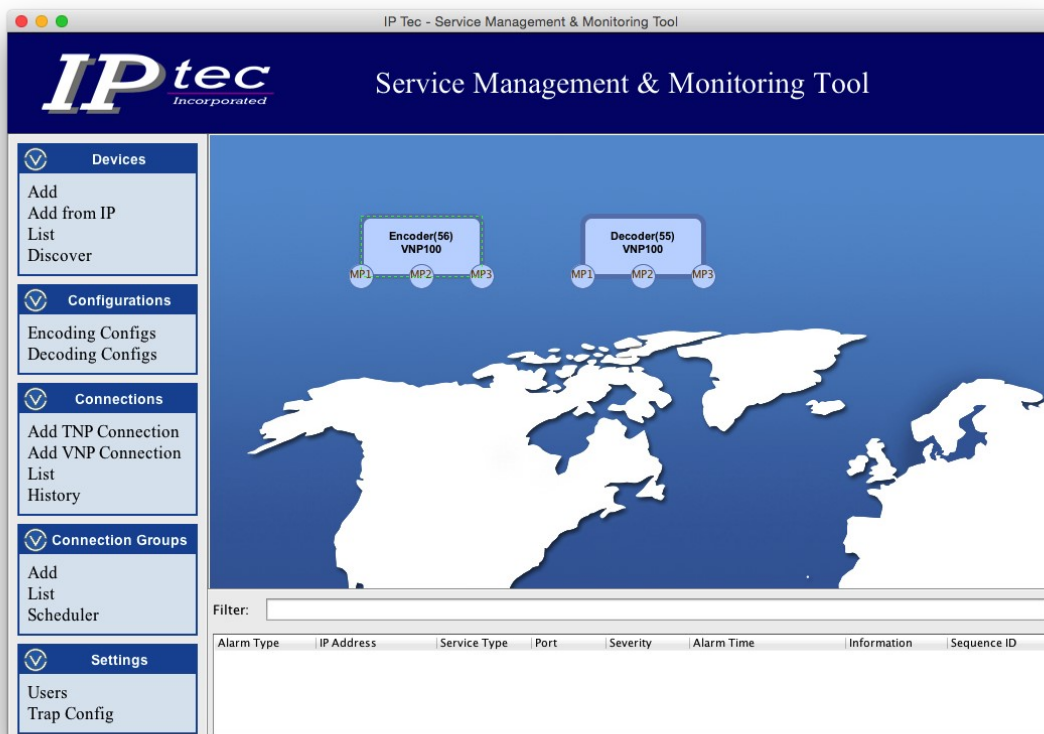


## Service Management & Monitoring Tool

### Seamless Integration of Control for Telemetry & Video

The IPtec Service Management & Monitoring Tool (SMMT) enables a practical method to manage and monitor TNP & VNP service provisioning. The integration of telemetry and video control provides IPtec with the superior resource management system by automatically creating point-to-point and point-to-multi-point connections through an automated process.

- Secure SNMPv3 Communication
- User Defined Graphical Network Display
- Integrated 24/7 Alarm and Network Monitor
- Scalable from 2 devices to over a 1,000
- Automatic Device Discovery
- Deployable in less than 10 minutes
- List of all Provisioned Services
- Multiple User Access
- Drag & Drop Service Provisioning
- Group Provisioned Connections
- Add/Drop destinations without disruption
- Scheduled Service Start & Stop Times
- Timeout service after specified minutes
- Statistics for service and network quality
- Mission Statistics from Service Start to Stop
- Create & Save Service Configuration Profiles

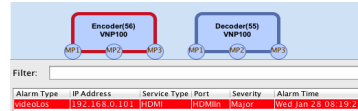


The SMMT eliminates the mystics and complications of overseeing and supervising cumbersome IP networks.

## SMMT Features & Benefits



Drag & Drop Connections  
Select source port and drag to destination port to automatically create a service connection.



Instant Alarm Reporting  
Monitor all device and service alarms with color coding severity on the device and real time trap receiver.

SNMP Version:

SNMP Username:

Auth Password:

Priv Password:

Secure SNMPv3 and SNMPv2 Communication.

Name	Source	Destination	Input	Output	Status
Camera 1	192.168.0.101/MP1	192.168.0.100/MP1	HDMI ...	None	Disconnected
Camera 2	192.168.0.101/MP2	192.168.0.100/MP2	Analog...	None	Disconnected

List of all provisioned service connections for instant service status and connection & disconnection.

Name	Source
HDMI H264 Embedded 1,2 RTP FEC B (20/5) Main 2 Mb/s 650 ms MPEGI2 96k	HDMI
HDMI H264 Embedded 1,2 RTP FEC B (20/5) Main 4 Mb/s 650 ms MPEGI2 96k	HDMI
HDMI H264 Embedded 1,2 UDP Main 4 Mb/s 650 ms MPEGI2 96k	HDMI
Analog H264 Audio CH 1,2 UDP Main 2 Mb/s 650ms MPEGI2 96k	Analog

Create and Save Telemetry and Video Configuration Profiles making a connection faster than ever before.

Connection Group	Start Time	End Time
Studio A	Thu Jan 29 11:05:00 EST 2015	Thu Jan 29 12:05:00 EST 2015

Scheduled start & stop times for individual and group services.

Model	Address	Name
VNP100 #2.00.r Model 0001	192.168.0.101	Encoder
VNP100 #2.00.r Model 0001	192.168.0.100	Decoder

Automatically discover devices on your network to add to the SMMT.

Name	Type
Studio A (Camera 1 & Camera 2)	VNP

Group multiple service connections. Connect and disconnect groups at once.

Timeout (min, 0 to disable)

Automatic Service Timeout Disconnection.

	Encoder	Decoder
Transmit Frames	9397	-
FIFO Overruns	0	-
Input Data Rate	0 b/s	-
Receive Frames	-	7000
Receive Underruns	-	0
Receive Sequence Errors	-	0
Min Inter-Packet Time	-	0 ms
Max Inter-Packet Time	-	220 ms
Inter-Packet Time Variation	-	220 ms
Output Data Rate	-	0 b/s

Instant Service Statistics  
Simultaneous viewing of Source and Destination port Statistics enables instant auto-refreshing verification of connection activity and data quality.

Connection	State	Reason	Time
Camera 1	Disconnected	Manual	Wed Jan 28 11:37:01 EST 2015
Camera 1	Connected	Manual	Wed Jan 28 11:36:26 EST 2015

	Encoder	Decoder
Transmit Frames	15970	-
FIFO Overruns	0	-
Input Data Rate	0 b/s	-
Receive Frames	-	12500
Receive Underruns	-	0
Receive Sequence Errors	-	0
Min Inter-Packet Time	-	0 ms
Max Inter-Packet Time	-	220 ms
Inter-Packet Time Variation	-	220 ms
Output Data Rate	-	0 b/s

Mission Quality Statistics!  
Analyze connection statistics from service connection until disconnection providing total mission quality data.

○ Connection Name

○ Source Settings

● Destination Settings

Name	Model	IP	Endpoint
Decoder	VNP100	192.168.0.100	MP 1
Decoder	VNP100	192.168.0.100	MP 2
Decoder	VNP100	192.168.0.100	MP 3
Encoder	VNP100	192.168.0.101	MP 1
Encoder	VNP100	192.168.0.101	MP 2

○ Scheduling

Multicast Address

Add & Drop multiple multicast destination ports without disrupting service connections.