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TRANSCAST SPLICER V3

CONFIGURATION GUIDE V3

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Revision History

Version	Date	Notes
V1	19 th May 2015	First release
V2	2 nd November 2015	Updated for Splicer v3.6
V3	7 th December 2015	Updated for Splicer v3.7

Introduction

This document explains the steps necessary to configure a splicing system, via the Splicer Manager Configuration tool. It assumes the installation process is complete already.

The Splicer Manager holds the configuration for the entire system, apart from the Automation Server Configurations, which are set up separately. Automation Server configurations are only required where an external automation system is directly controlling the splicers – rather than using SCTE-35 in the incoming transport stream.

Splicing System Overview

The splicing system has 2 main components:

- Splicer Manager
- Splicer Client

Splicer Manager

The Splicer Manager runs the Splicer Manager Service and (optionally) the Automation Server service. It will usually also run some of the basic set of ProTask services (PC Manager Service, Purge Service, Email Service and File Delivery Service).

The Monitoring system and Web GUI are also often hosted on the Splicer Manager PC. These runs as an IIS web application and website. The web application supports the API (documented separately).

The Splicer Manager Service manages all runtime aspects of the system and reports status to the monitoring system.

Splicer Client

The Splicer Client runs the Splicer Client Service and a set of three services for each instance (splicer engine, automation client and playlist delivery manager). The Clients are usually installed with 20 instances available.

It also runs several ProTask services (PC Manager Service, Purge Service).

Most of the Starfish services are written so that the same EXE can be installed a multiple times as a service – each one with a separate service name.

Splicer Instance

Each instance can take in up to 2 TS inputs and will automatically failover between them. It can also deliver up to 2 TS outputs and one SDI output.

The screen shot from the web GUI below shows a dual input and dual output configuration – running in active-passive mode on a pair of splicer clients.



The name of the instance is shown above the outer box (Test 1 Opt 2).

The active input is shown in dark green. The inactive is pale green (or grey if status unknown and red if missing). The arrows on the left allow a user to select the active input.

The three services are shown as running inside each box (representing a client). The top box is the A client. If the service names are green, then the services are running.

The green ticks on the TS inputs and outputs show that there are valid network connections on those physical NICs.

The blue text, shows the current state (splicing or pass-through). The purple text shows the current mode (manual or automatic mode). In manual mode, the web GUI is used to control the operation via the PLAY and STOP buttons between the two client boxes.

The output is also dual and the A Clients active on both of the signals. The arrows can be used to switch the active client from A to B.

The signal lines show the multicast and the friendly name for the signal (defined in the per-instance settings).

The SDI output is shown as a purple line and is always active from both clients (assuming they have SDI cards installed). The number in brackets is the port used by this instance on the SDI card.

Splicer Engine Service

This is the main workhorse. It is a real-time splicing process for a single transport stream. The engine takes in a stream, processes it (driven by the automation client service) and delivers the output. It handles auto-failover of the input signals. The processing stage is the loading and playing of playlist files and splicing the media content into the stream in place of some, or all, of the input data.

Automation Client Service

This service controls the splicer in several aspects:

- Receiving external Automation Commands from the TransCast automation Server Service (if in use) and driving the splicer engine service.
- Processing embedded automation commands (SCTE-35) in the input TS and driving the splicer engine service.
- Receiving external User Commands from the web GUI (if in use) and driving the splicer engine service.
- Managing the active/passive failover (if enabled) between the A and B clients for the given instance. The Automation Client runs a TS monitor process to provide this functionality

Playlist Delivery Manager Service

This service integrates with Tessera to collect playlists and media files – and to return receipts and as-runs. It can also insert instance specific PID-mapping details to the playlists.

Configuration Tool

When you start the Configuration Tool, you will see the initial screen below.

٩	TransCast Splicer Manag	er Configuration Tool 🛛 🗕 🗙
<u>F</u> ile	<u>H</u> elp	
	TransCast PC Settings TransCast Splicer Manager	Configuration Restart Service
	Check License	License not checked
	Validate Config	

Check License

This button will verify the presence of a Starfish DK2 dongle and will also check that the dongle contains sufficient licenses to run the current configuration.

Restart Service

Once you have edited the configuration, this button will save the changes and restart the Splicer Manager service on the local PC. This will apply any changes in the configuration – but only as far as the Splicer Manager. Any already running Splicer Clients and Splicer instances will need restarting (via the web GUI) to have the changes applied.

Validate Configuration

This option is not yet released – it will run a QC check on the configuration in an attempt to identify any inconsistencies or missing items.

Some checks are run automatically in the configuration whenever the user edits it. The most important one of these is the check for duplicate multicast outputs.

General Configuration Screens

There are a number of general configuration items that appear in multiple places in the Splicer Manager configuration and other Starfish product configurations. These are documented in this section.

Help menu – About

The Help | About screen (below) shows the product version number and also allows you to see any installed Starfish product licenses available from the PC you are running the configuration tool on. The tool does not require a license to run.

Note that the License Details shown below are specific to the current application and not a full list of Starfish licenses available on the current PC. In order to see the full list of licenses, click the View Licensed Starfish Products button.



Starfish Licensed Products

Clicking this button brings up the screen below – it is accessible from most Starfish configuration tools and applications.

×	Starf	ish License Viewer		×
<u>F</u> ile				
⊿D¥ DK2 Dongle		Details:		
🖳 🔟 TransCast Stream Monito	r (v2)	DUSN: 107 4 67		
TransCast Automation Se	rver (v:			
TransCast Automation Cli	ent (v3]	Storage Version: 4	Export License File	
TransCast Splicer (v3)			Cours Contour Dataila to Tout	-1-
ProTask PC Manager (v3)			Save System Details to Text I	File
Advantage File Converter	er (V3) r (v7)			
Isis Subtitle File Converte	on Serv	Parameter	Value	
Isis Subduc File company Isis Subduc File company	on serv	Major Version	3	
Tessera Plavlist Server (v	7)	Sub-Type	4	
Tessera Media Server (v7	กั่	Expiry Date	Expiry Date Not Set	
		License Type	Standard	
		Max Num Splicer Service	es 4	
		HD Option	disabled	
		Dolby Option	disabled	
		Frame Accurate Option	disabled	
		Transcode Option	disabled	- v
<	>	<	16 11 1	>
System Information	_			
Windows 8 x64 (v6 2) Build 9200				
Processor: 4-core 64-bit "Intel(R)	Core(TN	() i7-4600U CPU @ 2, 100	GHz"	
Total Physical Memory (KB): 4193	780 Perc	ent in use: 50%		
Windows Media Player Version: 12	2.0.9600). 16384		
Quicktime Player not found				
			 ✓ 	ок

Details of the current DK2 dongle are shown at the top right. Starfish support may ask you to export your license details using the one of the two buttons in this section.

Click on each licensed product to see further details on the lower right side.

DUSN: Device Unique Serial Number (an internal unique number for each physical dongle – different from the serial number printed on the outside of the DK2).

Storage Version: The format that the license information is written to the dongle. Some older products use v2, all current products use v4.

System information: This section shows some details about the PC that the application is running on.

File Menu: It is possible to upgrade a product license remotely. In this case, you will be asked to send your license details to Starfish (using the Export License File button and emailing the file). Starfish can process this and send back an update file, which you can apply using the Process License Upgrade File item in the File menu.

TransCast PC Settings

Each product family uses a single configuration file, which exists in a fixed location on the local PC. This file has one main purpose – to tell all the applications and services from the product family where to look for their specific configurations (for example, on some central location). In most cases, however the product settings file and the application-specific settings exist in the same folder.

The **Settings Folder** is the most important field and is set automatically, as shown below. Do not edit this value unless you are moving all the other settings for this product family to another location.

Property Editor	- 🗆 ×
TransCast PC Settings	
Settings Folder	
C:\ProgramData\Starfish Technologies Ltd\TransCast1	Browse
Local Encoder Bin Folder	
	Browse
Device Type Splicer Manager Server	
	✓ OK X Cancel

Local Encoder Bin Folder is required on some encoder products, and should be set to the folder where the playlist exe file is located.

Device Type is just informational and does not need to be set for any current products.

Logger Settings

Most Starfish applications and services create text log files. You will find the same logger settings screen in most of the individual service configuration files. It is documented below.

The logger settings node in the configuration defines what will be logged, where it will be logged and what the logs will be called.

Logger Settings ✓ Logging Enabled Log File Folder C:\Test\Tessera\Logs		Enable OutputDe	bugString (Adva: s frames (based	anced) d on 25 fps) Browse
✓ Include PC name in Log Log Filename Prefix T7_MSQ	g Filename	Include Process I Source Name (for W	ID in Log Filenam Indows Event Lo	ne og - blank to disable WEL)
Email Log Entries - Only p Email Enabled Email File Delivery Folde	oossible if you have a Sta Email Title Prefix er Bemail Warnings	arfish ProTask Email	Service running	Browse ation Failures
Event Types To Log Error Events Warning Events Hints Debug Events Information Events	 Start - Stop Events License Events Configuration Informa Select All 	 ✓ Database ✓ Media Event ✓ File Read/ ✓ Transmission 	Events nts Write Events on Events	 Report Data Operation Sucess Events Operation Failure Events Clear All

Logger operation

The log filename will be made up of the following components where <xxx> is compulsory and [xxx] is optional.

<Log Filename Prefix>_[PC Name]_[Process ID]-<date YYYYMMDD>.log

A log file will be for created each day that an entry is created. If, when a new entry is created, there is no log file for the current day, it will be created. Each new log file automatically has a header section added to it which describes the application and environment. An example is below.

New Log File Started Computer Name: STARFISHDEV-VM OS: Windows 8 x64 (v6.2) Build 9200 Software Version: 2.2.4.126 Software Exe: C:\Program Files\Starfish Technologies Ltd\ProTask\ProTask_PCManagerService.exe Username: Splicer

ProcessID: 3700

Log Entries

Log entries are created with the following tab-delimited format.

<time> <Thread ID> <Entry type> <entry ID - unused> <Windows user> <entry text>

Example:

12:38:37.928 4856 Info 0 Splicer Completed Tasks successfully

Logger Settings

Logging Enabled

Check this box to enable log creation.

Log File Folder

The location where log files will be stored. This should normally be subject to maintenance by a ProTask Purge service or similar arrangement to delete files over a certain age.

Enable OutputDebugString

Check this to deliver log entries to the Windows Debug environment we well as to the log file.

Log Milliseconds as Frames

Log entries each have a timestamp (to the nearest millisecond). Check this box to write the millisecond values as PAL frames (eg: 01:00:00.400 becomes 01:00:00:10)

Include PC Name in Log Filename

Check this to include the PC name in the log filename.

Include Process ID in Log Filename

Check this to include the PC name in the log filename. Use this were multiple Windows processes on the same PC use the same configuration, but you want separate log files from each process.

Log Filename Prefix

This string will be added to the start of each log filename. It is used to differentiate between logs from different applications and services in the same location.

Source Name

If you put text in this field, logging to the Windows Event Log will be enabled. Error and warning entries will be added to the Windows Event Log using the text in this field as the source name. Note that the user account used to write the logs will need sufficient rights to create a new Windows Event Log Source for this to work.

Email Log Entries

This section allows certain log entries to be written to an additional location as XML files. These will be ingested by the ProTask Email Service (if installed) and sent as email and/or SMS.

Event Types to Log

Each log entry has an event type. This is an indication of the content type and severity of the message. You can select which entry types you want to log to the output(s).

Configuration Lists

Some configuration items are defined as extensible lists. This is often the case with database settings. The user can create a list of items using a generic list manager screen as shown below.

t Item Name	Remote Playlist Databases	List Type	
Items	-		
Add	Name		Value
Edit	Database Settings		
Delete			
Duplicate	1		
Move Up			
Move Down	1		

Comm Server Configuration

The screen below is included in certain configuration files. This configures a TCP/IP server socket that will be connected to by other processes to exchange status and control information.

If it is not used, the configuration should be left with the port set to -1, as shown.

riunder	Description
dvanced	
Data Send Timeout (ms)	Send Delay Warning (ms)
10000	5000

Comm Client Configuration

This configuration sets up the other end of the TCP/IP connection. This does not normally need to be set manually – it will be populated by the relevant service at run-time.

A Comm Server and Comm Client will communicate using fixed size packets over TCP/IP. There is an automated heartbeat process that runs between them.

Heartbeat Interval in ms (zero = no heartbeats)
30000
Server Description
Enable Address 2
Maximum heartbeat response interval (ms)
300000

Examples of the use of this connection are:

- Splicer Manager to ProTask PC Manager
- Splicer Manager to the Monitoring web service
- Splicer Manager to the splicer instance Automation Client Services

Delivery Parameters

File transfer in TransCast is often done via FTP. In this case the FTP settings are usually defined via a Delivery Parameters screen, as shown below.

Location Name		Locatio	n Description	
HD Root Tx folder				
Delivery Mechanis	m			
FTP		~	Zip Files	✓ Use temp name while delivering
TP server name / a	ddress	Port		
127.0.0.1		41	 Preserve File D 	Date Time (get and put)
TP server name 2/a	address 2	Port 2		
		21	Enable Server	2
Jser name	Password		_	
Tessera	•••••		Use Last Activ	e Server by default (leave clear to always try server 1
			Delay befo	re switchback attempted 00:30:00:00
-TP Folder				
/				
Active Mode FTP	(leave unchecked for	passive mode)	Enable Server 2 and collection scenarios v These features do no specific destination s	Use Last Active Server are designed for use in FTP where files can be sourced from one of a pair of locatio ot fit an FTP send role where files must be deliverd to a et. In this case, add a separate single-server FTP

Delivery Mechanism sets the delivery transport. These settings can also be used to define file delivery by Windows copy (to a UNC or local location) and SMTP email. In each case, an appropriate configuration details tab is shown.

Select **Zip Files** to zip the file(s) before sending. The zip filename will be a numeric value (e.g. 1223.zip). This option is normally only used when file delivery is part of a wider system that includes setting the zip filename according to a deterministic value.

Select **Use temp name while delivering** to send the file with a temp name and rename it at the far end. This stops a partial or corrupted file ending up at the remote location with the original filename – which might proceed further into a workflow and cause problems.

FTP Tab

The FTP tab shows the server details and destination folder. The system supports a failover between 2 FTP servers, but only when collecting files, rather than sending them.

FTP server name is the primary FTP server.

Port is the IP port used to communicate with the primary FTP server.

FTP server name 2 is the optional secondary FTP server – used in FTP collection, rather than delivery.

Port 2 is the IP port used to communicate with the secondary FTP server.

Select Enable Server 2 to use the secondary server.

Username and Password must be the same on both servers.

FTP folder is the root folder

Active mode allows the user to select active or passive FTP.

Preserve File Date Time will set the file modified date after transfer to be the same as that of the source file, rather than the transfer time. This must be enabled when comparing local and remote copies of a file to see if one is newer.

Use Last active server is a control option when using server 2. It controls whether the system attempts to collect from server 1 each time, or whether it remains on the last good server for the Delay period before trying again.

File Copy Tab

This is simpler than the FTP screen and just allows specification of a list of **Destination Folders** (one per row).

elivery Parameters			
Location Name	Location Desc	ription	
Delivery Mechanism			
file copy	~	Zip Files	✓ Use temp name while delivering
Copy			
. сору			
estination Folder(s) - one per row			
estination Folder(s) - one per row			^
estination Folder(s) - one per row			^
estination Folder(s) - one per row			^
estination Folder(s) - one per row			

Splicer Manager Configuration

Overview

When setting up a new splicing system from scratch, we recommend the following approach.

- Set up the general splicer manager items (FTP, Tessera integration etc)
- Set up the first splicer client (or client pair)
- Configure the first instance this is a time-consuming process.
- Run up the system and verify that the opt is working as expected end-to-end
- Then use the Add New Instance Helper button on the Splicer Client configuration screen to copy and modify the known good opt with the details for each subsequent opt.

Splicer Manager Configuration Screen

When you click on the Splicer Manager Configuration button, you are presented with the screen below.

0	Property Editor: Splicer Manager Configuration – 🗖 🗙
Spicer Manager Configuration Spicer User Servers Spicer Servers Spicer Service Instances Comm Server Config Server Config Server Config Server Service Spicer Service Sp	Splicer Manager Configuration Secription Client Control Port Client Control Port 2 PCM Packet Version (Advanced) 30057 Splicer Manager Operation Local Folders and Delivery Config Tessera Interface Imager Description Splice Tessera Integration Manual Command Timeout (s) 6 5 7 Maximum Splice Event Duration 13:00:00 13:00:00 Timeout Multiplier (before active-active checks) 3
	Apply
	V OK X Cancel

Logger settings should be set as described earlier in this document. The normal Log File Prefix is SM.

Comm Server Config should have the port set to 30058

Comm Client Configuration (shown in tree as 127.0.0.1) should be left with the default values (port = -1).

Click **New ID** if the Splicer Manager ID is all zeros, or if the configuration has been copied to a new server, otherwise leave it unchanged.

Client Control port must be set to 30057. This is used to communicate with ProTask PC Manager services.

Client Control Port 2 is usually 30060, but can be changed. This is used to communicate with Automation Client services – but this value is placed in the configuration files for these services, so the splicer manager controls the port for both sides of the connection.

PCM Packet Version must be 2. This dictates the size and structure of the data packet sent between splicer manager and the ProTask PC Manager services.

Splicer Manager Operation Tab

This tab contains some basic operational settings for the Splicer Manager.

Enable Tessera Integration controls the playlist delivery manager configuration – with values taken from the Tessera Interface tab.

Manual Command Timeout and **Splice Event Timeout** control are not implemented yet, but will be used to raise warnings when the splicers do not respond in a timely manner to the external or manual splice commands.

Maximum Splice Event Duration is the duration of a splice event after which an error will be raised. The splice event will not be stopped/overridden.

Check **Disable Active-Active and Passive-Passive** to stop Splicer Manager trying to identify Active-Active and Passive-Passive errors. These are only relevant to installations with pairs of splicer clients and Active/Passive configuration enabled on those clients.

Timeout Multiplier is a multiplier for the TS Monitor Timeout value (set at the Splicer Client level). The resulting value will be used to trigger active-active and passive-passive checks. So if the timeout is 2000ms and the multiplier is 3, then 6 seconds if the time after each reported status change, that splicer manager will react to an active-active or passive-passive state.

Local Folders and Delivery Config Tab

This tab contains settings for the splicer manager file storage and the FTP details for the remote clients, from where they can collect their configuration files.

Splicer Manager Operation Local Folders and Delivery Config Tessera	Interface
Local Paths	Enable FTP delivery (leave unchecked for UNC copy via CIF share)
Email Folder (correctly formatted files placed here will be emailed)	Active FTP Enable Address 2
E:\TransCast\FTP\Email	Browse Local FTP Server Address Local FTP Server Address 2
Local Path to Task Folder	10.253.250.195
E:\TransCast\FTP\Tasks	FTP Port FTP Port 2
Local Folder for Device Log File Storage E:\TransCast\FTP\Log	21 21 FTP User Name SVC-APP-TRANSCAST
Folder for Status xml files	FTP Password
E:\TransCast\FTP\Status	CrZ2hffNgS
Remote Paths (FTP folder or full UNC)	✓ Preserve file date and time Backup Splicer Manager
Remote Folder path for Task and Config Files	Monitor Backup Splicer Manager
Remote Folder for Device Log File Storage (Log	Backup Splicer Manager Address

Select **Enable Email** if you want error log entries to be emailed. The email will be delivered by the ProTask Email Service, which must be installed, configured and licensed separately.

The Email Folder is the location where the ProTask Email Service will look for files to email.

The **Local Path to Task Folder** should be set to a location within the FTP. The splicer manager will create a folder for each device (PC) under this location. Task files for each device will be placed in these folders for collection by the devices over FTP.

Local Folder for Device Log File Storage is similar to the item above – a set of per-device folders will be created here and logs from the devices will be stored here when returned.

Folder for Status Xml Files is again similar to the above. The Splicer Manager can create status snapshot XML files here. It also creates a sub-folder called FIFOBuffer where it stores graphs and XML files of the output FIFO buffer values (for Dektec ASI and IP outputs only).

Remote folder for Task and Config Files is the remote path to the same location entered in the Local Path to Task Folder. This will be sent to remote clients to allow them to collect files written by Splicer Manager into the folder (it uses the local path setting to write).

Remote folder for Device Log File Storage is the remote path to the same location entered in the Local Folder for Device Log File Storage. This will be sent to remote clients to allow them to deliver their log files back to Splicer Manager.

Select **Enable FTP Delivery** if the **Remote Paths** section refers to FTP locations rather than UNC paths to shared locations.

Select Active FTP use to use Active FTP, clear for Passive.

Select **Enable Address 2** if there is a fallback location for the FTP site. This is normally a separate NIC on the same Splicer Manager server, and not a backup splicer manager – as there should only be one splicer manager active at a time. So this is for network resilience rather than manager resilience.

Local FTP server address is the IP address or Name for the server that hosts the locations referenced on the left of the screen – usually the local Splicer Manager server.

FTP Port is the IP port used by the FTP server. Default is 21, but if TransCast and Tessera FTP sites are separate, but hosted on the same server, then one will need to use a non-default port.

Local FTP Server Address 2 is the alternative IP address or Name for the server that hosts the locations referenced on the left of the screen – usually the local Splicer Manager server.

FTP Port 2 is the IP port used by the FTP server 2 (if used). Default is 21, but if TransCast and Tessera FTP sites are separate, but hosted on the same server, then one will need to use a non-default port.

FTP User Name is the account for remote clients to use when accessing the FTP site. It must have read and write access to the FTP site (and to the underlying Windows folders).

FTP Password is the password for the above account.

Select **Preserve File Date and Time** to set the file modified timestamp after an FTP transfer to the same value as the source file. This is required in most cases where the timestamp is used to detect file updates.

Monitor Backup Splicer Manager is not currently enabled. When activated, it will maintain a heartbeat check on the PC Manger service on a remote server and warn when the connection is lost. It is intended that the remote server is the backup splicer manager. This feature should be used in conjunction with the email warning feature – or an extension of the current API error codes to show the disconnection.

Tessera Interface Tab

This section defines the location of the Tessera data folders for media files, playlists, as-runs and receipts.

Splicer Manager Operation Local Folders and	Delivery Config Tessera Interface		
FTP path to Tessera Root Folder (playlists, /Splicer FTP path to Media Folder /Splicer/TxMedia FTP path to Rescue Media Folder /Splicer/TxMedia/Rescue	as-runs and receipts)	 ✔ Active FTP Tessera FTP Server Address 192.168.23.221 FTP Port 41 FTP User Name Tessera FTP Password t3553ra ✔ Preserve file date and time 	Tessera FTP Server Address 2 192.168.23.21 FTP Port 2 41

FTP path to Tessera Root Folder is the location under which all Tessera data is stored. The data structure under this folder should look like the example below:



In this example, T1O1 and T1O2 are the Region Idents for the two Tessera Channel Regions (which must be identical to the corresponding splicer Instance Idents in the Splicer Manager configuration (see later).

FTP Path to Media Folder is the location where the media content is stored. The system assumes a single location for all content.

FTP Path to Rescue Media Content is the location where any rescue or evergreen media content is stored. This must also be defined on a per-instance basis in the Splicer Manager configuration (see below).

The FTP section is a subset of the TransCast FTP section found in the Local Folders and Delivery Config tab. The values refer to the Tessera FTP site.

Select **Active FTP** use to use Active FTP, clear for Passive.

Select **Enable Address 2** if there is a fallback location for the FTP site. This is normally a separate NIC on the same Splicer Manager server, and not a backup splicer manager – as there should only be one splicer manager active at a time. So this is for network resilience rather than manager resilience.

Tessera FTP server address is the IP address or Name for the server that hosts the Tessera data.

FTP Port is the IP port used by the FTP server. Default is 21, but if TransCast and Tessera FTP sites are separate, but hosted on the same server, then one will need to use a non-default port.

Local FTP Server Address 2 is the alternative IP address or Name for the server that hosts the Tessera data.

FTP Port 2 is the IP port used by the FTP server 2 (if used). Default is 21, but if TransCast and Tessera FTP sites are separate, but hosted on the same server, then one will need to use a non-default port.

FTP User Name is the account for remote clients to use when accessing the FTP site. It must have read and write access to the FTP site (and to the underlying Windows folders).

FTP Password is the password for the above account.

Select **Preserve File Date and Time** to set the file modified timestamp after an FTP transfer to the same value as the source file. This is required in most cases where the timestamp is used to detect file updates.

Splicer Client Configuration Screen

The splicer client screen defines a splicer server, or pair of splicer servers that will be operated in a mirrored 1+1 arrangement.

Property Editor: Splicer Manager Configuration	ation – 🗆 X
Splicer Manager Configuration Logger Settings Splicer Clent Servers Splicer 1 Logger Settings Splicer Service Instances V · Test 1 Opt 1 Starfish Test Rig 1 Selver Configuration Splicer Configuration	Splicer Client Service Configuration Description Splicer 1 Client Location Location Name Location Latitude 0 0
Comm Server Config Splicer Groups Comm Server Config (127.0.0.1) Central Log Delivery	Input Switch Timeout (ms) TS Monitor Timeout (ms) Active-Active redundancy (dear for active-passive) 1000 5000 Imput Switch Timeout (ms) TS Monitor Timeout (ms) 5000 Inter-Instance Startup Pause (ms) NIC check interval (s) 3500 10
	Client Description Main Multicast Input NIC Backup Multicast Input NIC Splicer A 192.168.34.21 192.168.34.21 Client IP Address Main Multicast Output NIC Backup Multicast Output NIC 192.168.34.21 192.168.34.21 Igle Enable Client Service Name Main Automation NIC Backup Automation NIC TransCast_SplicerClient 192.168.34.21 Igle Enable Client ID {F09B1531-FD2C-4EB1-87BC-C28942056000} New ID A Multicast Input NIC is Dektec A Input is ASI (configure per instance) SDI Output Card Installed Default Root folder for content (for all instances) C:\TransCast SDI Output Card Installed Add New Instance Helper Export Client Config to File

The **Description** is just shown in the tree on the left of the configuration, and not displayed at run time.

Client location is not in use yet. In the future, it may be able to dynamically generate a map showing splicer locations – for a physically distributed installation.

Select **Active-Active redundancy** to push the output from both A and B clients simultaneously. This is normally selected with either ASI outputs, or where the downstream systems support IGMP v3 (source-specific multicast). Disable this and select **Enable TS Monitors** to enable an auto-failover between the A and B clients so that the passive one monitors the active one and turns itself active if it detects an outage for more that the value in the **TS Monitor Timeout** field.

Input Switch timeout is the allowed outage on the active input before the system will switch to the alternative input (if configured and present).

TS Monitor Timeout is the allowed outage on the output stage in Active-Passive mode before the passive side will become active and start delivering the output signal.

Inter-instance Startup Pause is the delay applied by the Splicer Client service between each instance as it is starting the 3 services for each instance. This is to reduce loading spikes that would occur if all services were started back to back with no throttling.

NIC Check Interval is used in the Splicer Client service to check that the specified and enabled input, output and automation NICs are connected. The connection state is reported the Splicer manager and visible in the web GUI.

Primary Client (A) Tab

This defines the main splicing server.

The **Client Description** will be seen in the monitoring web GUI (when you hold the mouse over an instance in the tree, there is a popup which shows which splicer client it is running on).

Client IP address is the IP address for the client over which communication with the Splicer manager will be carried out.

Client Service Name is the service name of the Splicer Client Service installed on this server.

Main Input Multicast NIC is the IP address of the NIC that will receive the primary input multicast (or the only input multicast if there is no input redundancy). This is not required for ASI inputs.

Backup Input Multicast NIC is the IP address of the NIC that will receive the backup input multicast. This is not required for ASI inputs.

Main Output Multicast NIC is the IP address of the NIC that will deliver the primary output multicast (or the only output multicast if there is no output redundancy). This is not required for ASI outputs.

Backup Output Multicast NIC is the IP address of the NIC that will deliver the backup output multicast. This is not required for ASI outputs.

Main Automation NIC is the IP address of the NIC that receive automation multicasts from the Automation Server service. This is often the same as the Client IP Address. This is not required for SCTE-35 or other embedded automation types.

Backup Automation NIC is the IP address of the alternative NIC that receive automation multicasts from the Automation Server service. This is often the same as the Client IP Address. This is not required for SCTE-35 or other embedded automation types.

Client ID must be unique for all clients managed by a single splicer manager.

A Multicast Input NIC is Dektec (new) should be set if the Main Input Multicast NIC is a Dektec IP port.

A Multicast Output NIC is Dektec should be set if the Main Output Multicast NIC is a Dektec IP port.

A Input is ASI should be set if the A input port is a Dektec ASI port, rather than an IP multicast.

A Output is ASI should be set if the A output port is a Dektec ASI port, rather than an IP multicast.

SDI Output Card Installed should be selected if there is a Dektec SDI output card and SDI outputs are licensed and configured. The port on the card to use for each output is configured in the per-instance screens.

The **Default Root Folder** is the location on the splicer where playlists and media should be stored. A folder set will be created under this location for each instance on the client.

Primary Client (B) Tab

If there is a second (mirror) client, this is defined in the secondary client tab, as shown below:

B Client Description	Main Multicast Input NIC	Backup Multicast In	put NIC	
Stage Splicer B	192.168.34.20	192.168.34.20	🗹 Enable	
B Client IP Address	Main Multicast Output NIC	Backup Multicast Ou	utput NIC	
192.168.34.20	192.168.34.20	192.168.34.20	🗹 Enable	
B Client Service Name	Main Automation NIC	Backup Automation	NIC	
TransCast_SplicerClient	192.168.34.20	192.168.34.20	🗹 Enable	
B Client ID {9CA457DF-620E-4F3	2-AC8B-333E1CB8A4E4}	New ID		
B Multicast Input NIC is Dektec	B Input is ASI (configure per in	istance)		
B Multicast Output NIC is Dektec B Output is ASI (configure per instance) SDI Output Card Installed				

Select **Enable Mirror Client** if you have a pair of mirrored servers for the set of instances defined under this client.

The **B Client Description** will be seen in the monitoring web GUI (when you hold the mouse over an instance in the tree, there is a popup which shows which splicer client it is running on).

B Client IP address is the IP address for the client over which communication with the Splicer manager will be carried out.

B Client Service Name is the service name of the Splicer Client Service installed on this server.

Main Input Multicast NIC is the IP address of the NIC that will receive the primary input multicast (or the only input multicast if there is no input redundancy). This is not required for ASI inputs.

Backup Input Multicast NIC is the IP address of the NIC that will receive the backup input multicast. This is not required for ASI inputs.

Main Output Multicast NIC is the IP address of the NIC that will deliver the primary output multicast (or the only output multicast if there is no output redundancy). This is not required for ASI outputs.

Backup Output Multicast NIC is the IP address of the NIC that will deliver the backup output multicast. This is not required for ASI outputs.

Main Automation NIC is the IP address of the NIC that receive automation multicasts from the Automation Server service. This is often the same as the Client IP Address. This is not required for SCTE-35 or other embedded automation types.

Backup Automation NIC is the IP address of the alternative NIC that receive automation multicasts from the Automation Server service. This is often the same as the Client IP Address. This is not required for SCTE-35 or other embedded automation types.

B Client ID must be unique for all clients managed by a single splicer manager.

B Multicast Input NIC is Dektec (new) should be set if the Main Input Multicast NIC is a Dektec IP port.

B Multicast Output NIC is Dektec should be set if the Main Output Multicast NIC is a Dektec IP port.

B Input is ASI should be set if the B input port is a Dektec ASI port, rather than an IP multicast.

B Output is ASI should be set if the B output port is a Dektec ASI port, rather than an IP multicast.

SDI Output Card Installed should be selected if there is a Dektec SDI output card and SDI outputs are licensed and configured. The port on the card to use for each output is configured in the per-instance screens. It is possible to have an SDI card installed in just one of the A and B splicer clients.

The **Default Root Folder** is the location on the splicer where playlists and media should be stored. A folder set will be created under this location for each instance on the client.

Splicer Client Child Nodes

Under the Splicer Client node there are 3 child nodes.

Comm server config should be left alone as it is automatically populated. The port will be set to the Client Control Port 2 from the main Splicer Manager configuration screen

Logger Settings should be populated manually. From Splicer Manager v3.0.7, the log folder and log file prefix will be set automatically.

The Splicer instances are covered in the next section.

Add New Instance Helper Button

This allows users to take an existing instance configuration and create a copy with the expected differences in place for alternative input/output definitions. The screen is shown below.

٥	Splicer Add New Instance	Helper – 🗆 🗙			
	Instance Name				
	New Instance Number (in service names): 3	Input Multicast A			
	Instance Ident (Must Match Tessera)	Input Multicast B			
	Automation Channel ID (Eurod)	Output Multicast A			
	Automation Channel ID (IT used)	5001			
		Output Multicast B 5001			
	Selected Instance to copy: Test 1 Opt 1	A Stream Name B Stream Name Red Blue			
	Name	✓ Enable B Input			
	Test 1 Opt 1 Test 1 Opt 2	✓ Enable B Output			
		V OK X Cancel			

Select an instance to copy from the list of existing instances at the bottom of the screen and then populate the instance specific fields shown.

This screen will automatically set the service names from the **New Instance Number** which is automatically set to one more than the number of existing instances. *Note: this means that if an instance is deleted and the service numbers are not reset, the New Instance Number may already be in use.*

Set the **Instance Name** and **Instance Ident**– which will be used to populate the same field in the Splicer Service Instance Configuration. Instance Ident must be unique across all instances managed by the Splicer Manager.

The **Automation Channel ID** will set the Channel ID in the automation client configuration for this Instance – but will not enable the Enforce Channel ID option.

The **Input Multicasts** and **Output Multicasts** and their respective **ports** are set on the right of the screen. These will be set into both RTP and Dektec sections of the IP input and IP output parts of the Instance configurations. *Note that the Dektec input values will not be set prior to v3.0.7 as Dektec inputs were not supported prior to this*.

Set the **A Stream Name** and **B Stream Name** to appear in the configuration tool as friendly names for the RTP/UDP settings.

Set Enable B Input if you have two inputs. Set Enable B Output to deliver 2 copies of the output.

Splicer Service Instance Configuration Screen

This screen and its child objects allow configuration of a single splicer instance. An instance is managed by three services.

Property Editor: Splicer Manager Configuration	- 🗆 X
Splicer Manager Configuration Generation Solution Sol	Splicer Service Instance Details
Splicer 1 Logger Settings Splicer Service Instances Splicer Service Instances Settings Starfish Test Rig 1 Settings Gomm Server Config Settings Se	Instance Name Instance Instance Ident (Tessera) Test 1 Opt 1 T101 Instance ID {2AE59C48-42E7-4506-9BD6-057548A64666F} New ID Instance ID Slate Mode (this will set all other slate mode flags in the instance config) Splicer Service Name TransCast_SplicerEngine 1 Playlist Delivery Manager Service Name Instance Ident (Tessera)
Splicer Configuration Splicer Configuration Solicer Configuration Solicer Configuration Solicer Configuration Comm Server Config Solicer Groups	TransCast1_PlaylistManager1 Automation Client Service Name TransCast1_AutomationClient1 Add PID Map to playlist files (not valid for slate mode) Monitoring Groups
Comm Server Config (127.0.0.1) > · Central Log Delivery	✓ IBC Group Test Group
< >	Apply

Instance Name is the friendly name for this instance, which will be displayed in the web GUI.

Enable Instance should be selected for all active instances. If you clear this box, the instance will not run and will not show in the monitoring system.

Instance Ident is the link between TransCast and Tessera. This string must match the equivalent Channel Region in Tessera in order for playlists and media to be correctly transferred.

Instance ID must be unique for all instances managed by a single Splicer Manager.

Slate Mode should be selected where the system is being used to replace incoming content with a single looping playlist. Setting this will, at run-time, set all necessary slate options further down in the Instance configuration.

Splicer Service Name is the name of the Splicer Engine Service for this instance. This must be the same on both A and B clients where there is a B client present.

Playlist Delivery Manager Service Name is the name of the Playlist Delivery Manager Service for this instance. This must be the same on both A and B clients where there is a B client present.

Automation Client Service Name is the name of the Automation Client Service for this instance. This must be the same on both A and B clients where there is a B client present.

Add PID Map to playlist files should be selected where non-slate playlist are being delivered from Tessera. This will cause the PDM to add the PID map as it collects the playlists.

Monitoring Groups allows users to select which group(s) the instance will be shown in. If none are selected, the instance will be placed in a default group called "Unallocated".

Splicer Engine Configuration

The Splicer Engine service configuration screen is shown below. Many of the fields in this configuration will be populated automatically by the Splicer Manager.

🎒 Property Editor: Splicer Manager Configuration		– 🗆 ×
 Splicer Manager Configuration Logger Settings Splicer Client Servers Splicer 1 Logger Settings Splicer Service Instances Test 1 Opt 1 Starfish Test Rig1 Automation Client Config Comm Server Config Automation Sources TransCast Automation Interfa Network Monitors Splicer Configuration Local Playout Params Splicer Groups Splicer Groups 	< · · · · · · · · · · · · · · · · · · ·	Single Splicer Service Configuration Name Starfish Splicer1 Splicer Shared Memory Name (will be prefixed with global\) SplicerShare1 SCTE-35 Shared Memory Name SCTE35Share1 C Enable Splicing Enable Debug Output Stop Event Name SplicerA Local Root Folder (on splicer) for content
		V OK X Cancel

The Name is a friendly name which is no longer used. Instance name is used instead.

The **Splicer Shared Memory Name** is managed by Splicer Manager, as is the **SCTE-35 Shared Memory Name**.

Set **Enable Splicing** to enable local content insertion. This is automatically set to true for Slate Mode instances.

Enable Debug Output will add additional logging to the Splicer Engine log files. This should be disabled when not in use.

The Stop Event Name is automatically set by the Splicer Manager

The **Local Root Folder** is also set automatically by Splicer Manager – using the Root Folder defined at the Splicer Client level.

Local Playout Params

This configuration defines a list of local content sources. Add one child per content source. Typical sources would include:

- Slates
- Commercials
- News

Each source has a list of items to configure and a header section defining the source type. The header section is shown below.

TransCast Playout Configuration				
Configuration Name				
Splice MPEG2				
Playlist ID (type of playlist)	Audio Attenuation in dB			
3	0			
Enable Rescue Media				
Enable As-run File Creation				
Enable Graphics				
Enable RTP Video Sources				
✓ Enable Slates				

Configuration Name is a friendly name, visible in the configuration tool.

Playlist ID must match the playlist type sent in as part of the automation commands. If the automation commands do not contain this field, use a playlist ID of 1 here. Playlist type of 3 is usually for Slate files whereas 1 is usually local news and 2 is usually local commercials.

Audio Attenuation is encoder-specific and only implemented on specific sites where the relevant license option has been purchased. It will reduce the level of the local content audio by a fixed amount.

Set **Enable rescue media** to use the specified set of rescue (evergreen) clips to full missing media gaps in the playlist (*Encoder only*)

Set Enable As-Run Creation to generate as-run files for delivery back to a Tessera system.

Set **Enable Graphics** to allow graphics to be added to the local content under playlist control as it is inserted (logo and clock supported). (*Encoder only*)

Set **Enable RTP Video Sources** to allow live streams (RTP or UDP) to be added to the local content playout under playlist control. (*Encoder only*)

Set **Enable Slates** to enable a single looping slate playout. This is setting is automatically managed by Splicer Manager, based on the Slate mode setting at the Splicer Service Instance configuration level. (*Splicer only*)

Rescue Media

The rescue media configuration has two sections. The location of rescue media files and the details of each file that this instance can use.

TransCast Playout - Rescue Media	
Rescue Media Folder	
E:\TransCast\T1O2\Commercials\Rescue	Browse
To add rescue dips, right dick on this item in the tree to the left	

The **Rescue Media Folder** is set automatically by the Splicer Manager or Region Manager.

Each rescue clip is defined as shown below.

TransCast Playout - Rescue Clip Parameters				
Rescue Clip Filename				
5_second_Logo.mpg				
Clip Duration				
00:00:05:00				

The Rescue Clip Filename is the filename of the clip (no path) and the Clip Duration is its length.

Graphics Parameters

This section defines the local **Graphics Folder**. This is set automatically by Region Manager (*Encoder* only)

TransCast Playout - Graphics Configuration	
Graphics Folder	Province
	browse

Media Parameters

This section sets the location and type of the media files.

TransCast Playout - Media Parameters	
Media Folder	
E:\TransCast\Media	Browse
Media Format	
MXF wrapped DV 🗸	

The Media Folder is set automatically by Splicer Manager or Region Manager.

Media Format is ignored by the splicer (which only accepts TS files), and is not currently used by Region Manager or the encoders – which automatically detect the file types.

Playlist Parameters

This section sets the location and type of the playlist files.

TransCast Playout - Playlist Params	
Playlist Folder	
E:\TransCast\T1O2\Commercials\Playlists	Browse
Playlist Format Starfish XML	

The **Playlist Folder** is set automatically by Splicer Manager or Region Manager.

Playlist Format is ignored as there is currently only one supported format.

As-Run Parameters

This section sets the location and type of the as-run files.

As-run Delivery Pro	perties		
As-run folder			
E:\TransCast\T1O2\Commer	tials\AsRun	Brow	se
As-run file format			
Starfish XML	~		

The **As-run Folder** is set automatically by Splicer Manager or Region Manager.

As-run Format is ignored as there is currently only one supported format.

Slates List

The Slates section is a list of slate file definition. Only one slate is loaded by default. This is the one flagged as Default – and if there is no default specified, the one with an index of 1. There should be no reason to define more than one slate in the current product.

Splicer Slate Properties
Slate Playlist Filename (not path)
sky1.xml
Slate ID or index
1
✓ Default Slate

The **Slate Playlist Filename** is the name of the slate playlist. The location will be the one defined in the Playlist Parameters above.

The **Slate ID** is not in use yet as the system currently supports just a single cued slate. In future, it may be possible to trigger one of a number of pre-cued slates.

Select **Default Slate** for the slate file to be loaded when the splicer starts.

RTP Video Sources

This is a list of RTP or UDP stream definitions that can be scheduled in local content playout (*Encoder only*). These should be populated manually, apart from where stated below, in the Region Manager configuration Automation Client template(s).

TP Configuration	
RTP Group	RTP Name
127.0.0.1	
RTP NIC	RTP Ident
RTP Port	Streaming Protocol
-1	3
RTP TTL	Source IP Address (for source-specific multicast)
1	
✓ Use A Nic (advanced, for automated con	figuration of multi-homed systems)

RTP Group is the multicast group for the stream.

RTP NIC is the NIC to bind to for receipt of this multicast. This is set automatically by Region Manager.

RTP Port is the port to listen on for the multicast.

RTP TTL is only used on the sending side.

RTP Name is the friendly name for this stream.

RTP Ident is the reference for this stream that will be used in the playlists to define which stream to insert. Traffic.lve is an example – used for live traffic reports in a news broadcast.

Streaming protocol is not used.

Source IP Address is used for source-specific multicast – leave blank, as shown, if not required.

Use A NIC is managed automatically by the Region Manager. It is used when there are separate A and B video networks. If the live source is always on the A network, then check this box. If it is present on B, then clear it.

Video Capture Params

This is a list of video capture configurations that define how and if the local content playout should be captured to disk. This feature is used to create a VOD asset, or as a compliance recording. (*Encoder only*)

Playout Capture Config	
Capture Name	
Capture Enabled	
Mode	
Entire Playlist 🗸 🗸	

The **Capture Name** references the Capture name in the Region Manager encoding profile. This links the two together, so that when this type of local content is played out, a specific capture profile can be utilised.

Set Capture Enabled to enable this capture profile.

The **Mode** has 2 options, Entire Playlist and Local Live Only. The first will capture the entire clip. Note this is done prior to any graphics being added. Local live will capture just the inserted local live content.

Splicer Configuration

This is the lower level splicer engine configuration, including inputs, outputs and TS details. It is made up of several sections. The main Splicer Configuration screen is shown below.

Splicer Confi	guration			
PMT PID 4096	PMT PID Monitor (s)	Active SCTE	-35 PID	SCTE-35 PID Monitor (s)
Max PTS-PCR dri	ft	PCR PID 256		
Video PID 256	Video PID Monitor (s)		Decode-R	ecode (not licensed)
Slate Mode (c	lear for normal splicer ope un (slate mode auto-run)	eration)	🗌 En	able Decode-Recode
Start in Stand	by mode (passive) ng the default slate : active on start ecks elay Mode		Output O Ena Ena SDI	ptions ble IP Output ble SDI Output Output Port 1
PAT and SDT Ta	able Updates pdates			
0	SD TV Service (N	1PEG-2) 🗸]	
Service Prov	/ider ie			
Add audio and of	her content PIDs in the d	hild contional	alow	

The **PMT PID** should be set to the PMT PID on the input TS.

The **PMT PID Monitor** should be left at zero in most cases. Setting a non-zero value enables some additional error checking which is normally only used in troubleshooting.

The **Active SCTE-35 PID** should be set to the particular SCTE-35 PID on the input TS that will be used to control the splicer – of that needs to be modified by the splicer. If there are no such SCTE-35 PDs, leave this at zero.

The **SCTE-35 PID Monitor** should be left at zero in most cases. Setting a non-zero value enables some additional error checking which is normally only used in troubleshooting.

Max PTS-PCR drift should be left at zero.

The **PCR PID** should be set to the PID carrying the PCR – often the Video PID.

The Video PID should be set to the target video PID on the input TS.

The **Video PID Monitor** should be left at zero in most cases. Setting a non-zero value enables some additional error checking which is normally only used in troubleshooting.

Slate Mode is managed automatically by Splicer Manager (using the value set in the Splicer Instance Configuration).

Enable Auto-run is for testing use only and should be left clear. It will play the default slate on SCTE-35 commands if enabled.

Start in Standby mode is managed by Splicer Manager to ensure that the instances are started taking into account any already running mirror instance. Specifically for active-passive configurations.

Start up splicing the default slate is managed by Splicer Manager to ensure that the instances are started taking into account the state of any already running mirror instance.

Select A input active on start is managed by Splicer Manager to ensure that the instances are started taking into account the state of any already running mirror instance.

Enable CC Checks should normally be disabled. This adds continuity count checking to the splicer engine, which increases load.

Enable low delay mode will set the splicer throughput delay to 400ms. Disabling this will set it to 1000ms.

PAT and SDT Table updates are not currently enabled.

Decode-Recode is in place for the v4 splicer and not available in v3.

Output Options allow users to specify if the given instance will produce SDI, IP or both. If SDI is enabled, the **SDI Output Port** must also be set. In a 1+1 system, this will be the same on both A and B splicers for each instance.

IP Params: IP Input and IP Output

These two sections define the input and output TS. There are several high level options followed by vendor-specific configuration screens. The initial screen is shown below.

IP Params Group
Group Name
IP Input
 Input Parameters (dear for output) Enable second stream Use Dektec Card
Input Switch Timeout (ms) 1000

The Group Name is the friendly name that shows in the configuration tool.

Select **Input Parameters** for the input node and clear it for the output.

Select **Enable Second Stream** if you have 2 inputs coming into the splicer (on the input side) or if you want to generate 2 copies of the output (on the output side). The NIC details for these streams are automatically set from the Splicer Client level values.

When there are 2 inputs defined, the splicer will automatically select the other stream if the active one fails. Active source is visible in the web GUI and can be manually controlled from the web GUI as well.

Use Dektec card is managed by the Splicer Manager, based on the settings at the splicer client level.

Input Switch Timeout is managed by the Splicer Manager, based on the settings at the splicer client level. It is not used for the output node.

Within the IP Params node are several child objects:

- Two RTP configurations (for non-Dektec IP streams)
- A Network Source node
- One Dektec configuration (for Dekec IP or ASI supports 2 streams)

RTP Configuration

These are used for non-Dektec TS over IP streams. The input will automatically detect and switch between UDP and RTP. The output is UDP only. An example input is shown below.

RTP Group	RTP Name
239.199.9.1	Red
RTP NIC	RTP Ident
10.85.97.35	
RTP Port	Streaming Protocol
5001	3
RTP TTL	Source IP Address (for source-specific multicas
1	0.0.0.0

✓ Use A Nic (advanced, for automated configuration of multi-homed systems)

RTP Group, RTP Port and **RTP TTL** should be set manually as they are instance specific. They will be filled in by the Add New Instance Helper screen (if used).

RTP NIC will be set automatically by the Splicer Manager from the Splicer Client level configuration.

RTP Name is the friendly name that shows in the configuration screen. It will be filled in by the Add New Instance Helper screen (if used).

RTP Ident and Streaming Protocol are not used.

Source IP address (input only) should be left as 0.0.0.0 for non-source-specific multicast environments. If you are using IGMP v3 then this will need to be set correctly on a per-instance basis.

Network Source

This is not used apart from the list type, which must be set to starfish as shown below. This is set automatically from v3.0.7.

Starfish List Pro	perty Editor			
Parent Item Name :	Network Source	List Type	starfish	
Child Items				
Add	Name		Value	
Edit	buffering_delay_ms		1000	
Editin				
Delete				

The **buffering_delay_ms** value is not used.

Dektec Port Settings

This screen is used to define the input/output using a Dektec card (ASI or IP).

Dektec Output Port Ins	stance		
Port ID {3F827F09-F6F5-43	BED-90C2-5D7A589F	D062} N	ew ID
Port Name	Port Number	Port Type	
	0	Dektec IP	~
ASI protection Switch (for ASI po	ort only)		
No Protection Switch		V 🖌 🖌 A ii	nput to ASI switch (clear for B)
{00000000-0000-0000	0-000000000000}		
IP Address (for IP port only) N	letwork Name/VLAN	IP Output	t Protocol
		RTP	~
Multicast Group	Multicast Port	Multicast TTL	Output Bitrate
234.5.5.11	1111	1	27000000
FEC Rows (RTP only)	FEC Cols (RTP	only)	Dektec Startup Delay (Ms)
0	0		0
✓ Enable Dual Dektec Output	ut - set values belov	v for second r	oort
Port 2 Name	Port 2 Number	Port 2 Type	
	1	Dektec IP	~
IP Address (for IP port only) N	letwork Name/VLAN	IP Output	t Protocol
		RTP	~
Multicast Group	Multicast Port	Multicast TTL	
234.5.5.11	2222	1	
FEC Rows (RTP only)	FEC Cols (RTP 0	only)	Dektec Startup Delay (Ms) 0

If the **Port ID** is all zeros, then click **New ID** to generate a new value. This has no current use, but is good practice.

Port Name and **Port 2 Name** are friendly names for the physical ports, but are not shown anywhere else than here.

Port Number and **Port 2 Number** are required for ASI ports only. They are the Dektec API port numbers and must be correct in order to address the correct port. On servers with multiple Dektec cards installed, this must be checked after driver re-installation as sometimes the cards are detected in a different order, which changes the port number for a given physical port. Check DtInfo to see an ordered list of ports (zero-based).

For IP inputs and outputs, the IP address is used to obtain the Port Number automatically – to avoid the risk of port number changes, so this value does not need to be set. If the IP address is blank, however, the port number will be used for an IP port.

Port Type and Port 2 Type are for information only.

A Input to ASI switch is not used in splicing systems.

The **IP Address** values are set automatically by Splicer Manager from the Splicer Client level configuration.

Network Name/VLAN values are not used, but can be completed to make the configuration easier to understand for future users.

IP Output protocol should be set correctly to UDP or RTP for IP ports.

Multicast Group, Multicast Port and **Multicast TTL** should be set manually as they are instance specific. They will be filled in by the Add New Instance Helper screen (if used).

FEC Rows and FEC Cols should be set manually as they are instance specific.

Dektec Startup Delay should be left at zero for splicers.

Enable Dual Dektec Output (or input) should be selected if there are 2 outputs or inputs to be specified. This will be filled in by the Add New Instance Helper screen (if used).

Dektec Clock and FIFO Management

Each Dekec port configuration has a child object which defines the size of the FIFO available on the card. For ASI cards this is a physical limit, specific to the card model. For IP, it is virtual.

SI Clock Trim	
Enable Warnings	Enable Auto-trim Reload on start
Raw Data High Water	Raw Data Low Water
11000000	500000
Average Data High Water	Average Data Low Water
8500000	7500000
Raw Data Max Delta	Average Data Max Delta
2500000	250000
Dektec FIFO Size	
1600000	Set 8MB defaults Set 16MB defaults

For ASI ports that have 16MB physical FIFOs, click the **Set 16MB defaults** button. For all other cases, click the **Set 8MB defaults** button.

Audio PIDs List

This contains a list of Monitored PID definitions, as shown below. Add one entry for each audio PID in the programme stream.

Monitored PID Value	
PID Value 64	
Monitor Value (Seconds)	

The **PID Value** must be set, but the **Monitor Value** can be set to zero in normal operation.

Subtitle PIDs List

This contains a list of Monitored PID definitions, as shown below. Add one entry for each subtitle PID in the programme stream.

Monitored PI	D Value
PID Value	
64	
Monitor Valu	ie (Seconds)
0	

The PID Value must be set, but the Monitor Value can be set to zero in normal operation.

On Insert Drop PIDs List

This list contains all PIDs that will be dropped from the incoming stream during a splice. These will usually all be replaced by PIDs from the inserted local content.



Drop PIDs List

This list contains all PIDs that will be dropped from the incoming stream during at all times. So if they are seen on the input, they will not be present on the output. The PMT will not be adjusted as the drop mechanism is to set the payload length to zero on the incoming PIDs.

PID Details	
PID Value	
48	

Logger Settings

These should be configured as described earlier in this document. The Log File Prefix is automatically managed.

Playlist Delivery Manager Configuration

The Playlist delivery manager configuration is the first child of the Splicer Service Instance Screen. In the screen shot on page 27 this configuration is seen in the tree with its friendly name of *Osterley Stage System*.

This configuration is fully managed by Splicer Manager and does not need any manual configuration other than the logger settings within it – where users should specify which items should be logged. The Log File Prefix and Log File Folder are set automatically.

Automation Client Configuration

This section does need some manual configuration. Please refer to **TransCast Automation Client** - **Configuration Guide v1** for full details. The key items to set in a splicer instance are in the sources tab:

• Set the automation source (UDP or SCTE-35). If you are using UDP, you must also correctly set the Channel ID options and the Automation Source list (child object).