSQL (local)

System Context Diagram



Configuring DNS for Virtual PUCK

The Virtual PUCK receiver and Virtual PUCK client software require that the SAS be assigned a partially qualified domain name (PQDN) to support automatic device discovery.

The factory default PQDN in the receiver and client software is scs-virtualpuck-registry.

A PQDN may not work until a **DNS search list** is provided to the Virtual PUCK receivers and end-user devices running the Virtual PUCK client software.

Consider using DHCP option 15 or DHCP option 119 to provide a DNS suffix or search list to network devices.

Why Virtual PUCK Uses a PQDN

Because Virtual PUCK can be installed on any network, a PQDN should be resolvable without requiring a network-specific DNS suffix or fully qualified domain name (FQDN).

Specifying a Different Domain Name or IP Address

The Virtual PUCK receiver and Virtual PUCK client software configuration can be modified to support communication with the SAS at any domain name or IP address.

Note: If you have imported an existing SAS installation and set the IP address to the same static IP as the old SAS, this step is not necessary.

Configuring the Virtual PUCK Receiver

1. In a web browser, navigate to the IP address of the Virtual PUCK receiver (see media:scape Manager 3.0 – Prerequisites), and log in using the default username and password:

Username: **admin** Password: **adminvpuck**

- 2. Under Advanced Settings, click Show.
- 3. Under Steelcase Application Server, enter the IP Address of the SAS and click Save.

Configuring the Virtual PUCK Client Application

- 1. Open the Virtual PUCK client application. Note: Virtual PUCK Client 1.3.2 or newer is required.
- 2. Before entering a code, click on the **settings icon**.
- 3. Replace the existing SAS address with the IP address or custom DNS name of the SAS and click Update Settings.

Importing the SAS Into a Hypervisor

If you do not currently have a hypervisor, one will need to be installed and configured.

VMware vSphere, Microsoft Hyper-V and Citrix XenServer all require additional hardware and configuration.

VMware vSphere

From within the vSphere web interface, follow these steps:

- 1. Click Create/Register VM.
- 2. Select Deploy a virtual machine from an OVF or OVA file and click Next.
- 3. Enter a name for the virtual machine.
- 4. Use the Click to select files or drag/drop interface to locate the SAS OVA file and click Next.
- 5. Click Next through the remaining screens (the default settings should be adequate).
- 6. Click Finish to begin importing the file.
- 7. When the import is complete, start the virtual machine.

Microsoft Hyper-V

Note: Before importing into Hyper-V, unzip the contents of the SAS .zip file to a known location.

From within Hyper-V Manager, follow these steps:

- 1. Unzip the SAS folder and upload to a Hyper-V accessible datastore.
- 2. Click Import Virtual Machine... from the Actions menu.
- 3. Within the Locate Folder section, click Browse... to select the folder that was extracted from the SAS .zip file. Click Select Folder, then click Next to continue.
- 4. Within the Select Virtual Machine section, click on the name of the SAS virtual machine to import and click Next.
- 5. Within the **Choose Import Type** section, select **Copy the virtual machine (create a new unique ID)** and click **Next**.
- 6. The **Choose Destination** and **Choose Storage Folders** sections can be left with their default settings unless there is a reason to choose otherwise.
- 7. Within the **Summary** section, ensure that everything looks correct, and click **Finish** to begin importing the virtual machine.
- 8. When the import is complete, start the virtual machine from the Actions menu.

Citrix XenServer

Note: There is a separate OVA that is specifically built for Citrix XenServer and is specified within the OVA filename.

Using Citrix XenCenter software on your computer, follow these steps:

- 1. From the **File** menu, select **Import...**
- 2. Click **Browse...** to select the SAS OVA file and click **Next**.
- 3. Select the target XenServer in the Import VM to dropdown list and click Next.
- 4. Click **Next** through the remaining screens (the default settings should be adequate).
- 5. Click **Finish** to begin importing the file.
- 6. When the import is complete, start the virtual machine.

Configuring a New Installation

- 1. After starting the SAS virtual machine, view its console from within the hypervisor.
- 2. Log in with the default username and password (provided on-screen).
 - a. For SAS 3.1.1 and below, the default login is root. For SAS 3.2.0 and above, the default login is admin.
- 3. At the command line interface (CLI), type sudo /opt/configurator/configure.sh and press Enter.
- 4. The rest of the configuration is guided by the user interface.
 - a. Change and confirm a new root password. Note: It is normal that text will not appear when typing the new password.
 - b. Change and confirm a new admin password. Note: It is normal that text will not appear when typing the new password.
 - c. Configure static IP (default is DHCP). Note: A static IP is recommended for all SAS installations.
 - d. Select the time zone.
 - e. Install SSL certificates (optional).

Restarting the Configuration

WARNING

Reconfiguring a system may cause data loss or file corruption. See *Updating From an Existing Installation* for steps on how to archive your data before continuing.

The -f flag in the command (below) forces reconfiguration.

Type sudo /opt/configurator/configure.sh -f at the CLI.

If restarting the configuration fails, delete the existing SAS VM and start over by importing the SAS OVA/OVF file and continue with configuring a new installation.

SSL Certificate Installation

SSL is recommended to protect usernames, passwords and other information.

The factory default configuration will use a self-signed certificate and force all web traffic to use HTTPS.

For a production SAS installation, it is recommended that you replace the default certificate and key with your own at these locations within the SAS file system (using SCP):

Certificate: /etc/nginx/ssl/server.crt

Key: /etc/nginx/ssl/server.key

These files will be included with all future system backups and migration packages.

After modifying the SSL certificate and key, nginx will be reloaded automatically. If the keys do not take effect within 60 seconds, perform the following tasks:

- 1. Check the error log in /var/log/nginx/error.log.
- 2. Attempt to restart nginx manually with sudo service nginx restart on the CLI.
- 3. Clear your web browser's cache and reload the web page.

Updating From an Existing Installation

Step 1 – Create an Archive of the Existing SAS

For SAS 3.0 or above:

- 1. From the CLI, type sudo /opt/archivist/archivist backup to create an archive in the /bak directory on the SAS.
- 2. Download the archive to your computer using SCP.

For SAS 2.0 or below:

- 1. Obtain the file upgrade-prep-tool-3.0.0.zip from techsupport.steelcase.com.
- 2. Unzip the file to a known location on your computer.
- 3. Upload the upgrade-prep-tool-3.0.0.shar to the /root directory of the SAS using SCP.
- 4. Execute the tool by typing sh upgrade-prep-tool-3.0.0.sh in the CLI.
- 5. The tool will produce a tar.gz archive in the /root directory.
- 6. Download the archive to your computer using SCP.

Step 2 – Get Network Configuration of the Existing SAS

To retrieve the current IP address, type ip addr from the CLI.

To retrieve the entire network configuration, use SCP to download the file /etc/sysconfig/network-scripts/ifcfg-eth0.

Step 3 – Shut Down the Existing SAS

From the CLI, type sudo shutdown -h now to turn off the machine.

Step 4 – Copy the Archive to the New SAS

Using SCP, copy the archive to the /home/admin directory of the newly imported SAS.

Note: For SAS versions 3.1.0 and older, copy the archive to the /root directory.

Step 5 – Restore the Archive to the New SAS

From the CLI, type **sudo** /opt/archivist/archivist restore <filename> where <filename> is the file name of the archive that has been uploaded.

Configuring Network Settings

To configure a static or DHCP network address, type **sudo** /opt/configurator/configure-network.sh from the CLI.

For a static network configuration, you will need the following information:

- IPv4 address
- Netmask
- Gateway
- DNS (primary)
- DNS (secondary)

Note: If you downloaded your entire network configuration in Step 2 above, it is advised that you use those same network settings.

Management and Monitoring

Command Line Interface (CLI)

The following common Linux tools are available for management and diagnostic purposes.

COMMAND	DESCRIPTION			
vim	Text editor.			
nano	Text file editor.			
ssh	Secure shell protocol client used to connect to remote computers.			
scp	Secure file transfer client used to copy files to/from remote computers.			
nc	Utility that reads/writes data across network connections using the TCP or UDP protocol (also known as netcat).			
rsync	Utility that keeps copies of a file on two computer systems.			
screen	Full-screen software program that can be used to multiplex a physical console between several processes (typically interactive shells).			
mlocate	Merging locate and database package.			
strace	Runs the specified command until it exits and records the system calls.			
lsof	Lists open files and reports the processes that are using them.			
sudo	When used as a prefix to a command, it allows a user to run that command as root.			
ip addr	View the current network configuration.			

Verifying the SAS Version

Run sudo /opt/versionator/versionator from the CLI to view the SAS and SAS tooling version numbers.

Viewing the SAS Configuration

Run sudo /opt/investigator/investigator | more from the CLI to view details about the SAS and its configuration.

Backups

Steelcase Application Server data is backed up nightly to the /bak directory. Backups are maintained for 30 days.

Site-specific customizations (e.g., guest additions) are not backed up by the SAS and should be dealt with accordingly.

It is recommended that the automatic backup tar.gz files be downloaded and stored in a secure location at regular intervals. The following data is included in each backup image:

- Application data
- Database dump
- Product license keys
- SSL certificates
- Root user's encrypted password
- · Admin user's encrypted password
- · Application log files (for diagnostic purposes only)

Manual Backup

From the CLI, type sudo /opt/archivist/archivist backup

This will create a backup file in the /bak directory that can be downloaded using SCP or SFTP.

Restoring a Backup

If updating from a previous installation of SAS, do not use this process to restore your data. Follow the instructions for updating SAS.

From the CLI, type sudo /opt/archivist/archivist restore <filename> where <filename> is the name of the backup file to be restored.

SNMP

An SNMP daemon is already running on the SAS. Use the SNMP monitoring tool of your choice to monitor the server's health and status.

Built-in Monitoring

Basic monitoring is already running on the SAS using the software tool Monit.

To view the status of the SAS, type sudo monit status from the CLI.

Monit is already configured to have basic reactive capabilities. For example, if critical services stop responding, Monit will attempt to restart them.

Because of this configuration, we do not recommend configuring other monitoring or watchdog utilities to start or stop these services.

Enterprise Monitoring (Third Party)

Third-party monitoring agents can be installed on the SAS as long as they do not interfere with the existing reactive and responsive monitoring provided by the included monitoring software, Monit.

Any related installation and configuration for third-party monitoring agents will not be backed up as part of the SAS backup process.

Technical Support Requests

The SAS includes a software tool to collect diagnostic information. It creates an archive including logs and system information that could be helpful with a technical support request.

To use this tool, from the CLI type sudo /opt/investigator/assemble-support-request and retrieve the file from the SAS using SCP or SFTP.

media:scape Manager 3.3.2

DEVICE VIEW FOR MEDIA:SCAPE 43 **OVERVIEW** 49 **DIGITAL SWITCHER** 43 **Prerequisites Rebooting a Device** 49 49 **Removing a Device** 49 Switcher Tab 45 **GETTING STARTED** 50 Basic Settings 45 First Use Advanced Settings 51 **Default Login** 46 53 **History Tab** 46 Account Menu 54 **DEVICE VIEW FOR MEDIA:SCAPE** 47 **DASHBOARD VIEW VIRTUAL PUCK** 47 Adding a Device 54 **Rebooting a Device** 48 **Status Tab** 54 **Removing a Device History Tab** 48 **Receiver Tab** 55 55 Basic Settings 55 Advanced Settings

History Tab

56

Overview

media:scape Manager is a module contained within the Steelcase Application Server (SAS) that provides remote management and configuration of media:scape systems, including Virtual PUCK.

Prerequisites

media:scape Virtual PUCK

- Connect the Virtual PUCK to your network.
- · Connect one or two displays using the included HDMI cables.
- Verify the Virtual PUCK's firmware is v3.0.0 or later.
- Record the IP address and space name of the Virtual PUCK receiver.

media:scape Digital Switcher

- Connect and configure the switcher according to the assembly instructions.
- · Connect the switcher to your network.
- Record the IP address of the switcher.
- Verify the switcher's firmware is v2.0.8 or later.

media:scape Digital Switcher with Virtual PUCK

- Connect and configure the switcher and Virtual PUCK according to the assembly instructions.
- Connect the switcher and the Virtual PUCK to your network.

Getting the media:scape Digital Switcher's IP Address

- Press and hold for five seconds the media:scape power button, located on the bezel of the media well for media:scape tables.
- The IP address will be displayed in the center of display 1, as shown below.
- Press the power button to return the digital switcher to normal operation.



Note: 192.168.10.81 is the default IP address of the switcher if it does not acquire a DHCP address. All new media:scape switchers are shipped with DHCP enabled. For instructions on setting a static IP address, add the switcher to media:scape Manager using the DHCP address, and then go to the **Network** section of **Advanced Settings**.

Updating media:scape Digital Switcher Firmware

For resources relating to media:scape switcher firmware, visit techsupport.steelcase.com and use the **Product** dropdown menu to search for downloads for **media:scape (Digital)**. Download **media:scape software upgrade** and extract the contents of the .zip file to view instructions on updating firmware.

Note: If the media:scape switcher being updated has firmware v1.1.22 or prior, connect a laptop directly to the media:scape switcher's LAN port using an Ethernet cable. Disable all network adapters except for the one connected to the media:scape digital switcher.

Getting the Virtual PUCK's IP Address

If your network has been configured to resolve the SAS's IP address using the partially qualified domain name of **scs-virtualpuck-registry**, you can get the IP address of the Virtual PUCK receiver from within media:scape Manager.

If not, the IP address of the Virtual PUCK is shown briefly in the lower-left corner of the display(s) for a few seconds before the walk-up experience animation is shown.

Updating Virtual PUCK Firmware

Visit techsupport.steelcase.com to download the latest Virtual PUCK firmware.

First, try to add the Virtual PUCK to media:scape Manager.

If the Virtual PUCK's firmware is compatible, the firmware can be updated from within media:scape Manager.

If the firmware is not compatible, an error message will appear and the Virtual PUCK receiver will not be added to the Dashboard device list.

To update a Virtual PUCK with firmware v2.0.3 or below, download the firmware from the URL above and follow these steps:

- 1. Unzip the Virtual PUCK firmware file to your computer's desktop.
- 2. Navigate to the IP address of the Virtual PUCK.
- 3. Log in to the web page.

Default username: admin

Default password: adminvpuck

- 4. By Advanced Settings, click Show >.
- 5. Under Software Update, click Choose File and select the Virtual PUCK firmware file (.puck).
- 6. Click **Update** to begin the firmware update.

Getting Started

First Use

To launch media:scape Manager, open a web browser and navigate to the URL of the SAS.

media:scape Manager		
	Enter license key	
	Need help? Contact Steelcase Technical Support. I don't have a key. Scient	

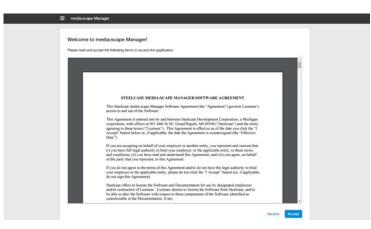
The first time media:scape Manager is launched, you must enter a license key.

The license key is included in the Maintenance Agreement with the purchase of every new media:scape digital switcher or Virtual PUCK.

Note: If your media:scape application includes only Virtual PUCK, you will not need to enter a license key.

If you believe you should have an active Maintenance Agreement but do not have a license key, contact MAs@steelcase.com to request one.

Once the license key has been entered, review the software license agreement and click **Accept** to accept.



Default Login

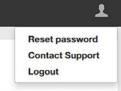
When prompted, enter the default username **admin** and password **admin** on the login screen.

Note: It is highly recommended that you reset the password immediately after the initial login. See Account Menu section below.

Account Menu

Launch the account menu by clicking on the person icon at the top-right corner of the screen.

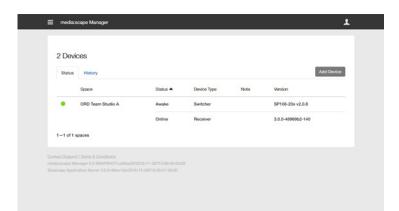
- Reset Password: Enter and confirm a new password for your account.
- Contact Support: Launches techsupport.steelcase.com in a new browser tab.
- Logout: Ends the current session.



Dashboard View

Once logged in to media:scape Manager, the Dashboard is the main screen.

From the Dashboard you can add devices, and see the status and review history of all devices.



Adding a Device

- Select Add Device to launch the "Add New Device" window.
- Select the device type to add: Switcher or Virtual PUCK.
- Adding a Switcher:
 - Enter the current IP address of the switcher.
 - Select Add New Space... from the Space Name dropdown list to add a new space.

or

- Select an existing Virtual PUCK space if it is integrated with the switcher.
- Click Add Device.
- Adding a Virtual PUCK:
 - Select the IP address of the Virtual PUCK to add from the Network Address dropdown list.
 - Select Add New Space... from the Space Name dropdown list to add a new space.

or

- Select an existing switcher space if it is integrated with the Virtual PUCK.
- Click Add Device.

If you do not see the IP address of your Virtual PUCK in the Network Address dropdown list, the Virtual PUCK receiver is unable to communicate with the SAS. Consult the Steelcase Application Server (SAS) 3.3.2 section for assistance in troubleshooting.

Note: Individual device settings can be adjusted by selecting the device from the Dashboard. See Device View section for more information.

Status Tab

The Status tab provides a summary view of all devices.

- Space: Space name that contains one switcher and/or one Virtual PUCK
- Status: Device status
- Note: Custom notes
- The arrow indicates which column is being sorted.
- Switch between ascending/descending order by clicking the arrow next to the selected column.
- · Click on a device name to view/adjust the device's Basic and Advanced settings.

Status indicators include:

- Online (green): Device is connected to media:scape Manager.
- Offline (red): Device cannot be reached by media:scape Manager.
- In Use (green): Device is currently awake and in use (digital switchers only).
- · Awake (green): Device is awake but not in use (digital switchers only).
- Standby (green): Device is asleep and not in use (digital switchers only).
- Not Networked (gray): Network address has not been specified (digital switchers only).
- · Incompatible Firmware (yellow): Device firmware is not compatible with media:scape Manager.

Note: For minimum firmware version and instructions on updating firmware, see Prerequisites section.

History Tab

This tab shows all changes made to all devices. Review the history of an individual device by selecting that device from the **Status** tab.

Note: View the last 30 or 60 days of history, or all history, by using the dropdown menu at the top right of the screen.

Sort the history by the **Date** column:

- The arrow indicates which column is being used to sort the information.
- Switch between ascending/descending order by clicking the arrow next to the selected column.
- An arrow to the left of a listing indicates more than one change was made; click on the arrow to reveal all changes made to that device.

Device View

media:scape Digital Switcher

Clicking on a media:scape **Digital Switcher** in the Dashboard opens the **Device View**. From this screen the following tasks may be performed:

- Edit the Space Name
- Reboot
- Remove
- Configure
 - Display Settings
 - Network
 - Video conferencing
- View History

media:scape Manag	er			1
ORD Team S				
				Reboot
Basic				Eat
Device type:	8x4 Switcher	DIOS version:	26.8.45	
Network address:	192.168.1.90	Device status:	Awake	
Serial number:	-	Note:	-	
MAG address:	00-04-A3-FF-A4-04	ECO.	2014-09-26	
Firmware version:	SP106-20x v2.0.8	Temperatures	38°C	
Advanced N	ised help?			6.01
Display Settings				
Number of monitors	1	System standby:	10m	
Network Configuratio	n			
DHCP:	or	IP address:	192.168.1.90	
		Subnet mask:	255.255.255.0	
		Default router:	192.168.1.1	

Rebooting a Device

Select **Reboot** to restart the device.

Note: It may take up to 5 minutes to reconnect to the device after a reboot.

Removing a Device

- 1. Select **Remove Device**, located at the bottom of the page, to remove the device from media:scape Manager.
- 2. Confirm removal of the device by selecting **Remove Device** on the confirmation screen.
- 3. Select **Cancel** to proceed without removing the device.

Switcher Tab

Basic or Advanced settings can be reviewed or edited for a device.

Note: Select **Edit** next to either **Basic** or **Advanced**. Editing of the other group of settings will be unavailable until **Save** is selected in the corresponding section of the screen.

Basic Settings

Device Type

- 4x2: 4 PUCK input, 2 AUX input, 2 output media:scape switcher
- 8x4: 8 PUCK input, 3 AUX input, 4 output media:scape switcher

Network Address

View/change the IP address or hostname used to communicate with the device.

Serial Number

Indicates the serial number of the device.

- "--" indicates the serial number is not present in the device's firmware.
- Devices with an ECO date earlier than June 2015 will not have a serial number programmed into memory.
- The serial number is not user configurable.

MAC Address

Indicates the unique identifier of the device for the Ethernet adapter.

Firmware Version

Indicates the current firmware version of the device.

Note: For minimum firmware version and instructions on updating firmware, see Prerequisites section.

BIOS Version

Indicates the current BIOS version of the managed device.

Device Status

- Offline: Device cannot be reached by media:scape Manager.
- In Use: Device is currently awake and in use.
- Awake: Device is awake but not in use.
- Standby: Device is asleep and not in use.
- · Not Networked: Network address has not been specified.
- Incompatible Firmware: Device firmware is not compatible with media:scape Manager.

Note: For minimum firmware version and instructions on updating firmware, see Prerequisites section.

Note

View/add notes about the device (out for repair, etc.).

• The notes icon becomes visible on the Dashboard when a note has been entered.

ECO

Indicates the date of the device's hardware revision.

Temperature

Indicates the internal temperature of the device.

- 74°C or above indicates overheating; a "CHECK FAN" message will also appear on the affected displays.
- Ensure the device's fan is operational and free from obstruction.

Advanced Settings

Display

Number of Monitors

Sets the number of monitors to be used by the device.

· Correlates to the number of icons that will be illuminated on the media:scape PUCKs.

System Standby

Sets the time for the standby timer.

- The standby timer activates when all PUCK inputs have been disconnected and video is not detected on the AUX inputs.
- Available settings: 5m, 10m, 15m, 60m.

Network

Setting a static IP address or using DHCP reservation for all devices is highly recommended.

DHCP

Enable/disable DHCP.

IP Address

Set a static IP address.

• If DHCP is enabled, this field is disabled and does not represent the device's DHCP address.

Subnet Mask

Set a static subnet mask.

• If DHCP is enabled, this field is disabled and does not represent the device's DHCP address.

Default Router

Set a static default router or gateway address.

• If DHCP is enabled, this field is disabled and does not represent the device's DHCP address.

Video Conferencing

Wake Up on AUX

Select AUX inputs that will wake the device upon sensing a video signal.

AUX 1 Routing*

Select which outputs should receive the video from the AUX 1 input when video is sensed.

AUX 2 Routing*

Select which outputs should receive the video from the AUX 2 input when video is sensed.

AUX 3 Routing*

Select which outputs should receive the video from the AUX 3 input when video is sensed.

AUX Standby Time

Set the time for the AUX standby timer.

- Starts the timer after PUCKs have been disconnected but while a video signal is still sensed on any of the AUX inputs.
- Works in conjunction with the standby timer.
- Available settings: 1 to 12 hours in 1-hour increments.

Data Sharing

Set the data-sharing output(s).

- When a PUCK icon becomes active (green), the video routed from the PUCK will also be routed to the data-sharing output(s).
- · Active data sharing is indicated by a green ring on the PUCK.

Walk-up Outputs Enabled

Check/uncheck the box to enable/disable the Walk-up Experience Video for an output.

- When video is not routed to the output, the video signal will not be present (no sync).
- This setting is commonly enabled with video conferencing data-sharing inputs.
- media:scape scaler connected to this output should be set to INTR to work with this setting.
- To change this setting, output must not be set as Display.

Black Screen

Check/uncheck the box to enable/disable the Black Screen output instead of no video signal when the Walk-up Output Enabled setting has been deselected.

Note: See Number of Monitors in the Advanced Settings section.

HDCP

HDCP Setting

Sets the HDCP mode.

- Auto: Evaluates HDCP compatibility for each output upon boot.
 - If all outputs are HDCP compliant, the HDCP status will be ON.
 - If any output is not HDCP compliant, the HDCP status will be OFF.
- ON: Forces HDCP status ON.
 - May cause unexpected behavior if any of the displays are not HDCP compliant.
- OFF: Forces HDCP status OFF.
 - May cause unexpected behavior when attempting to share HDCP-protected content.

HDCP Status

Indicates the current state of the HDCP engine.

- ON: Indicates that HDCP is on.
 - Protected content may be shared through PUCKs.
- OFF: Indicates that HDCP is off.
 - Protected content cannot be shared through PUCKs.

Note: If HDCP status seems incorrect, change the HDCP setting from AUTO to either ON or OFF.

HDCP Output Compatibility

Indicates the detected HDCP compatibility for each output.

- Y: HDCP compliant.
- N: Not HDCP compliant.
- X: No display or sync device detected.

Other

Walk-up Experience

Set the type of walk-up experience that plays when media:scape powers up, when a device connects to a PUCK or when the power button is pressed.

- Animation: Uses the animation selected with Walk-up animation.
- Still: Shows a static image.

Walk-up Animation

Set the animation used for the walk-up experience.

- Default (media:scape overview)
- Default + Video conferencing
- Default + Virtual PUCK
- Default + Video conferencing + Virtual PUCK

Classroom Mode

- When set to ON, all PUCKs are locked.
- · Commonly used in media:scape classroom or LearnLab applications.

Cool-down Time

Set the cool-down timer for when the unit is used with a projector. Refer to the projector manual for the recommended cool-down time.

- Timer begins when the media:scape enters standby mode.
- media:scape will not power on until the timer runs out.

History Tab

This tab shows all changes made to the individual device. The history of all devices can be reviewed on the Dashboard.

Note: See the Dashboard View: History Tab section to learn more about navigating and using this tab.

Device View

media:scape Virtual PUCK

Clicking on a Virtual PUCK receiver in the Dashboard opens the **Device View**.

From the screen, the following tasks may be performed:

- Remove
- Configure
 - Notes
 - Network Configuration
 - System Standby (Virtual PUCK stand-alone only)
 - Hours of Operation (Virtual PUCK stand-alone only)
 - HDVC Compatibility (requires switcher)
- Software Updates
- Access Device Logs
- View Historical Data of Device

🗅 mediascape Manager 🛛 🗙						909 - 0	9
← → C △ ▲ Not secu	are https://10.51.68.198/mediasci	pe/space/64b52a82-ed7c-4d6b	8f55-5b1c6b1debc6/receiv	er		Q & O O	
	🗧 mediatacape Manag	"			1		
	CDD Tech	Adviser Virtual PU	CK .				
	GRR IECH	Adviser virtual PU					
	· Receiver Hat	2					
					Rebot		
					PARAMA		
	Basic				Kot		
		Virtual PUCK Receiver		Online			
		10.51.67.106		-			
	Hardware D:	NUCRODAKE					
	Sanar number;	-					
	MAC address	64.5d dt 04.6d a0					
	Software version	3.2.1-2e(1e23-835					
	Audo supported	Yes					
	Advanced						
	Bystem Blandby			1			
				. 50			
	Hours of Operation						
	Ended	04	Dystem tenezone:	America/Detroit			
			Start Time.	05.00			
			End Time:	17:00			
	Network Configurat	lion					
		On	Houtname	spuckserver			

Rebooting a Device

Select **Reboot** to restart the device.

Note: It may take up to 5 minutes to reconnect to the device after a reboot.

Removing a Device

- 1. Select **Remove Device**, located at the bottom of the page, to remove the device from media:scape Manager.
- 2. Confirm removal of the device by selecting **Remove Device** on the confirmation screen.
- 3. Select **Cancel** to proceed without removing the device.

Receiver Tab

Basic or Advanced settings can be reviewed or edited for a device.

Note: Select **Edit** next to either **Basic** or **Advanced**. Editing of the other group of settings will be unavailable until **Save** is selected in the corresponding section of the screen.

Basic Settings

Device Type Indicates that the device is a Virtual PUCK receiver.

Network Address

Indicates the device's current IP address. This can be changed with Advanced Settings/Network Configuration.

Serial Number

Indicates the serial number of the device.

MAC Address

Indicates the unique identifier of the device for the Ethernet adapter.

Software Version

Indicates the current software version of the managed device.

Note: For minimum software version and instructions on updating software, see Prerequisites section.

Audio Supported

Indicates whether the device supports audio streaming.

Note: Audio streaming requires minimum Virtual PUCK receiver software of 3.2 and minimum Virtual PUCK client software of 3.2 in order to function.

Device Status

- Online: Device is connected.
- Offline: Device is disconnected.
- Incompatible Firmware: Device firmware is not compatible. Note: View/add notes about the device (out for repair, etc.).
- The notes icon becomes visible on the Dashboard when a note has been entered.

Advanced Settings

System Standby (Virtual PUCK stand-alone only)

Standby Timer: Indicates the amount of inactive time after which the Virtual PUCK will go to sleep.

To wake up the Virtual PUCK:

- Click Request Your Code in the Virtual PUCK client software and select the name of the Virtual PUCK to wake up.
- If present and connected, press the media:scape power button located in the media well of the media:scape table.

Hours of Operation

- Enabled: Turn this feature on or off.
- System Time Zone: Set the time zone.
- Start Time: The time that Virtual PUCK will wake up every day.
- End Time: The time that Virtual PUCK will go to sleep every day.

Network Configuration

- DHCP: Turn DHCP on or off.
- Hostname: Edit the hostname.
- IP Address: Set a static IP address.
- Subnet Mask: Set a static subnet mask.
- · Default Router: Set a static default router or gateway address.
- DNS name server: Set a primary DNS server.
- DNS search domain: Set a DNS search domain.

Software Update

The current software version, build date and install date are listed here.

media:scape Manager offers two ways to update your Virtual PUCK receivers:

 To use a new .puck file, click on the Upload New tab and click Choose File to select the file for uploading. Click Update to begin the software update process.

Uploaded PUCK files	Upload New
Install an uploaded file:	No uploaded files *

 Additionally, the media:scape Manager will store the last two .puck files uploaded. These files can be used to update additional Virtual PUCKs by using the **Uploaded PUCK** files tab. Choose one of the two .puck files from the "Install an uploaded file" list. Click **Update** to begin the software update process.

Uploaded PUCK files	Upload New	
Choose File No file ch	osen	
Update		

HDVC Compatibility (available only when integrated with a digital switcher)

Refer to the Virtual PUCK assembly instructions on how to integrate Virtual PUCK and video conferencing with a media:scape digital switcher.

• This setting can be enabled or disabled.

Device Logs

Steelcase technical support may ask for Virtual PUCK device logs for troubleshooting purposes. Click the **Access Device Logs** link to access the Virtual PUCK receiver's log files.

History Tab

This tab shows all changes made to the individual device. The history of all devices can be reviewed on the Dashboard.

Note: See the Dashboard View: History Tab section to learn more about navigating and using this tab.

Steelcase Technical Support

media:scape Product Page

steelcase.com/products/collaboration/mediascape/

Documentation and Downloads

techsupport.steelcase.com

USA & Canada

Phone 888.783.3522 (Support available in English) Monday through Friday, 8 am to 5 pm Eastern time

Email techsupport@steelcase.com

EMEA

- Phone 00800 2000 4000 for DACH, France, Benelux, UK and Ireland (Support available in English, French and German) +49 8031 405 111 for all other EMEA countries (Support available in English, French and German) Monday through Friday, 8:00 to 18:00 Central European time
- lineone-en@steelcase.com Email

APAC

- Phone +60 3 2027 6161 (Support available in English and Mandarin) Monday through Friday, 8:00 to 17:00 KL time
- apac.techsupport@steelcase.com Email



Visit Steelcase.com

f facebook.com/Steelcase

twitter.com/Steelcase

You

youtube.com/SteelcaseTV

1/22 ©2019 Steelcase Inc. All rights reserved. All specifications subject to change without notice. Trademarks used herein are the property of Steelcase Inc. or of their respective owners.