PRODUCT INTRODUCTION

You Have a Choice.

OSI OnSite

Introducing OSI OnSite,
the first independent,
non-OEM remote connection
for linear accelerators.

ONCOLOGY SERVICES
INTERNATIONAL

OSI OnSite is the first independent, non-OEM remote connection product for linear accelerators.

Combining state-of-the-art technology with cloud-based resources, OnSite minimizes disruptive installation processes and updates while maximizing equipment uptime.

OSI OnSite

Provides direct access for:

- Troubleshooting
- Predictive failure analysis
- Preventive maintenance

Skilled OSI Field Service Engineers review the data and can make adjustments and corrections remotely, helping to forestall potential problems and prevent downtime.

As part of OnSite, OSI provides customers with a computer with an integrated functional oscilloscope for waveform capture and multiplexer for waveform selection. The product does not require installation of software on existing computers and is compliant with IT security requirements.

OnSite is provided as part of all OSI full service contracts, and is available to T&M customers and others on a subscription plan. OnSite is available for Elekta and Varian, including both Trilogy and TrueBeam equipment.

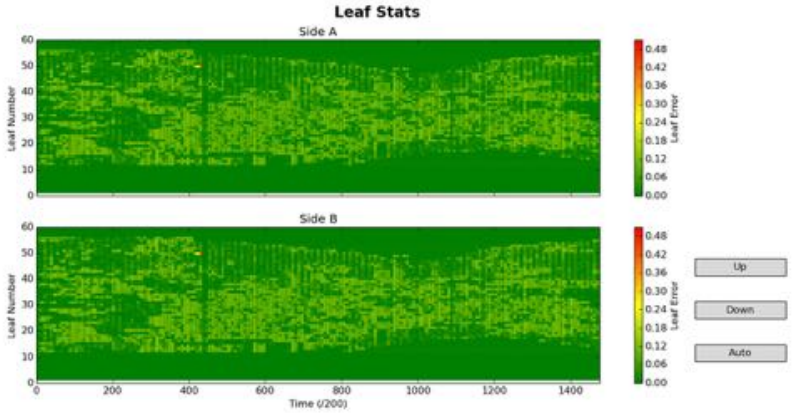
Remote Access Sample Outputs

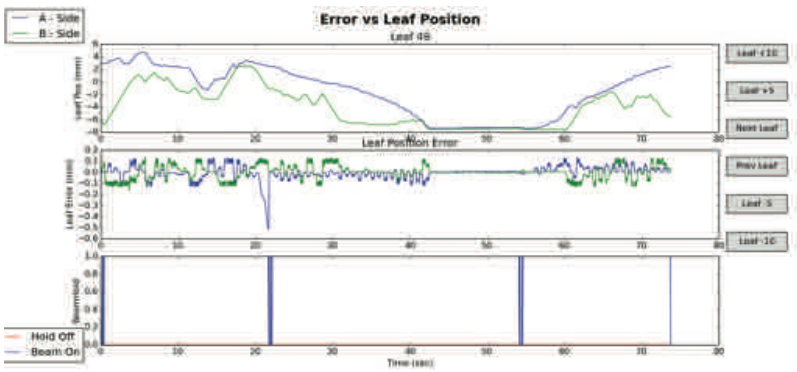
Onsite enables OSI Field Service Engineers (FSEs) to both diagnose and configure the linear accelerators without an actual site visit. Additionally, the data may be reviewed by an FSE when preparing for a site visit.

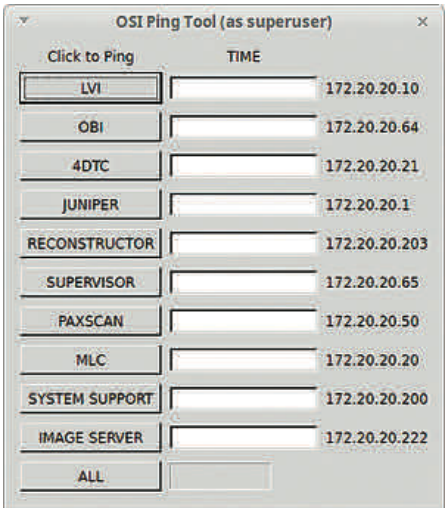
Following are examples of actual remote access outputs.

Output: **Dynalog File and Leaf Error Identification**

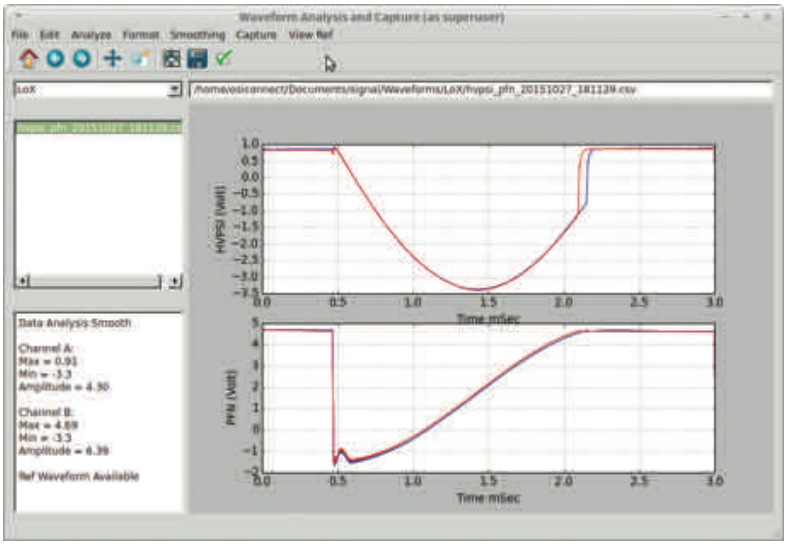
Use: Identification of leaf issues for immediate remote correction





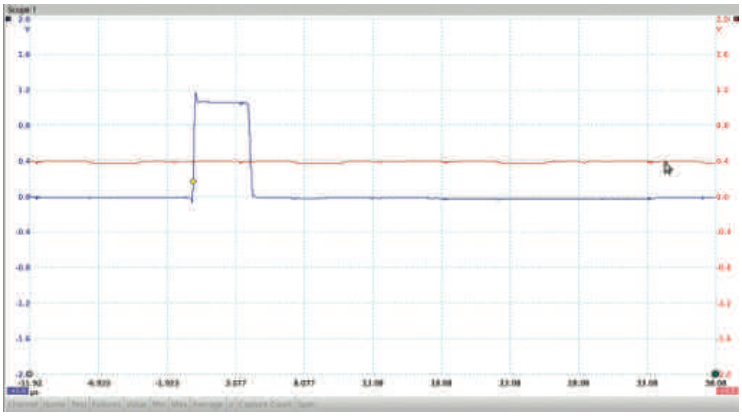


Output: **Ping Tool/Connection Verification**
Use: Verification of connectivity while immediately narrowing parameters for troubleshooting

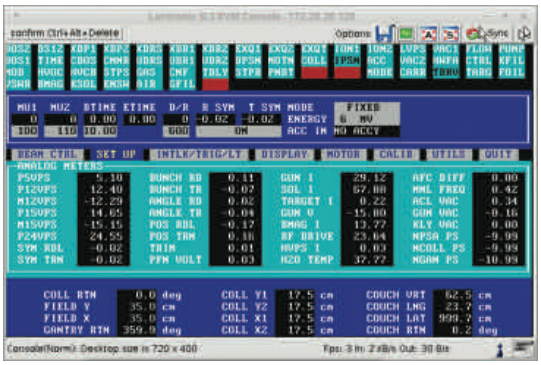


Output: **Waveform Capture/Comparison**
Use: Comparison of current waveform against an equipment standard, improving diagnostics

Output: **TrueBeam: Service Screen**
Use: Diagnostics and remote tuning; FSE has complete control of service mode



Output: **Trilogy /iX Service Screen**
Use: Supports remote diagnostics



System Specifications:

Customer provides:

- TrueBeam: Internet ethernet port (detailed specifications are available for IT functional approval for access)
- Trilogy: Web access to TeamViewer, www.teamviewer.com

OSI provides:

Computer with integrated functional oscilloscope for waveform capture and multiplexer for waveform selection delivered to facility

Hardware:

Computer:

OSI provides a standalone computer – a 64bit Intel Atom CPU running Linux Mint 17 on a 120GB sata drive. The CPU board has 2 GB of memory, HDMi video, and 8 bits of buffered GPIO. It is housed in a standard mini-ATX case with a 300W power supply.

Oscilloscope:

A USB oscilloscope (Picoscope) is used for the display of system signals used in troubleshooting. The oscilloscope is a 50 Mhz dual channel scope with arbitrary waveform generator which allows for 250 Mega samples per second when two channels are in use, and includes a 24k buffer size shared between both channels.

Multiplexer:

An internally developed multiplexer is also employed. It allows for selecting which signals will be displayed. System allows for 10 machine signals (HVPSI, PFNV, GunI, load power2, Klystron voltage, Klystron current, target current, forward power, reflected power and rf driver) as well as two spare connectors for oscilloscope probes. It uses a multiplexer chip that is addressed by the CPU.

Also populated on the circuit board is circuitry for power supply on and off. Circuit is designed to turn on standard ATX-type power supply with a short press for on and a five-second hold for off.

Software:

Operating system – Linux Mint 17.