

## Summary of new features with benefits

**DSLAI software ver. 4.5.2**

**DSLAII firmware ver. 6.23**

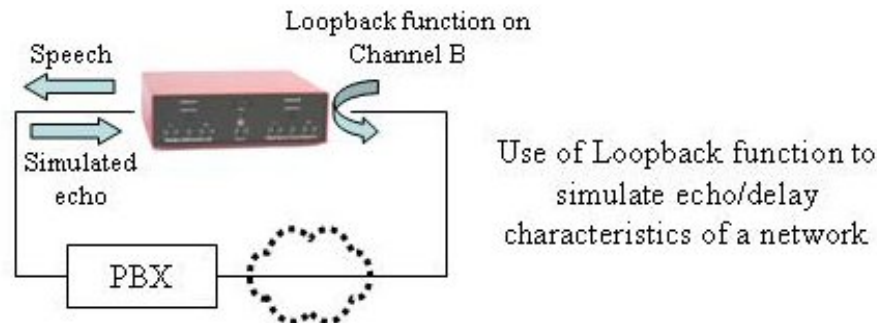
**Network Voice Service (used in VVT and ISDN BRI) software ver. 1.2.5.1**

### DSLAI

#### **Loopback and Route Playlist events to make measurements across a network with definable gain and delay through DSLAII.**

DSLAI can pass an input signal back to its own output. This can be either on the same channel ("Loopback") or the other channel ("Route"). In each case the gain and delay can be controlled. These features are of particular interest in the testing of DSP applications involving echo cancellation, since the Loopback and Route functions can be used to simulate an echo having a specified loss and delay.

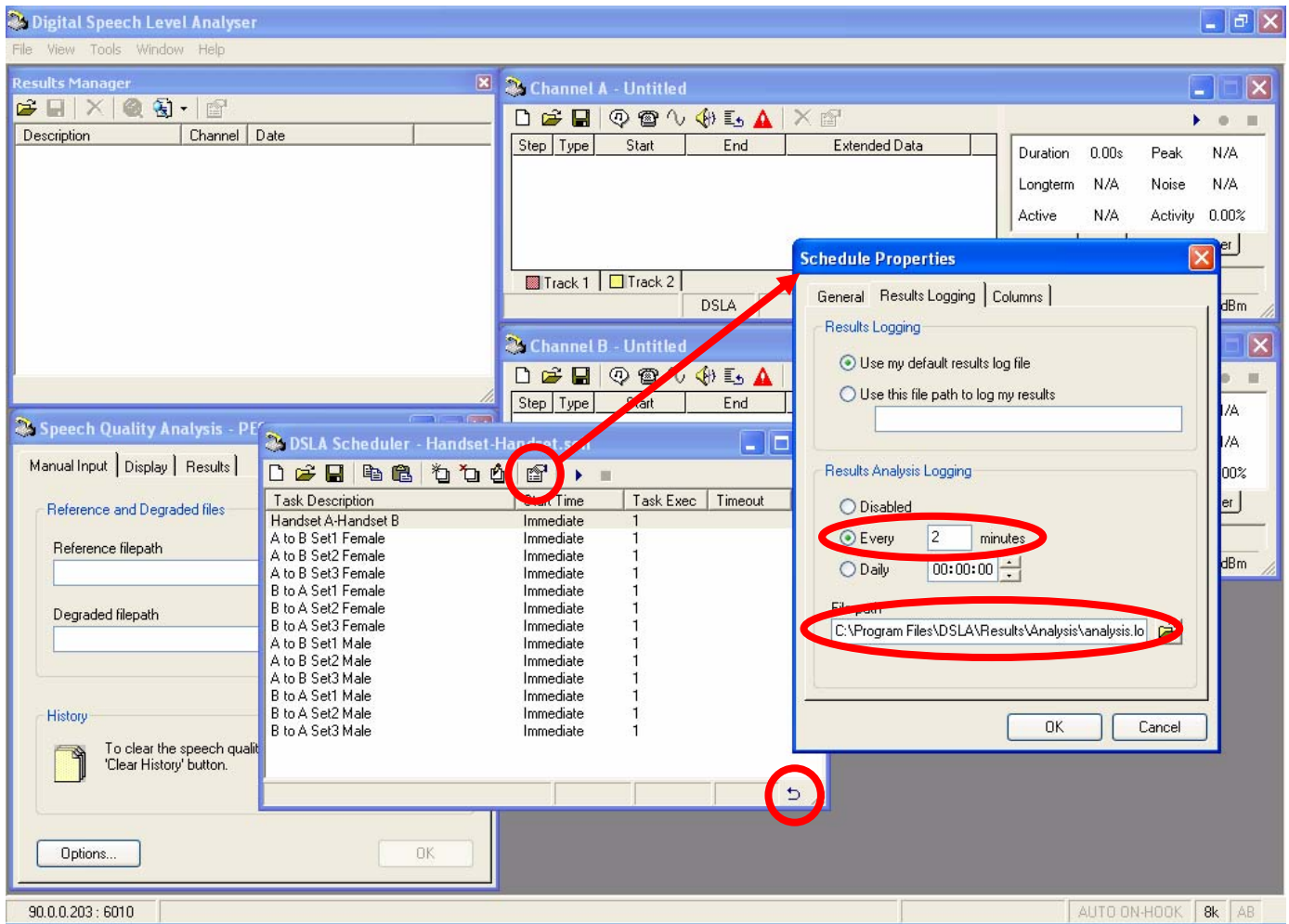
Example: simulating the effect of an IP network connected to a PBX, extending a circuit to make echo measurements.



#### **Timed Results Analysis logging option added to Scheduler properties**

Results Analysis can be manual (from the Results Manager window) or automatic (by instructions included in Schedule Task properties). With this new feature, the Schedule can be set to perform Results Analysis at regular intervals. This may be used, for example, in a long-duration test where time-varying performance has to be investigated.

Example: (see screen shot below) Results Analysis performed automatically, every 2 minutes.



## Synchronisation of Schedule start time and Schedule Tasks to PC clock.

This enables two DSLA's to be used for end-to-end testing (including fixed to mobile for drive testing) without the need for in-band handshake signals. Provided the clocks of the PC's controlling each DSLA are synchronised, the Schedules at each end will run together. The advantage is that no test time is lost for handshaking, and synchronisation is maintained even when the telephony link under test is disconnected or performing poorly. (N.B. This feature will become fully operational in the next software release – please email [support@malden.co.uk](mailto:support@malden.co.uk) to discuss potential applications.)

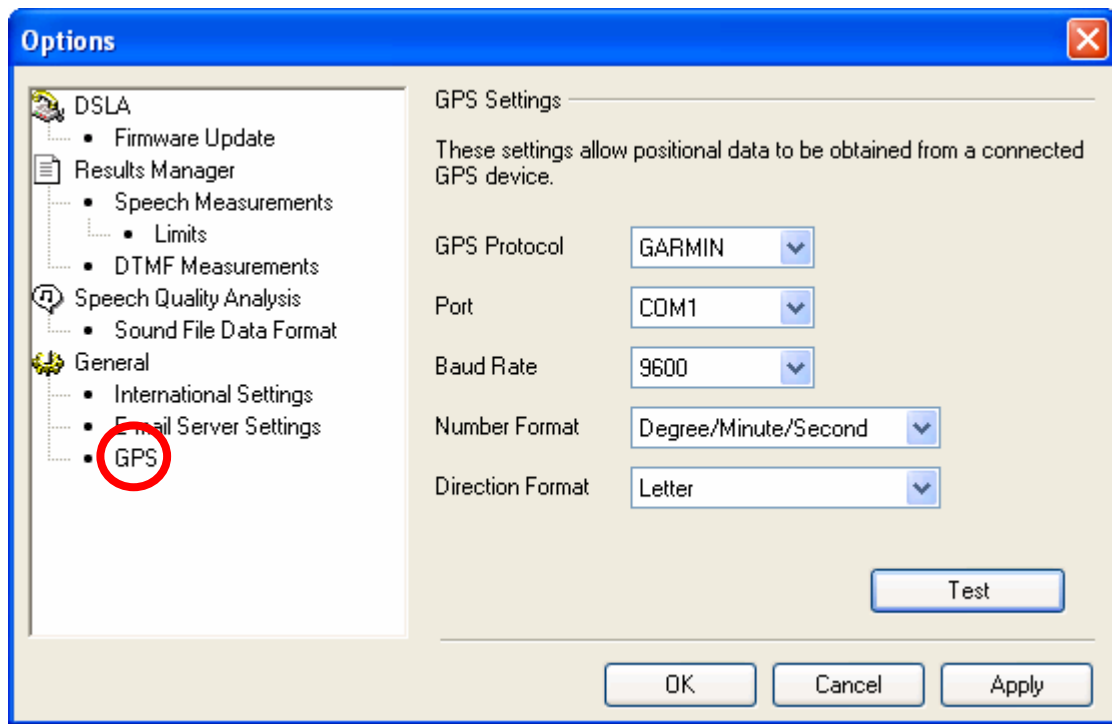
## Port numbers changed for ISDN and VVT communication.

This change prepares the DSLAII for operation in a MultiDSLA system.

## GPS support

The DSLA application can read location and time data from a GPS unit connected to the PC serial port. This data can be incorporated into the results log file. This is very useful in drive test applications as each DSLA result set can be related to a precise location and accurately timed.

Example: See screen shot below.



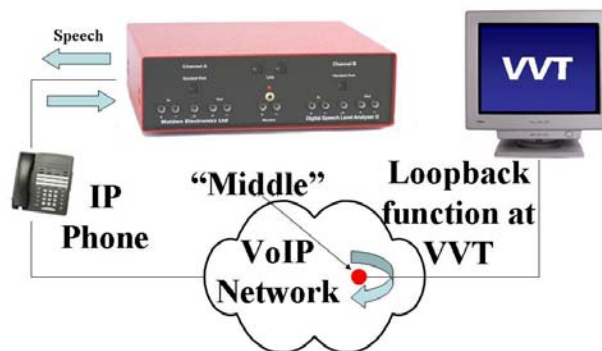
## VVT

### 'Wait for Speech' for G.711 codecs.

The Wait for Speech event is used in the DSLA system to suspend test execution until an expected speech signal is detected. Applications include the testing of Interactive Voice Response (IVR) systems and multi-level dialling access (for example "Please enter your PIN number"). Wait for Speech is now available at a VVT end point, enabling this feature to be used, for example, in the testing of SIP access to a conference bridge.

### Loopback

The loopback feature in VVT enables measurement of delay "end to middle to end" of a network. In this case the "end" is a terminal device connected to the DSLA, and the "middle" is the VVT.



**Use of VVT Loopback function to measure delay from physical end point to "middle" and back**

**VVT port numbers changed to 6020/6021 to allow simultaneous access with DSLA on same IP address.**

This change prepares the VVT for operation in a MultiDSL system.

#### ISDN BRI

**'Wait for Speech' for G.711 codecs (Similar to VVT above.)**

**Loopback (Similar to VVT above.)**

**ISDN port numbers changed to 6020/6021 to allow simultaneous access with DSLA on same IP address.**

This change prepares the ISDN BRI option for operation in a MultiDSL system.