

# Digital Program Insertion Auditor

## Application Software

- ✓ Incoming splice message validation
- ✓ Online log of all messages
- ✓ Offline confirmation of splice and content
- ✓ Capture incoming and outgoing transport stream upon splice message arrival

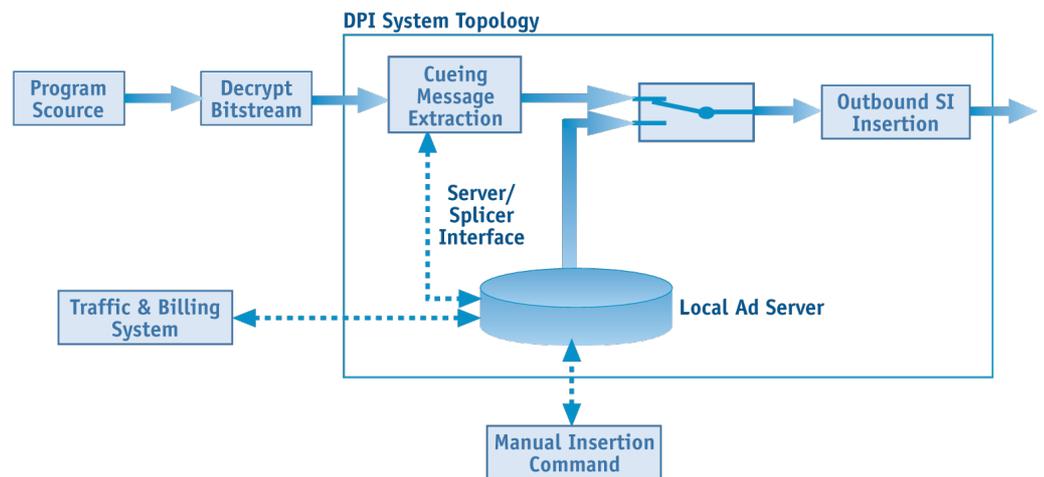
The Torque Digital Program Insertion Auditor is an analysis application that offers a range of logging and reporting capabilities, which allow operators to monitor and audit the accuracy of digital program insertion (DPI).

The DPI Auditor is built based on the ANSI/SCTE 35 2001 standard (formerly known as DVS-253 and also known as ITU-T J.181). Developed from close monitoring of the evolution of program insertion technology and corresponding changing needs, DPI Auditor is instrumental in the monitoring and verification of DPI.

### Automatic Digital Splicing

Torque DPI Auditor supports the ANSI/SCTE 35 2001 standard that defines a fully digital mechanism to control remote splicing equipment via cueing messages embedded in the transport stream. These messages contain unique splice event ids which indicate a current or future avail – a time slot sold to local operators to insert their own commercials. The core of the standard is centered on an SIT (Splice Information Table) which can contain a schedule message or an insert message. An insert message identifies a specific avail by a unique event ID, the starting time of the event, and the duration of the break.

Ad insertion systems separate splicing commands from the inbound transport stream, switch between the network feed and the local ad server, and provide signaling and coordination with the local ad server or VTR.



Time	UTC Time	Source	Source Name	PID	CmdType	Action	EventID	Services	CompTags	SpliceTime	Duration	OOB	AR	ProgramID	Avail	AvailCount
15:06:00	07:06:00(+8.0)	00		1390	insert	splice	100000	Soap East [30], Soap E AC3 [31]		2004-02-12 15:06:06		1		1000	1	8
15:06:23	07:06:23(+8.0)	00		1390	insert	splice	100000	Soap East [30], Soap E AC3 [31]		2004-02-12 15:06:31		1		1000	1	8
15:06:43	07:06:43(+8.0)	00		1390	insert	splice	100000	Soap East [30], Soap E AC3 [31]		2004-02-12 15:06:51		1		1000	1	8
15:07:05	07:07:05(+8.0)	00		1390	insert	splice	100000	Soap East [30], Soap E AC3 [31]		2004-02-12 15:07:12		1		1000	1	8
15:07:25	07:07:25(+8.0)	00		1390	insert	splice	100000	Soap East [30], Soap E AC3 [31]		2004-02-12 15:07:32		1		1000	1	8
15:07:45	07:07:45(+8.0)	00		1390	insert	splice	100000	Soap East [30], Soap E AC3 [31]		2004-02-12 15:07:53		1		1000	1	8
15:08:05	07:08:05(+8.0)	00		1390	insert	splice	100000	Soap East [30], Soap E AC3 [31]		2004-02-12 15:08:13		1		1000	1	8
15:08:26	07:08:26(+8.0)	00		1390	insert	splice	100000	Soap East [30], Soap E AC3 [31]		2004-02-12 15:08:33		1		1000	1	8
15:08:45	07:08:45(+8.0)	00		1390	insert	splice	100000	Soap East [30], Soap E AC3 [31]		2004-02-12 15:08:54		1		1000	1	8

## Effective Monitoring & Validation

The DPI Auditor provides an expandable range of monitoring and validation capabilities. Incoming splice message validation, online logging of all messages, capturing of incoming and outgoing transport stream upon splice message arrival, and offline confirmation of splice and content are crucial to accurate verification of the DPI process.

Other features include incoming splice message validation, capturing incoming and outgoing transport stream upon splice message arrival, alarms on arrival of user selectable tables or fields, long-term storage of logs, and search capability for easy retrieval of logged information for verification.

Customized reports can also be generated based on summarized or consolidated user-specified parameters. These reports can be useful for billing verification or other specific needs by extracting only messages pertaining to a specific service, PID or provider.

## Full Support for DPI

DPI is supported on two tiers: a built-in function in DVMon, and DPI Auditor, a separate DPI analysis application with enhanced features.

While the basic DPI function that comes with the standard DVMon software displays and decodes DPI messages, the DPI Auditor boasts enhanced features including expanded logging and analysis features – online logging of all messages, offline confirmation of splice and content.

Feature	Standard DVMon	DPI Auditor Application
Display DPI messages in Table Decode Window	✓	✓
Log arrival of DPI messages in HTML interface		✓
Filter log display based on user criteria		✓
Execute alarm on arrival of DPI table		✓
Long-term storage and retrieval		✓

