CASE STUDY

Bodet

The time server, a time management tool

CUSTOMER
Le Son Unique

ACTIVITY
Radio studio

LOCATION
Nantes - France

FIGURES
3 radio studios
20,000 listeners per day

PRODUCT
Netsilon 9

APPLICATIONS
Synchronisation of IT equipment
Timestamping of events

AUDIOVISUAL

Background

SUN radio (Le Son Unique) is an independent, generalist and associative radio station broadcasting a wide variety of music. Its core purpose is to promote talents and artists from the West region of France. Its programming is broadcast across different radio frequencies in the cities of Nantes and Saint-Nazaire using FM transmitters, and in the cities of Pornic, La Roche-sur-Yon and Guérande using the DAB standard. With its eclectic programming, offering music for all tastes and all ages, this radio station appeals to a wide audience aged between 20 to 60 years old.

This local radio station faces the same problems as national radio stations. They **all share the same requirement for secure, reliable synchronisation** for their clocks and IT equipment in order to communicate accurate time information to listeners and manage their programming schedule.

Radio stations also need **reliable timestamping in order to effectively monitor their IT systems** requiring 24/24 availability. And for good reason, since the continuous live broadcasting of music and radio programmes demands constant vigilance.

The need

The main expectation of SUN's Technical Manager was to be able to **synchronise the IT network and computers in unicast and all the clocks in multicast, over an IP connection**.

He was also looking for a solution that would enable him to perform **reliable and accurate timestamping to provide better traceability of events** occurring on the most strategic studio equipment.

He wanted to purchase **an efficient product that was compatible with existing systems** (NTP standard time protocol). The time server needed to have the technical capacity to adjust to the future developments of the radio studio (upgrade to PTP protocol) in order to ensure a sustainable solution.

The solution

A Netsilon 9 has been installed in the SUN radio studio to meet its specific requirements. This model provides a comprehensive solution suited to the technical constraints of the audiovisual industry. Specifically:

- **accurate time synchronisation** to provide reliability when broadcasting the hourly time signal and a single time reference across all clocks and devices,
- **configuration of network cards (via option cards) used to synchronise independent networks** (local, dedicated, Terrestrial Digital Radio),
- **support for SNMP and SMTP protocols** to optimise monitoring and the sending of alerts in the event of faults on the network,
- **accuracy up to 10^{-11} second** to allow accurate timestamping and traceability in the event of faults.

The advantages of the NETSILON 9

- **Highly accurate timestamping**
- **A product assembled and manufactured in France**
- **SNMP and SMTP protocols enabling monitoring**
- **Option cards**
  (network RJ45, network fibre, PTP)

Customer testimonial

"In anticipation of future developments to our radio station, we have decided to install a time server. **With its expertise in time management and industrial clockmaking, we chose to contact Bodet Time.** We were happy to place our trust in Bodet as the teams acted responsively and professionally to our request.
We chose to install the Netsilon 9 as it is a secure, reliable and accurate solution. **Besides, the functional aspects of the product, its accuracy and its price matched our criteria.**

We particularly valued:

- the **added network card** with two Ethernet ports,
- the **straightforward, user-friendly system interface**, even for new users,
- the **ease of accessibility to web server monitoring protocols from any browser**,
- the **possibility to use multiple satellite constellations** (GPS, GLONASS, Galileo or Beidou),
- its **integration in our monitoring solution** to have better visibility as for connection status,
- the **SMTP protocol** for sending Netsilon status information and the **SNMP protocol** for sending automatic alerts in the event of IT errors,
- **access to additional data** for monitoring the Netsilon status (oscillator temperature, alarm management, power status, option cards, event log, etc.) as well as synchronisation.
- **the availability of indicators, alarms, graphics and histories to monitor synchronisation sources** (satellite reception quality, time offset, etc.). Other interfaces currently available on the market are less "user-friendly" and the data not so easy to interpret."

LE SON SUN UNIQUE

Testimonial from François Picard,
Technical Manager at Le Son Unique
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