Appendix B: Port Reference

The following tables identify the default ports used by Cisco Vision Dynamic Signage Director:

- Cisco Vision Dynamic Signage Director Ports, page 51

- Digital Media Player Ports, page 52

Cisco Vision Dynamic Signage Director Ports

The Cisco Vision Dynamic Signage Director ports are divided into tables for input and output ports.

Cisco Vision Dynamic Signage Director Input Ports

Table 1 on page 51 lists the input ports used by all Cisco Vision Dynamic Signage Director servers.

Table 1   Cisco Vision Dynamic Signage Director Input Ports

Originator	Protocol	Port	Target Application	For Web UI Access
DMP	UDP	123	NTP	Time sync when using Director as NTP server in initial setup
Laptop	TCP	22	SSH[1]	Remote login
MPI Client	TCP	22	sftp	For Media Planner API / playlist import
Director	TCP	22	sftp	System backup from Primary Server
Laptop (browser UI), DMP	TCP	80	HTTP	Redirect to port 8080
Laptop	TCP	443	HTTPS	Web UI access
DMP	TCP	9090	HTTP	For data feed from widgets
DMP	TCP	8080	HTTP	Fetch DMP config/data, firmware, content

1. When remote login is enabled.

Table 2 on page 52 lists the additional input ports used by Cisco Vision Dynamic Signage Director server only during troubleshooting access from a PC.

Table 2   Cisco Vision Dynamic Signage Director Input Ports

Originator	Protocol	Port	Target Application	Usage
External NTP server	UDP	123	NTP	Time synchronization (Director as NTP client)
DMP	UDP	514	Syslog	Proof of Play, Alerts

Cisco Vision Dynamic Signage Director Output Ports

Note: Data integration with Daktronics or OES is over UDP. The port number is configurable in Director and must match the score data source.

Table 3   Cisco Vision Dynamic Signage Director Output Ports

Originator	Protocol	Port	Target Application	Usage
Director	UDP	123	NTP	As request to NTP server, and as response to DMPs
Director	UDP	Varies (default =50001)	DMP runtime	Multicast commands (default = 239.192.0.254:50001)
Director	UDP	Varies (default=50080–50099)	DMP runtime	Multicast commands when per–script multicast is enabled
Director	FTP	21	FTP server	Fetching integration broker data over FTP, Playlist integration
Director	TCP	22	ssh	Remote login
Director	TCP	22	sftp	Automated content import
Director	TCP	22	sftp	System backup; Proof of Play data
Director	TCP	80	http	Redirect to port 8080
Director	TCP	80 / 443	external web server	Fetching of data for integration broker
Director	TCP	443	https	Web UI access
Director	TCP	8000	DMP runtime	DMP control commands

Digital Media Player Ports

The DMP ports are divided into tables for input and output ports:

Common Media Player Input Ports

Table 4 on page 53 lists the input ports used by all media player models.

Table 4   Common Media Player Input Ports

Originator	Protocol	Port	Target Application	Usage
Director	UDP	varies (default: 50001)	DMP runtime	Multicast commands (default is 239.192.0.254:50001)
Director	UDP	varies (default: 50080–50099)	DMP runtime	Multicast commands when per-script multicast is enabled
Headend	UDP	varies	DMP firmware	Multicast video
NTP server	UDP	123	NTP	Time sync response

Network Input Ports

Table 5 on page 53 lists the input ports only used by the digital media player.

Table 5   Input Ports

Originator	Protocol	Port	Target Application	Usage
Laptop	TCP	80	DMP diagnostic web server (dws)	Diagnostic Web Server, when enabled
Director	TCP	8000	DMP control and debugging web server	For commands and queries by Cisco Vision Director server
Laptop	UDP	161	SNMP service	Listening agent for SNMP management information This port is only open when the SNMP service is enabled in Cisco Vision Dynamic Signage Director
DMP	UDP	319, 320	PTP	Event and general messages for time sync (DMP)
DMP	UDP	50001, 50002	DMP runtime	For content synchronization, such as in video walls
Laptop	TCP	2099	Javascript inspector for DMP browser	To run Javascript Inspector when enabled to debug/troubleshoot by Cisco support
NTP Server	UDP	123	Network Time Protocol (NTP)	Sync the time on the DMP

Common Digital Media Player Output Ports

Table 6 on page 54 lists the output ports used by all digital media player models.

Table 6   Common Digital Media Player Output Ports

Originator	Protocol	Port	Target Application	Usage
Director	TCP	8080	httpd	Fetching of DMP config, autoprovisioning, and related
DMP	TCP	80	httpd	External content URL.
DMP	TCP	8888	java (Mule)	Fetching preview (data pull requests) from Integration Broker
DMP	TCP	33333	java (Mule)	Fetching data integration images from Integration Broker
Director	UDP	123	NTP	Time sync request
DMP 43	UDP	514	syslog	Proof of Play, Alerts

Output Ports

lists the output ports used by the Series 2 media players.

Table 7   DMP Output Ports

Originator	Protocol	Port	Target Application	Usage
Laptop	UDP	161	SNMP service	This port is only open when the SNMP service is enabled in Cisco Vision Dynamic Signage Director
DMP	UDP	319, 320	PTP	Event and general messages for time sync
DMP	UDP	50001, 50002	DMP sync manager port	For sync leader