Connecting a K-Frame to vsmStudio

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vsmStudio Build 1926

K-Frame Simulator KSP v6.0.2.

This document will explain the three possible connections between vsmStudio and a GVG K-Frame.

- 1. Tally through the GVG Ethernet protocol
- 2. Aux bus routing through the S7000 protocol
- 3. Label transferring from vsmStudio to the K-Frame through the S7000 protocol.

# 1.1 Preparing vsmStudio to connect to the K-Frame Tally.

1.1.1 The first step needed would be to create the GPI's in vsmStudio that will be associated with up to three layers of Tally among vsmStudio and K-Frame.

Typically LSB internal use recommends starting at 10001 for the first Red Tally.

Because of the large potential number of ME's as well as the potential to have 192 physical inputs and then a great deal of Virtual inputs and internal sources (Test, Colour BG, DPM...) it is recommended that you leave enough headroom to allow for expansion. Even if not using these sources, these GPI slots need to be reserved otherwise they can be forced to true or False states by the protocol. (It is recommended to reserve 2000 GPI's for each Tally source)

Below is the recommended GPI allocation.

10 000 - 11 999 Red Tally for Suite 1

12 000 - 13 999 Green Tally for Suite 1

- 14 000 15 999 Yellow Tally for Suite 1
- 20 000 21 999 Red Tally for Suite 2
- 22 000 23 999 Green Tally for Suite 2
- 23 000 24 999 Yellow Tally for Suite 2

Note that these recommendations can be changed to suit the end user but remember to leave the empty positions to avoid incorrect behavior.

The Following Iterators can be used but naming is up to the installation engineer.

Red Tally on K-Frame Input {1-192} Suite (1) Green Tally on K-Frame Input {1-192} Suite (1) Yellow Tally on K-Frame Input {1-192} Suite (1) Red Tally on K-Frame Input {1-192} Suite (2) Green Tally on K-Frame Input {1-192} Suite (2) Yellow Tally on K-Frame Input {1-192} Suite (2)

1.1.2 Every Physical output of the K-Frame is a potential Tally source and to Enable or Disable these, vsmStudio uses GPO's.

These GPO's need to be created.

Below is the recommended GPO allocation.

401 – Enable Red Tally on the K-Frame source currently selected to Output 1.

- 402 496 will be Red Tallies for outputs 2 96
- 601 Enable Red Tally on the K-Frame source currently selected to Output 1.
- 602 696 will be Red Tallies for outputs 2 96
- 801 Enable Red Tally on the K-Frame source currently selected to Output 1.
- 802 896 will be Red Tallies for outputs 2 96
- 501 Enable Red Tally on the K-Frame source currently selected to Output 1.
- 502 596 will be Red Tallies for outputs 2 96
- 701 Enable Red Tally on the K-Frame source currently selected to Output 1.
- 702 796 will be Red Tallies for outputs 2 96
- 901 Enable Red Tally on the K-Frame source currently selected to Output 1.

902 – 996 will be Red Tallies for outputs 2 - 96

Note that these recommendations can be changed to suit the end user. The Following Iterators can be used but naming is up to the installation engineer.

Enable Red Tally on K-Frame out {1-96} (Suite 1)

Enable Green Tally on K-Frame out {1-96} (Suite 1)

Enable Yellow Tally on K-Frame out {1-96} (Suite 1)

Enable Red Tally on K-Frame out {1-96} (Suite 2)

Enable Green Tally on K-Frame out {1-96} (Suite 2)

Enable Yellow Tally on K-Frame out {1-96} (Suite 2)

It is also recommended to set these GPO's to be Persistant (See Figure 1.1.2.1) This means that GPO states are saved in the Storage folder and will resume in their previous state after a vsmStudio restart.

GP-I/O-Properties	×
Number: 901	
Name: Enable Yellow Tally on K-Frame out 1 (Suite 1)	
Comment:	
Persistent * Set to "True" on Startup *	
<ul> <li>Suppress default logging.</li> <li>Is Signalled when "False"</li> <li>Enable Color Preset</li> </ul>	
Color Preset vsmPanel Blink LBPxx	ור
Non-Signalled: Text 🚽 🔲 Text 🚽 📉 Text 🗸	
Signalled: Text Text Text Text	
Enable Reporting	
Log on Signalled:	
Log on Non-Signalled:	
Instructions:	1
*) Using persistent GPOs to trigger actions will cause problems in Multi-Server setup	s.
OK Cancel	

A Persistant GPO is indicated with a letter P in the GPO List

🔹 O-10202 🕀 🔿 Enable Red on K-Frame out 2

The parameter Set to "True" on Startup is also recommended in Static environments if the Program output is always used on the same Physical Connector. This will ensure that the GPO will always be in a true state after a restart of vsmStudio, even if it was turned off in a previous session.

Note : These parameters are only Applicable for GPO and can't be used for GPI status.

# 1.2 Creating the connections on the vsmStudio Primary Server.

## 1.2.2 Select "New"

Manage Communication Ports		? ×
<ul> <li>SERVER2008 (Local)</li> <li>UMDs and Monitor Splitters</li> <li>Mixer</li> <li>X-Switches</li> <li>Other</li> <li>S101.2 Bus</li> <li>S101.2 Devices</li> <li>Gadgets</li> <li>Unused Ports</li> </ul>		
Settings Reset	Disable New Remove Close	

1.2.3 Expand Mixer, Grass Valley Group and select "Ethernet Tally" Click "Next."

Ports	×
<ul> <li>X-Switches</li> <li>UMDs and Monitor Splitters</li> <li>S101.2 Bus</li> <li>Mixer</li> <li>Grass Valley Group</li> <li>Kalypso - X-Switch</li> <li>Kalypso - Contribution T ally</li> <li>Zodiak - Contribution T ally</li> <li>Kayenne - Contribution T ally</li> <li>Ethernet - T ally</li> <li>Snell &amp; Wilcox</li> <li>Snell &amp; Wilcox</li> <li>Snell &amp; Wilcox</li> <li>Studer</li> <li>Thomson</li> <li>Thomson</li> <li>Gadgets</li> </ul>	
< Back Next > Cancel Help	

### 1.2.4 Select "New Port"

Ports				×
Select one or more p	ports to which this	protocol should	l be assigned to:	
Port	Device	9		
New Port	Remove			
	< Back	Finish	Lancel	Help

- 1.2.5 Create the TCP/IP Port. (See Figure 1.2.5.1)
  - 1.2.5.1 Enter a description for the connected K-Frame.
  - 1.2.5.2 Ensure TCP Oubound is selected (Default)
  - 1.2.5.3 Enter the IP Adress of the K-Frame mainframe.
  - 1.2.5.4 Enter the port used for the Tally connection (Manufacturer specifies port 2012)
  - 1.2.5.5 Click "OK"

Figure 1.2.5.1

Create new Tcp/IP Po	ort			×
Description:	K-Frame Ethernet Tally			1
Type of Port:	<ul> <li>TCP - Outbound</li> <li>TCP - Inbound</li> <li>UDP - Outbound</li> </ul>			
Remote IP Address: Port:	192 . 168 . 6 . 13 2012 4	3		
			ок 🌀	Cancel

1.2.6 The newly created port will be selected by deafult. Click on Finish.

ts	which this protocol should t	be assigned to:	
Port	Device		
K-Frame Ethernet Tally	192.168.6.13:2012 (TCF	P)	
•			Þ
New Port Remo	ve		
R	ack Finish	Cancel	Help
		Cancer	11010

1.2.7 Enter the values that were specified in step 1.1.1 or the relevant values in case they are different.

Only the Base Value (First Input) needs to be specified. vsmStudio will continue counting from this base value.

(Note : Because the protocol starts counting from Zero, there will be an offset of 1 between the values entered here and the GPI / GPO used by vsmStudio)

1. The GPO specified in vsmStudio to enable Red Tally to the source selected on Output 1 if used in Suite 1.

2. The Value of the First GPI that will be set to true if Mixer input 1 is selected to any output that has been selected to be a Red Tally source in Suite 1.

3. The GPO specified in vsmStudio to enable Green tally to the source selected on Output 1 if used in Suite 1.

4. The Value of the First GPI that will be set to true if Mixer input 1 is selected to any output that has been selected to be a Green Tally source in Suite 1.

5. The GPO specified in vsmStudio to enable Yellow Tally to the source selected on Output 1 if used in Suite 1.

6. The Value of the First GPI that will be set to true if Mixer input 1 is selected to any output that has been selected to be a Yellow tally source in Suite 1.

7. The GPO specified in vsmStudio to enable Red Tally to the source selected on Output 1 if used in Suite 2.

8. The Value of the First GPI that will be set to true if Mixer input 1 is selected to any output that has been selected to be a Red Tally source in Suite 2.

9. The GPO specified in vsmStudio to enable Green tally to the source selected on Output 1 if used in Suite 2.

10. The Value of the First GPI that will be set to true if Mixer input 1 is selected to any output that has been selected to be a Green Tally source in Suite 2.

11. The GPO specified in vsmStudio to enable Yellow Tally to the source selected on Output 1 if used in Suite 2.

12. The Value of the First GPI that will be set to true if Mixer input 1 is selected to any output that has been selected to be a Yellow tally source in Suite 2.

13. Optionally, enter a comment for this connection. This comment will also be used to identify the connection in the list. (See X.X.X)

14. Click on OK when done.

1.2.8 An Orange Dot indicates that there is a K-Frame mainframe already connected but not yet configured. (Figure 1.2.8.1)

A correctly configured K-Frame will be indicated by a Green Dot (Figure 1.2.8.2) No connection will be indicated by alternating Red and White dots. (Figure 1.2.8.3)

Figure 1.2.8.1 (Connected but not configured correctly)

🖻 📕 Mixer

# Figure 1.2.8.2 (Valid communication)

🚊 📕 Mixer

Figure 1.2.8.3 (No Communication)

🗄 🛄 Mixer

🛛 🔤 🐽 192.168.006.013:02012 - K-Frame Ethernet Tally

1.2.9 Double Click on the connection to open the "Port Settings" Window

Ро	rt Settings		2	×				
r								
	Port Settings	Attribute	Value					
	Part Properties	Logical Inputs	1000					
	Port Properties	Physical Outputs	96					
	Control & Trace	Physical Inputs	192					
	Attributes	Trace Contribution Calculation	False					
*) Attributes tagged with * are valid for all configurations.								
			•					
			1					
		OK Cancel	Apply Help					

- 1.2.9.1 Enter the amount of Logical inputs in the system (Default = 1000)
- 1.2.9.2 Enter the amount of Physical outputs to the system (Default = 100)
- 1.2.9.3 Enter the amount of Physical Inputs to the systel (Default = 200)
- 1.2.9.4 Ensure that the value for "Trace Contribution Calculation" is set to False unless you are debugging the connecition.

# 1.3 <u>Configuring the K-Frame Mixer (Switcher) to connect to vsmStudio through Ethernet Tally.</u>

- 1.3.1 In the K-Frame Panel Software, select (See Figure 1.3.1.1)
  - 1. Eng Setup
  - 2. Ports & Devices
  - 3. Tally Ports
  - 4. Ethernet Tally 1

Enter the IP Address of the Primary vsmStudio Server here

5. Ethernet Tally 2

Enter the IP address of the Second vsmStudio Server here

6. Ethernet Tally 3

In case of a three server Cluster, you can enter the IP address of the third server here (not demonstrated in this manual)

- 7. Enable all relevant Connections.
- 8. S1 & S2 LED's will light up, indicating Valid Communication to Suite 1 and Suite 2..
- 9. The Authentication Identifier will be displayed in the Tally Clients Window.

Figure 1.3.1.1	L	
Pbus GPI	Motion Associated Panel Disconnected	Frame Connected
Ports &	Tally Contribution	Tally Clients
Eng Setup	Ethernet Tally S1_S2	
Status Eng Setup =	1 192.168.6.14 4 S Enable 8	vsmStudio 9 L-S-B Broadcast
Suite Prefs User Set	2 192.168.6.11 5 O Enable 0 0	
Prefs User Set	3 0.0.0.0 6 Enable O	
Source Definition		
Eng Setup Router		
Eng Setup		
Node Settings Eng Setup		
Outputs		
Eng Setup	PBus Ports GPI Outputs External Devices Tally Ports Editor Ports	
History Favorites	Eng Login SetDef MatchDef Definition Outputs Ports & Switcher Definition Outputs Ports & Tally Router	CipStore Video Node Install Patterns Status Save Load Acquire Resources
eDPM SWR	User Setups File Ops E-MEM & Macros Ops ME	Keyer iDPM Wipes Copy Swap Devices Image Router Eng Store Router Setup

- 1.4 Setting up the vsmStudio Second Server
- 1.4.1 Repeat steps 1.2.1 to 1.2.6 in the second Server
- 1.4.2 Synchronize Servers
- 1.4.3 Repeat in Third Server (if Applicable)

(Note : One K-Frame supports a maximum of three Tally Clients)

1.4.4 Verify connections in both Servers as well as in K-Frame Software

Tally Contribution		Tally Clients
Connection Status Ethernet Tally	S1 S2	
1 192.168.6.14 S Enable	••	vsmStudio L-S-B Broadcast
2 192.168.6.11 S Enable	••	vsmStudio L-S-B Broadcast
3 0.0.0.0 O Enable	••	

### 1.5 Testing the Tally Communications.

1.5.1 In vsmStudio, set the Value of GPO 401 (Created in step 1.1.1) or other GPO to Enable Red Tally on Suite 1 Output 1 to True.



#### 1.5.2 In the K-Frame menu, Select Input 1 to Output 1.

	Safe	Aux Src Associated Panel Disconne	cted	Frame Connected		
Outputs		Physical Outputs	Suite	Output Name		Output
Eng Setu Ports &		Output 1 1 51	Suite1 Suite2		Logica Fixed Sources Sources	1
Devices Eng Setu		Output 2 Aux 1 S1	Output Type			Source Filter
Status Eng Setu		Output 3 Aux 2 51			3 4	None
Suite Prefs		Output	Fixed Switched PVW Aux		5 6	
Panel	1	4 Aux 3 51			7 8	Show All
User Set		Survey Aux 4 S1			9 10	
Definition Eng Setu	n P	Output 6 S1			11 12	
Router		Output			13 14	
Node	i	Aux 7 S1			15 16	
Eng Setu					17 18	Lock
Clear I	History					
History	Favorites	Eng Login SetDef Source MatchDef Definition	Outputs Ports & Switcher Devices Switcher Tally Router	ClipStore Video Node Config Settings Settings	Install Test Options Patterns Status	Save Load Resources
eDPM	SWR	User Setups File Ops	E-MEM & Macros Source ME	Keyer iDPM Wipes	Copy Swap Devices Image Store	Router Eng

1.5.3 GPO 10001 should now have a value of "True"

)	▶■=GP-I/O List					
Config 🛛 Þ GPIs 🗪 GPOs						
Ě	_			_		
L		Number			Name	
Γ	*	I-000	Ð	0	NULL	
	*	I-10001	Ð	۲	Red Tally on K-Frame Input 1 Suite (1)	

1.5.4 Repeat the above steps to test Red, Green and Yellow Tallies for Suite 1 and Suite 2.

## 1.6 Configuring Tally for K-Frame internal resources.

Various internal resources are also Tally Contributors. Examples are ME1, ME2, Internal Test generators, Internal Still stores and these will also be contributing Tally information to GPI's higher than the Physical inputs.

The Standard fixed source tallies can be derived by Adding 900 to the base input for every layer of Tally.

Eg. (10001 + 900 = 10901) for Red Tally from internal resources when used in Suite 1 I-10901 Red Tally (int.) M1 A (Suite 1)

### The Iterator below can be copied to assist in creating these GPI's easily.

{M1 A,M1 B,M1 C,M1 D,M1 pA,M1 pC,M1 pM,M2 A,M2 B,M2 C,M2 D,M2 pA,M2 pC,M2 pM,M3 A,M3 B,M3 C,M3 D,M3 pA,M3 pC,M3 pM,M4 A,M4 B,M4 C,M4 D,M4 pA,M4 pC,M4 pM,Pg A,Pg B,Pg C,Pg D,Pg pA,Pg pC,Pg pM,eDA,eDAk,eDC,eDCk,Blk,Wht,Blk Key,Test 1,Test 2,Bg 1,Bg 2,IS 1A,IS 1B,IS 2A,IS 2B,IS 3A,IS 3B,IS 4A,IS 4B,IS 5A,IS 5B,IS 6A,IS 6B,IS 7A,IS 7B,IS 8A,IS 8B,IS 9A,IS 9B,IS 10A,IS 10B,TBD 1,TBD 2,TBD 3,TBD 4,TBD 5,TBD 6,TBD 7,TBD 8,TBD 9,TBD 10,TBD 11,TBD 12,TBD 13,TBD 14,TBD 15,TBD 16,TBD 17,TBD 18,TBD 19,TBD 20,TBD 21,TBD 22,TBD 23,TBD 24,TBD 25,TBD 26,TBD 27,TBD 28,TBD 29,TBD 30,TBD 31,TBD 32,TBD 33,TBD 34,TBD 35,TBD 36,TBD A,TBD B,TBD C,TBD D,TBD pA,TBD pC,TBD pM}

### This concludes the Tally Connection section.

2. Aux bus routing through the S7000 protocol

Note : In K-Frame as well as Kayenne Classic, Aux bus routing is allowed through the GVG SMS7000 Protocol. This routing supports the internal Aux busses and not the BNC outputs of the Mainframe.

- 2.1 Firstly we need to create a Layer in vsmStudio which will resemble the K-Frame eg. K-Frame Aux Bus.
- 2.1.1 Click on the Settings icon

File Edit	Window	
	? 📕 🎿   🕆 🖆 🛅 💽 🔧 🖳 🕮 🖉 • 🕄 🌲 💗 👐 🎄 🎟 • 💆 🔜 🚜 💓 🤣 🦉 🥸 🎲	

## 2.1.2 Select "New Layer"

Matrix Properties									×
Matrix Settings	Layers:								
Size and Options	Name		Port	Short	Inputs	Outputs	Mode	Туре	
Channels									
PTT Settings									
System Tally Flags									
System Settings									
Logging Settings									
Debug Settings									
-,									Up
									Dn
	New Layer	Edit			Delete	;			
l		1							
			0	к	Cancel		Apply		lelp

- 2.1.3 Enter the Layer Properties. (See Figure 2.1.3.1)
- 2.1.3.1 The name of the Connection eg. K-Frame Aux
- 2.1.3.2 An optional Comment
- 2.1.3.3 A short name (Recommended)
- 2.1.3.4 The amount of Inputs to the K-Frame
  - Note : If you wish to use internal Fixed Sources, Enter a Value of 1000 here.
- 2.1.3.5 The number of outputs (used Aux Busses)
- 2.1.3.6 Click OK.

# Figure 2.1.3.1

Layer Proper	ties		? ×
Name:			Switch behavior:
K-Frame Aux	(	1	1:n 💌
, Comment:			
Route int. A	ux Busses	2	
Short:	Inputs:	Outputs:	Туре:
Aux ( 3)	192 👍	96 (5	<not specified=""></not>
Show as	Tab in Master N	Matrix View	
Virtual La	yer		
Autor	hation Entry Poi	nt	
Enabl	e AutoFade Fla	g 	
	ess pseudo de	vice rules for inb	ound connects
Synchron	lize across Zon	e-Servers	
	arty Control		
		0	K 🌀 Cancel

# 2.2 Create Signal paths for K-Frame Auxes.

These are destinations on the K-Frame Layer.

2.2.1 Open the signal paths list



2.2.2 Right Click anywhere in the Signal Path list and click on New Signal Path.

🕂 Signal Paths														
🗰 Assignment 🔛 Pool Managed S	Gignals													
Signal Path Name 🛛 🖂	VM	Layer	Moor	Pool	Source Tag	Target Tag	Info	Fam.	Primary	Secondary	Mixer	Protocol	Extern	
New Signal Path														

- 2.2.3 Add the information needed for these signal paths (See Figure 2.2.3.1)
- 2.2.3.1 Add a description. Using an iterator will create multiple (censecutive) signal paths simultaniously.
- 2.2.3.2 Optionally you can add a location, like the rack that houses the mainframe.
- 2.2.3.3 Optionally add a comment eg. Only active if enabled in K-Frame.
- 2.2.3.4 Optionally assign a signal path family.
- 2.2.3.5 Any conflicts (names already in use) will automatically be displayed here.
- 2.2.3.6 Click Next.

Figure 2.2.3.1

Information		X
Description:	Aux {1-96}	
Amount:	1	
Preview:	"Aux-1", "Aux-2", "Aux-3", "Aux-4", "Aux-5", "Aux-6",	
Location:	2	
Comment:	3	
Signal path Family:	< No assignment > Modify	
Conflicts:		
5		
	< Back Next > 6 Cancel Help	_

- 2.2.4 Select the connections. (See figure 2.2.4.1)
- 2.2.4.1 Click on the arrow that identifies the relevant router output. A Dropdown list will appear and if you used an iterator, the correct amount of connections will automatically be selected.
- 2.2.4.2 Click on Next (No Further handling is needed.)

Figure 2.2.4.1

Connections					×
Type of Signal Path:	<ul> <li>Standard Sign</li> <li>Virtual Signal F</li> <li>Tie-Line</li> </ul>	al Path   Path Disable: [ Hard Lock:   s	Concealed		
Assignment of Signal	Patris in- and output	s Name		Тире	
		K-Frame Aux		туре	
Ints	st				
dfn (	ldu				
10	ter				
fino	Sou				
Ω.	LL LL				
	< Back	Next > 2	Cancel	He	lp

2.2.5 Continue clicking next until you have a Finish Button. Select "Finish"

36x24 Images	×
Image for Signal Path's outputs	
	Image Clear
	0
	0
	C Number
	L Show
Image for Signal Paths's inputs	
	0
	0
	C Number
	🗖 Show
< Back Finish	Cancel Help

- 2.2.6 Repeat the steps above but this time Create the Sources to the K-Frame. (See figure 2.2.6.1)
- 2.2.6.1 Add the description for K-Frame inputs (These can be changed at a later stage) Note : If you wish to use internal sources, add 1000 sources)
- 2.2.6.2 Optionally add a Location.
- 2.2.6.3 Optionall add a Comment.
- 2.2.6.4 Optionally select a Signal path Family
- 2.2.6.5 Any conflicts (names already in use) will automatically be displayed here.
- 2.2.6.6 Click Next.

Figure 2.2.6.1

Information		×
Description:	K-Frame input {1-1000}	
Amount:	1 -	
Preview:	"K-Frame-input-1", "K-Frame-input-2", "K-Frame-input-3",	
Location:	2	
Comment:	3	
Signal path Family:	< No assignment > (4) 💌 Modify	
Conflicts:		
5		
		_
	< Back Next >6 Cancel Help	

2.2.6.7 Click on the arrow that identifies the relevant router intput. A Dropdown list will appear and if you used an iterator, the correct amount of connections will automatically be selected.

Connections					×
Type of Signal Path:	<ul> <li>Standard Sign</li> <li>Virtual Signal I</li> <li>Tie-Line</li> </ul>	al Path Path Disable: [ Hard Lock: ]	Concealed		
Assignment of Signal	Path's in- and output	· ·s…			
Input Signa	Path Output	Name K-Frame Aux		Туре	_
Router Outputs	Router Inputs				
	< Back	Next > 2	Cancel	Help	

2.2.6.8 Click on Next (No Further handling is needed.)

2.2.6.9 Continue clicking next until you have a Finish Button. Select "Finish"

36x24 Images	×
Image for Signal Path's outputs	
	Image Clear
	0
	C Number
	Show
Income for Circuit Dath de incode	
	Clear
	☐ Show
< Back Finish	Cancel Help

- 2.3 Create a connection Between K-Frame and vsmStudio for Aux Bus Routing.
- 2.3.1 Open the "Manage Communications" Window



## 2.3.2 Select New

Manage Communication Ports				? ×
SERVER2008 (Local) UMDs and Monitor Splitters Mixer 192.168.006.013:02012 - K-Frame Ethernet Ta X-Switches Other S101.2 Bus S101.2 Devices Gadgets Unused Ports	ally			
Settings Reset	Disable	New	Remove	Close

2.3.3 Expand X-Switches, Grass Valley Group, Series 7000 Controller. Click "Next"



# 2.3.4 Select "New Port"

Device		

- 2.3.5 Create the TCP/IP Port. (See Figure 2.3.5.1)
  - 2.3.5.1 Enter the Description for the Connection.
  - 2.3.5.2 Select the Type of port to TCP Outbound (Default)
  - 2.3.5.3 Enter the IP Address of the K-Frame mainframe.
  - 2.3.5.4 Enter the Port number. 12345 Specified by Manufacturer.
  - 2.3.5.5 Click "OK"

Create new Tcp/IP Po	nt			×
Description:	K-Frame Aux Bus			0
Type of Port:	<ul> <li>TCP - Outbound (2)</li> <li>TCP - Inbound</li> <li>UDP - Outbound</li> </ul>			
Remote IP Address:	192 . 168 . 6 . 13	3		
Pole.	J12340 <b>4</b>	OK	6	Cancel

2.3.6 The newly created port will be selected by deafult. Click on Finish.

Port	Device
K-Frame Aux Bus	192.168.6.13:12345 (TCP)
•	
New Port Ber	move
NewFull Le	liuve

- 2.3.7 Enter the Port Properties
- 2.3.7.1 Enter the name of the port in the Comment field.(This is optional but it will assist in the identification of the port later)
- 2.3.7.2 Select the relevant vsmStudio layer that will be used to switch the Aux busses on the K-Frame. This will be layer 1 and the value can be changed by double clicking on Layer 1 or selecting Modify on the right.
- 2.3.7.3 Click "OK"
- 2.3.8 A Green Dot in the Manage Communication Ports Window indicates a valid connection. Note : If the K-Frame has not been configured yet, you will occasionally lose connection.

Manage Communication Ports	? ×
SERVER2008 (Local)   WMDs and Monitor Splitters   Mixer   192.168.006.013:02012 - K-Frame Ethernet Tally   192.168.006.013:12345 - K-Frame Aux Bus   192.168.006.013:12345 - K-Frame Bus   193.168.006.013:12345 - K-Frame Bus   193.168.006.013:12345 - K-Frame Bus	
Settings Reset Disable New	Remove Close

- 2.3.9 Double click on the Connections and in the Attributes tab, Ensure that the settings are correct.
- 2.3.9.1 Select "Attributes"
- 2.3.9.2 Ensure "Honor Acknowledge" is set to False (Default state)
- 2.3.9.3 Label Layer is Zero, not used for Aux Bus
- 2.3.9.4 Local is False

# 2.3.9.5 Click "OK"

Port Settings		×
Port Settings	Attribute	Value
Port Properties	Honor Acknowledge	False 🕗
Port Properties	Label	0 3
Control & Trace	Local	False 4
Attributes (1)		
	*) Attributes tagged with * are valid for all configur	ations.
	OK (6) Cancel	Apply Help

- 2.3.10 Set up the K-Frame to allow Aux Bus control. (See Figure 2.3.10.1) Note : Only Aux busses that have been enabled will allow control from vsmStudio
- 2.3.10.1 Select Eng Setup.
- 2.3.10.2 Select Outputs.
- 2.3.10.3 Find the Aux Bus that you wish to control in the Physical outputs list. Note, an Aux Bus will still be controlled, even if it is not routed to a Physical output.
- 2.3.10.4 Ensure that Router Control is enabled for this Aux Bus.

Figure 2.3.10.1

Safe	Aux Src Associated Panel Disconne	cted			
Outputs	Physical Outputs	Suite	Output Na	ame	Output
	Output - 3 1 Aux 1 51	Suite1 Suite2		Aux Bus	1
Buses Source Ops	Output 2 Aux 2 S1		Restor 1	Pair	
MEs Source Ops	Output 3 Airx 3 S1		Control		
Source Definition Eng Setup	Output	Fixed Switched Au	Logical Aux Buses	3	
Ports & Devices	Aux 4 S1 Output				
Router	5 Aux 5 S1		ux 3 Aux 4 Aux 5	Aux 6 Aux 7 Aux 8	
Eng Setup	6 Aux 6 S1	Aux 10 Aux 17 Aux 18 Aux 18	x 19 Aux 20 Aux 21	Aux 22 Aux 23 Aux 24	
Eng Setup	Output 7 Aux 7 S1	Aux 25 Aux 26 Au	x 27 Aux 28 Aux 29	Aux 30 Aux 31 Aux 32	
Options Eng Setup	Output 8 Aux 8 S1	Aux 33 Aux 34 Au	x 35 Aux 36 Aux 37	Aux 38 Aux 39 Aux 40	
Clear History					
History Favorites	Eng Login SetDef Source MatchDef Definition	Outputs Ports & Switcher Devices Tally	Router ClipStore Video Config Settings	Node Install Test Options Patterns	Status Save Load Acquire Resources
eDPM SWR	User Setups File Ops	E-MEM & Macros Source Timeline Ops	ME Keyer iDPM	Wipes Copy Swap Devices	Image Store Router Eng Setup

2.3.11 You are now able to Route all enabled Aux Busses from vsmStudio.



- 2.3.12 If you wish to use K-Frame internal sources, these can be identified by selecting them in K-Frame and looking at the selected input. (See Figure 2.3.12.1)
- 2.3.12.1 Select Source Ops
- 2.3.12.2 Select AUX Busses
- 2.3.12.3 Select Fixed Sources
- 2.3.12.4 Source number is displayed.

Figure 2.3.12.1

Def Catalog	T-Line Associated Panel Disconnected			
AUX Buses		Logical Sources	Fixed Sources	Source Number
Outputs	2 2	M1 A	M1 B	701 4
MEs		M1 C	M1 D —	Filter
Source Ops		M1 pA	M1 pC	None
Definition Eng Setup	4 4 Aux Bus Transition	M1 pM	M2 A	Show All
Ports & Devices Eng Setup	OFF Trans	M2 B	M2 C	
Router		M2 D	M2 pA	
Node Sottings	6 Blk	M2 pC	M2 pM	
Eng Setup	7 Bik	M3 A	M3 B	
Options Eng Setup		M3 pA	M3 pC	
Clear History	Source Select YUV Correction RGB Correction			Lock
History Favorites	MES AUX 2 Buses Store eDPM Bus Links Source Rules Cameras			
Def       Catalog       T-Line       Associated Panel Disconnected         ALX       I       IIIA       IIIA       IIIA         Image       Image       Image       Image       Image         Outputs       Image       Image       Image       Image         Image       Image       Image       Image       Image       Image         Image       Image       Image       Image       Image       Image       Image         Image       Image       Image       Image       Image       Image       Image       Image         Image       Image       Image       Image       Image       Image       Image       Image <td>Kouter Eng Setup</td>		Kouter Eng Setup		

2.4 The Fixed Sources start counting from 701 upwards and the Iterator below can help to easily create all these Signal paths.

{M1 A,M1 B,M1 C,M1 D,M1 pA,M1 pC,M1 pM,M2 A,M2 B,M2 C,M2 D,M2 pA,M2 pC,M2 pM,M3 A,M3 B,M3 C,M3 D,M3 pA,M3 pC,M3 pM,M4 A,M4 B,M4 C,M4 D,M4 pA,M4 pC,M4 pM,Pg A,Pg B,Pg C,Pg D,Pg pA,Pg pC,Pg pM,eDA,eDAk,eDC,eDCk,Blk,Wht,Blk Key,Test 1,Test 2,Bg 1,Bg 2,IS 1A,IS 1B,IS 2A,IS 2B,IS 3A,IS 3B,IS 4A,IS 4B,IS 5A,IS 5B,IS 6A,IS 6B,IS 7A,IS 7B,IS 8A,IS 8B,IS 9A,IS 9B,IS 10A,IS 10B,TBD 1,TBD 2,TBD 3,TBD 4,TBD 5,TBD 6,TBD 7,TBD 8,TBD 9,TBD 10,TBD 11,TBD 12,TBD 13,TBD 14,TBD 15,TBD 16,TBD 17,TBD 18,TBD 19,TBD 20,TBD 21,TBD 22,TBD 23,TBD 24,TBD 25,TBD 26,TBD 27,TBD 28,TBD 29,TBD 30,TBD 31,TBD 32,TBD 33,TBD 34,TBD 35,TBD 36,TBD A,TBD B,TBD C,TBD D,TBD D,TBD PC,TBD PM}

Note that Created Logical sources can be switched too.

# This concludes the Aux Bus Connection section.

 Label transferring from vsmStudio to the K-Frame through the S7000 protocol. Note : Labels can be transferred from vsmStudio to a K-Frame or Kayenne Classic with the SMS7000 protocol. There are however a few limitations both on the vsmStudio side as well as on the GVG side.
 A Video Deuton people to Evict with Deuton Virtual on both courses qualitable.

A Video Router needs to Exist with Physical, Virtual or both sources available. These source will forward their labels to the K-Frame when routed.

# 3.1 Firstly configure vsmStudio to create labels to be sent to the K-Frame.

3.1.1 Open the Settings menu.

File Edit	Window
	🛃 🎿   × 🖆 🎁   🕢 📉 🖳 🕮 🖉 •   🗓 🌩 🤝 🖇 🎄 🎟 • 💆 🔜 🛷 🏈 🥙 🥘 🤌 🔅

# 3.1.2 Select New Layer

Matrix Properties										×
Matrix Settings	Layers	s:								
- Size and Options		Name		Port	Short	Inputs	Outputs	Mode	Туре	
Channels	01	K-Frame Aux			Aux	1000	96	1:n		
Pooling	I									
	I									
Tags	I									
System Settings	I									
End Settings	I .									
System Debug Flags	I .									
										Up
										Dn
	I .									
	I .									
	I .									
	Ne	ew Laver	Edit			Delete	.			
					_					
					к	Cancel	A	pply	+	lelp
					<u> </u>	Cancer		7997	· '	

- 3.1.3 In Layer Properties, enter the information as below. (See Figure 3.1.3.1)
- 3.1.3.1 Enter a Name for the Virtual Layer
- 3.1.3.2 Optionally, enter a description for later troubleshooting.
- 3.1.3.3 Enter the amount of inputs. This is the number of Router inputs that could potentially be routed to the K-Frame and not the Physical number of K-Frame inputs. Normally this would be the amount of sources on the Video Router (both Physical and Virtual)
- 3.1.3.4 Enter the number of outputs. This would be the number of Routable inputs of the K-Frame (Virtual or Physical) Normally this would be the number of Physical K-Frame inputs.
- 3.1.3.5 Select Virtual layer

### 3.1.3.6 Click "OK"

Figure 3.1.3.1

Layer Properties	<u>?</u> ×
Name:	Switch behavior:
K-Frame Labels 1	1:n 💌
Comment:	
Send labels to K-Frame 2	
Short: Inputs: Outputs:	Туре:
1000 (3) 192 (4)	<not specified=""> 💌</not>
<ul> <li>Show as Tab in Master Matrix View</li> <li>Virtual Layer 5</li> <li>Automation Entry Point</li> <li>Enable AutoFade Flag</li> <li>Suppress pseudo device rules for inbo Synchronize across Zone-Servers</li> <li>No 3rd Party Control</li> </ul>	ound connects
40	Cancel

# 3.1.4 The newly created Layer will now be displayed.

Matrix Properties						×
Matrix Settings	Layers:					_
Size and Options	Name	Port	Short Inputs	Outputs	Mode Type	2
Channels	01 K-Frame Aux		Aux 1000	96	1:n	_
Pooling	02 K-Frame Labels	-V-	1000	192	1:n	
PTT Settings						
- System Tally Flags						
Tags						
System Settings						
····· Logging Settings						
Debug Settings						
System Debug Flags						
						Dn
	New Lawer	t da l	Del			
				ele		
J						
		0	IK Cano	el /	Apply	Help

Click "OK"

## 3.2 Create the Signal paths that will feed the K-Fame Labels.

### 3.2.1 Select the Signal paths Icon

File	Edit	Window																						
	No.	- 📙 💑	$ \times$	Га I	ĩ   (	0	<b>⊱ !!</b>	1 🗱 🗊	? <b>-</b>	J	\$-	<b>F</b>	, 👀	÷.	•	7	147	*	•	🥐	3	3	1	옞

### 3.2.2 Right Click anywhere on the Signal paths window, select "New Signal Path"

34 Signal Paths											
🗰 Assignment 🗰 Pool Ma	naged S	ignals									
Signal Path Name	Δ	VM	Layer	Moor	Pool	Source Tag	Target Tag	Info	Fam.	Primary	Secondary 🔺
Video Router in 1			Video Router	S: 00001						Camera 1	Cam 1
Video Router in 2			Video Router	S: 00002						Camera 2	Cam 2
Video Router in 3			Video Router	S: 00003						Camera 3	Cam 3
Video Router in 4			Video Router	S: 00004						Camera 4	Cam 4
Video Router in 5			Video Router	S: 00005						Camera 5	Cam 5
Video Router in 6			Video Router	S: 00006						Camera 6	Cam 6 🚽
Video Router in 7			Video Pouter	S: 00007						Camera 7	Cam 7
Video Router in 8	New	Signal Path		S: 00008						Camera 8	Cam 8
Video Router in 9	Edit :	Signal Path		S: 00009						Camera 9	Cam 9
Video Router in 10	Assio	in to Signal Po	ool 🕨	S: 00010						Camera 10	Cam 10
Video Router in 11	Assio	n Signal Fami	lv ▶	S: 00011						Camera 11	Cam 11
Video Router in 12	Adva	anced	· •	S: 00012						Camera 12	Cam 12
Video Router in 13				S: 00013						Camera 13	Cam 13 🔤
Video Router in 14	Delei	te	Strg+X	5: 00014						Camera 14	Cam 14
All player K-Frame Aux	Shov	v Properties									
	Expo	rt selected Si	gnals 🕨								

3.2.3 Enter a Description, ensuring that your Total amount of Characters, including spaces can never exceed 8 Characters. (These will become the K-Frame inputs) All other entries are optional.

Information	E	×
Description:	KI (1-196)	
Amount:	1	
Preview:	"KF1", "KF2", "KF3", "KF4", "KF5", "KF6", "KF7", "KF8",	
Location:		
Comment:		
Signal path Family:	< No assignment > Modify	
Conflicts:		
	< Back Next > Cancel Help	

Click "Next"

3.2.4 Select the Router outputs that will feed the K-Frame Video Inputs. When using an Iterator, these would have to be consecutive outputs.

Ca	nne	ectio	าร											×
	Гуре	e of Si	gnal F	Path:	000	Stand Virtual Tie-Lir	ard Sig Signa ne	gnal P Il Path H	ath Disal ard Lo	ble:	Con <dis< td=""><td>icealed abled&gt; pty&gt;</td><td></td><td></td></dis<>	icealed abled> pty>		
í	Assij	gnmer Inou	ntors	Ignal F Signal	Path's	in- ani	d outp	uts	ame				Tupe	
		mps	<u> </u>			- Out		<u>к</u> -	Frame	Aux			турс	
			_					K-	Frame	Labe	ls			
	1		$\geq$				$\rightarrow$	Vi	deo R	outer				
				·		- /	<u> </u>				×			
	ω		1	2	3	4	5	6	- 7	8	9			
	Ξ,	10	11	12	13	14	15	16	17	18	19			
	Ħ	20	21	22	23	24	25	26	27	28	29			
	5 U	30	31	32	33	34	35	36	37	38	39			
	nte	40	41	42	43	44	45	46	47	48	49			
	8	50	51	52	53	54	55	56	57	58	59			
		60	61	62	63	64	65	66	67	68	69			
		70	71	72	73	74	75	76	77	78	79			
		80	81	82	83	84	85	86	87	88	89			
		90	91	92	93	94	95	96	97	98	99			
		100	101	102	103	104	105	106	107	108	109			
1		110	111	112	113	114	115	116	117	118	119			
-		120	121	122	123	124	125	126	127	128	129			
		130	131	132	133	134	135	136	137	138	139	el	ł	Help
		140	141	142	143	144	145	146	147	148	149			

In Case the K-Frame is not fed by a Physical Video Router, Select "Virtual Signal Path" (As in this example)

Connections	O. Standard Sign	al Path 🗖 Concea	X
rype or orginalitian.	<ul> <li>Virtual Signal F</li> </ul>	arradi <u>concea</u>	
	🔿 Tie-Line	Disable: <disable< td=""><td>d&gt;</td></disable<>	d>
		Hard Lock: <empty></empty>	
Assignment of Signal	Path's in- and output	s	
Input Signa	al Path Output	Name	Туре
		K-Frame Aux	
		K-Frame Labels Video Router	
		Video Houlei	
onts	uts		
Litin .	du		
5	Ę		
onte	ino,		
ŭ K	Ľ		
	< Back	Next > Cancel	Help

- 3.2.5 This is all that is needed here, Click on next repeatedly until it becomes a "Finish" button. Click "Finish"
- 3.3 Next we need to connect the newly created signal paths to the Virtual Router.
- 3.3.1 Open the Primary Virtual Matrix.

File Edit Window		
🗈 🔗 📕 🙏 🗡 🛍 🗂 💽 🔧 🕵	🌃 🖉 • 🗓 🤹 🤝 🗛 🚛 • 💥 🔜 🚥	i 🚜 🥏 🤣 🕄 🗿 🔌 😥

3.3.2 Select the Tabs "Layout" and vLayer K\_frame Labels (or the relevant name)

🗰 Master View	
Layout 🗰 Current الس	→•< GPI
ldentifier	Tanget 1           Tanget 1           Tanget 2           Tanget 5           Tanget 6           Tanget 6           Tanget 6           Tanget 1           Tanget 10           Tanget 12           Tanget 14           Tanget 15           Tanget 14           Tanget 15           Tanget 14           Tanget 15           Tanget 25           Tanget 26           Tanget 27           Tanget 28           Tanget 35
Source 1 Source 2 Source 3 Source 4	
Source 5 Source 6 Source 7 Sources	
Primary Virtual Matrix PL	ayer: K-Frame Aux VLayer: K-Frame Labels pLayer: Video Router

3.3.3 Select all Router Targets that are K-Frame inputs (Virtual or Physical) and Drag and drop them into the Target Columns, Starting from Target 1.



3.3.4 Do the Same for all Router Sources that could potentially be routed to the K-Frame inputs.



# 3.3.5 Select the "Current" Tab

	els																																						_		X
au Layout ## Current For GPI																																									
Lidentifier	• Ki 1	VKI 2 VKI 3	ÞKI 4	ÞKI 5	PKI 6	VII <	PKI 9	ÞKI 10	NI 11	ÞKI 13	ÞKI 14	NI 15	DKI 17	ÞKI 18	ÞKI 19	ÞKI 20	M 21	NKI 23	ÞKI 24	ÞKI 25	ÞKI 26	NI 27	ÞKI 29	ÞKI 30	N 31	PKI 33	ÞKI 34	NI 35	PKI 36 PKI 37	PKI 38	PKI 39	NI 40	N 41	ÞKI 43	ÞKI 44	NKI 45	VKI 45 VKI 47	ÞKI 48	ÞKI 49	PKI 51	<ul> <li>Targets</li> </ul>
Video Router in 1																																									
Video Router in 2																																									
Video Router in 3 🔹																																									-
Video Router in 4																																									
Video Router in 5 🔹 🕨																																									
Video Router in 6 🔹																																									-
Video Router in 7																																									-
Sources >	I.																																							•	
Primary Virtual Matrix pLa	ayer: K	<-Fra	ame	Aux	v	Laye	er: K	Fran	ne L	.abel	s [	pLa	yer: '	Vide	eo R	lout	er																							_	

Try Clicking on the Crosspoints. You should now be able to route.

# 3.4 Create a Connection to the K-Frame.

3.4.1 Open the "Manage Communication Settings" window



# 3.4.2 Select "New"

Manage Communication Po	rts			1	? ×
SERVER2008 (Local UMDs and Monit Mixer 192.168.006 UMDs and Monit Mixer 192.168.006 Umber S101.2 Bus S101.2 Devices Gadgets Unused Ports	tor Splitters .013:02012 - K-Frame Ethernet T .013:12345 - K-Frame Aux Bus	ally			
Settings Reset		Disable	New Rem	iove Close	



3.4.3 Expand the Tree X-Switches -> Grass Valley Group -> Series 7000 Controller

Click "Next"

### 3.4.4 Select "New Port"



- 3.4.5 Create the TCP/IP Port (See diagram 3.4.5.1)
- 3.4.5.1 Enter a Description for the connection
- 3.4.5.2 Select TCP Inbound
- 3.4.5.3 Do not enter an IP address (Because the Type of Port is inbound)
- 3.4.5.4 Enter the Port Number (12345 Specified by Manufacturer)
- 3.4.5.5 Click "OK"

Figure 3.4.5.1

Create new Tcp/IP Po	rt 🔉	<
Description:	K-Frame Label Transfer 1	
Type of Port:	<ul> <li>TCP - Outbound</li> <li>TCP - Inbound</li> <li>UDP - Outbound</li> </ul>	
Remote IP Address: Port:	0.0.0.0 <mark>3</mark> 12345 <b>(4</b> )	
	OK (5) Cancel	

3.4.6 The newly created port will automatically be selected. Click "Finish"

For	Devic	e	
K-Frame Label	Transfer :: 1234	5 (TCP)	
•			<u> </u>

- 3.4.7 Enter the port Properties (See Figure 3.4.7.1)
- 3.4.7.1 Enter a Comment (This comment will also be displayed in the "Manage Communications" Window.)

Po	t Properties		? ×
	:12345 (TCP)	Grass Valley Group - Series 7000 Controlle	r
	, Comment:	K-Frame Label Transfer	
_	Laver	Usage within Configuration	Modify
	01.00		
	02.00		Add Alias
	03.00		
	04.00		
	05.00		
	06.00		
	07.00		
	08.00		
	<u> </u>		
			_
		ОК	Cancel

Double Click on "Layer 1" or select it and click "Modify".

- 3.4.7.2 Enter the Layer Assignment arameters (See Figure 3.4.7.2.1)
- 3.4.7.2.1 Select the Layer Created in Section 3.1 as the layer to be used.
- 3.4.7.2.2 Select "The Attached Device is a Control-System"
- 3.4.7.2.3 Click "OK"

Figure 3.4.7.2.1

Layer Assignme	ent				×
Layer:	Controlling V 002 - K-Fran	M Layer: me Labels (100	0 x 192)	1 -	ок 3
, Direction:	◯ The Atta ⓒ The Atta	ched Device is ched Device is	: a Router : a Contol-Syste	em <mark>2</mark>	Cancel
Sources:	Minimum:	Maximum:	Offsets:	NOTE: Zeros indicate defa do not change with	ult behavior, out reason.
Targets:	0	0	0		



3.4.7.3 The letter "C" indicates that this port is connected to a Control System

Click "OK"

3.4.7.4 The Manage Communications Window will now display the newly created connection and the Symbol displayed indicates that vsmStudio is listening on Port 12345.Because the connection is inbound, vsmStudio will open this port but wait for a connection from the K-Frame.

Once the K-Frame initiates communication, this communication will be bi-directional and vsmStudio can send label information to the KFrame.



Note : You won't get a confirmation with a green dot for an inbound connection.

# 3.5 Set the Attributes for the connection.

3.5.1 Select the Label transfer connection. Click on settings or Doubleclick on the connection.

Manage Communication Dents		2 2
Manage Communication Ports		
SERVER2008 (Local) UMDs and Monitor Splitters Mixer 192.168.006.013:02012 - K-Frame Ethernet To 192.168.006.013:12345 - K-Frame Aux Bus 12345 (TCP) - K-Frame Label Transfer Other S101.2 Bus S101.2 Devices Gadgets Unused Ports	ally	
Settingen Percet	Diashla   Naw   1	
Settings Reset		

- 3.5.2 Select "Attributes. (See Figure 3.5.2.1)
- 3.5.2.1 Ensure Honor Acknowledge is set to False
- 3.5.2.2 The label setting selects the layer of labels that you wish to forward to the K-Frame Note : DO not use layer 4 (Mixer) because this layer is limited to 4 characters for older mixer types with 4 character limit.
- 3.5.2.3 Ensure the Local setting is set to "False"
- 3.5.2.4 Click "OK"

Pa	ort Settings		×
	Port Settings Port Properties Control & Trace Attributes	Attribute     Value       Honor Acknowledge     False       Label     0       Local     False	
		*) Attributes tagged with * are valid for all configurations.	
		OK Cancel Apply Help	

3.5.2.5 Repeat these steps on all servers in the cluster.

Note : K-Frame supports label transfer only on 2 connections at the same time.

- 3.6 <u>Setting up the K-Frame to accept incoming labels from vsmStudio</u> Use the K-Frame menu screen. (See Figure 3.6.1.1)
- 3.6.1 Select "Eng Setup"
- 3.6.2 Select "Router"
- 3.6.3 Enter the IP Adress of the vsmStudio Primary Server A Green Dot indicates valid communication.
- 3.6.4 Enter the IP address of the vsmStudio Secondary ServerA Green dot indicates Valid Communication.Note : Only one server will connect and display a Green Dot.
- 3.6.5 Click on Add
- 3.6.6 A list of Names sent from vsmStudio will populate the Router Sources Section. These are the names of the vsmStudio Router sources that are available on the relevant K-Frame Labels Layer.
- 3.6.7 Note : Empty router Sources will be displayed as ??and 4 Digits with an offset of 1.
- 3.6.8 Note : Only Labels that are 8 Characters or less will be displayed here (Camera 1, Camera 10, Camera 11 will all be displayed as Camera 1 and displayed a single time only. They are, however available to be used in the protocol and can be renamed at a later stage)

This list is populated and updated at initial connection only and will not be updated until the connection is broken and fully restarted.



Figure 3.6.1.1.

3.7 Associating vsmStudio Targets (Router out) to K-Frame inputs.

Use the K-Frame menu screen. (See Figure 3.7.1.1)

- 3.7.1 Select Eng Setup
- 3.7.2 Select Seource Definition
- 3.7.3 In the Source List, select the First Routable K-Frame input (or Virtual if doing Label Transfer only)
- 3.7.4 In "Source Type", select Router
- 3.7.5 Click on Router Destination. A list of Router Destinations (sent from vsmStudio) will appear.
- 3.7.6 Select the relevant Router Destination from the list. (Figure 3.7.5.1) Repeat the above steps for all routable inputs.





Figure 3.7.5.1



# 3.8 Verify Valid Name Transfers

Use the K-Frame menu screen (See Figure 3.8.1.1)

- 3.8.1 Select Router
- 3.8.2 The Router Sources list will Populate with all accepted names that have been transferred from vsmStudio.
- 3.8.3 All K-Frame Sources that have valid Router connections will be displayed in the Router Destinations section.



Src Patch Catalog	T-Line Associated Panel Disconnected				Frame Op Mode 1080i 29.97Hz : Ref Sync 1080i 29.97Hz					
Control	Router Destinations <sup>3</sup>	R-MEM			Router Sou	irces 🙎			Router Source	
Router	Switcher Source 1 Destination: KI 1 Source: Camera 20	Enable			??0987	??0988	??0989		980	
Definition Eng Setup					??0990	??0991	??0992			
Suite Prefs User Set	Switcher Source         2           Destination:         KI 2           Source:         Camera 2	Enable			??0993	??0994	??0995			
Panel Prefs	Switcher Source 3				??0996	??0997	??0998			
Status	Destination: KI 3 Source: *	Enable	Router Protection	tection Off	??0999	Camera 1	Camera 2			
Eng Setup Router	Switcher Source 4 Destination: KI 4		Protection Off De	All	Camera 3	Camera 4	Camera 5			
Eng Setup Switcher Tally	Source: *	Enable	Protection On De	tection ON All estinations	Camera 6	Camera 7	Camera 8			
Eng Setup Node Settings				On Air	Camera 9	Camera20				
Clear History			On Air Protection De	All		Camera20			Lock	
								Contra		
History Favorites								Contro	R-MEM	
eDPM SWR	User Setups File Ops	E-MEM & Timeline Macros	Source Ops ME	Keyer	Wipes	Copy Swap De	vices Image Store	Router	1 Eng Setup	

NOTE : All name changes require routing of the destination to change in vsmStudio. The connection will only be made from K-Frame to update names after the status of the routed crosspoint has been changed.