



Version 4.10



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Before Beginning

AMP support in PRIME is completely dependent upon a component called the Automation Standardization Layer (ASL), which is installed by default by the PRIME installer. This service will appear in the service list as **ASL AMP Service**; please verify that this service is present prior to beginning configuration. Otherwise configuration will proceed normally, however enabling an AMP connection will result in failure.

Once the ASL service is running the switcher will automatically detect the ASL service.

😰 Task Manager				– 🗆 X
<u>File</u> Options <u>V</u> iew				
Processes Performance App history Startup Us	ers Deta	ils Services		
Name	PID	Description	Status	Group
ASL AMP Service	4132	ASL AMP Service	Running	
ASL VDCP Service	4124	ASL VDCP Service	Running	
ASL XVS Service		ASL XVS Service	Stopped	
🤐 aspnet_state		ASP.NET State Service	Stopped	
AssignedAccessManagerSvc		AssignedAccessManager Service	Stopped	AssignedAccessManagerSvc
🔍 AudioEndpointBuilder	2096	Windows Audio Endpoint Builder	Running	LocalSystemNetworkRestricted \vee
<				>
Fewer details 🍓 Open Services				

The AMP Protocol is a protocol specified by Grass Valley. PRIME supports Network (TCP) control only on port 3811 as specified by the AMP Protocol. RS422 Serial is NOT currently supported by the ChyronHego ASL Service.

http://www.gvgdevelopers.com/concrete/apis/amp_protocol/



Using AMP with PRIME

In order to understand how PRIME supports the AMP protocol, it is necessary to first differentiate between content types in PRIME. On a PRIME system that will be used to play content to air, a user may configure one or more output video channels. These channels correspond to physical or virtual outputs (for example SDI, NDI, GPU and so forth) and will appear in the PRIME playout window. These output channels may or may not have a visible preview.

PRIME scenes (PBX files) and messages (PBM files) are played on these output channels. These files are the most robust of scene types in the PRIME environment.

A user may also configure one or more clip players. Each clip player controls clip playback (typically PPC files) to a specific layer within an output channel. For example, a clip player may be configured to play content on layer -5 of output channel 1. Since layers are stacked based upon their relative numeric value,



this means that any content on layer -4 or higher will always be on top of the content being played back on this clip player.

In the case of a dedicated clip player, an output channel is still required, but the expectation is that only the clip player itself will be used to render content on that output. The actual parent (output) channel will likely not be visible in the user interface to avoid confusion for an operator.

Put more simply:

- **Output Channels**: PRIME scene and message playback.
- **Clip Players**: PRIME clip playback.

Each AMP connection that gets configured will target a specific type of content within a designated project. Once installed, AMP may be configured with just a few steps.

Connection Configuration

Note: A switcher will communicate with PRIME using the ASL service as an intermediary. The switcher will connect to ASL running on the target PRIME system using TCP on port 3811.

Step 1, Open Automation

Open the Automation configuration panel within PRIME.



Step 2, Add a New Connection

Click on the AMP toolbar button to create a new AMP connection.



Automat	ion Settings					
Conne	c tions 🖤 Intelligent Interfa	ce 🐨 XML 🐨 U	IDP Stream 🖤 Generic 🚥 VDO	CP 🚥 PBus 🛤 EAS	🖙 AMP 📋 Edit 🥥 Rules 💥 Delete 🛛 🛞 Enable 🛞 Disable	
Туре	Name	Port	Encoding	Enable On Startup	Status	
0	Camio Connection			~	🤣 Enabled: Endpoint 1.1.13 🛛 iSQ 3.2.0.36	
	Intelligent Interface 1	49528	Western European (Windo	~	🔮 Waiting For Connection	
Log •	📄 Advanced 🛛 👩 Clear Log	1				
Time	Connections	Command	Response	Duration		
AMP 1	Oisabled					

This will open the AMP configuration dialog:

Add AMF	Connection	×
AMP	Properties	
	Name	AMP 1
	Gateway	1 •
	Туре	Clips
	Project	Test
	Clip Player	Clip Player 1
	Cache Folder	:\ChyronHego\Prime\Thumbnails
		Connect on Startup
		OK Cancel

Step 3, Configure Properties:

• **Name**: This is intended as user-friendly name that will appear in the automation configuration panel. It does not have any bearing on configuration with the switcher.



• **Gateway**: This is a unique identifier that allows ASL to map between a switcher and PRIME AMP connection. When a switcher communicates with ASL, an entry with a specific index will be configured. These entries are listed in the Gateway drop-down as Active to facilitate configuration pairing.

Add AM	Connection		×
AMP	Properties		
	Name	AMP 1	
	Gateway	1 (Active)	-
	Туре	1 (Active) 2 (Active)	
	Project	3 4	
	Clip Player	5 6	
	Cache Folder	7	umbnails
		9 10	
		11 12	
		13 14	Cancel
		-15 16	
		17	
		19	

• **Type**: This specifies the type of assets that should be addressable through this AMP connection. Clips refers to PPC clip files while Graphics refers to PBX and PBM scene/message files.



Add AMF	Connection	×
AMP	Properties	
	Name	AMP 1
	Gateway	1 (Active)
	Туре	Graphics 🔹
	Project	Test 🔹
	Channel	Output 1 👻
	Layer	Default 👻
	Cache Folder	:\ChyronHego\Prime\Thumbnails
		Connect on Startup
		OK Cancel

- **Project**: This specifies the project from which assets will be utilized. Only assets within this project will work with this AMP connection. The project currently selected in the main PRIME user interface has no bearing on the AMP connection.
- **Clip Player** (*Type Clip Only*): Indicates which clip player will be affected by incoming AMP commands.
- **Channel** (*Type Graphics Only*): Indicates which output channel will be affected by incoming AMP commands.
- Layer (*Type Graphics Only*): Indicates which layer on the specified channel will be affected by incoming AMP commands. Content that gets played will be played to this specific layer rather than whatever the default is configured internally.
- **Cache Folder**: A location on the local file system where thumbnails will be written for all of the assets currently exposed by this AMP connection.

The rule engine is supported and can customize the behavior of incoming AMP commands, but such configuration should not be necessary. Default rules are automatically created based upon the Type property configured on the AMP connection.

Once configured, click the Enable button on the Automation connection toolbar to enable the AMP connection. If ASL is installed, the connection should enable successfully and the version will be listed as below:



Automat	utomation Settings					
Connections 💚 Intelligent Interface 🖤 XML 💚 UDP Stream 🖤 Generic 🚥 VDCP 🚥 PBus 🚥 EAS 🏻 🖤 AMP 🛛 🔯 Edit 🥪 Rules 💥 Delete 👘 Enable 😣 Disable						
Туре	Name	Port	Encoding	Enable On Startup	Status	
AMP	AMP 1				🚡 Listening: ASL 1.1.43	
0	Camio Connection			*	Senabled: Endpoint 1.1.13 Signal is Q 3.2.0.36	
CII	Intelligent Interface 1	49528	Western European (Windo	~	了 Waiting For Connection	

Otherwise, ASL will report an error and a reinstallation may be required.

Once the connection is listed successfully as Listening, the PRIME is ready to receive AMP commands. Note that this success only indicates that the AMP connection is listening for commands through the ASL gateway; this does not indicate that a connection has been made between PRIME and switcher.