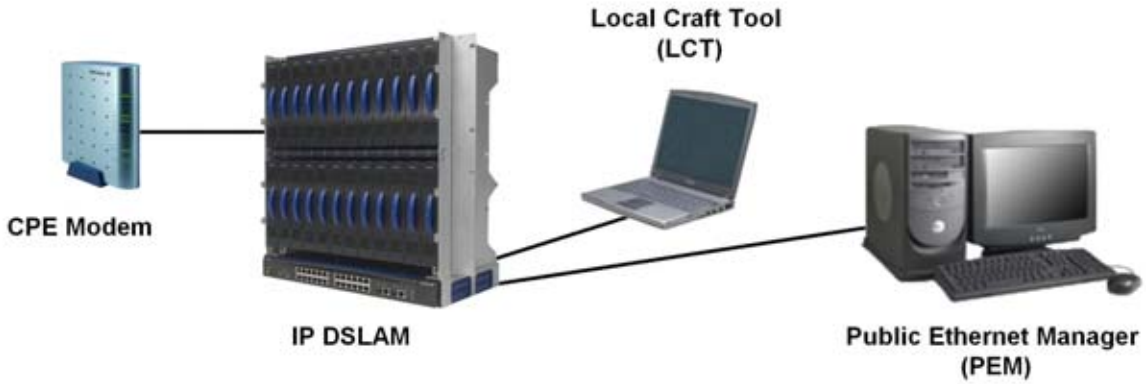



# Local Craft Tool

*The EDA Local Craft Tool (LCT) is a management component used by field technicians. The Local Craft Tool supports the field technician in the installation and verification process when preparing a new Ethernet Access Node for entering into operation. The LCT supports loading of software onto network components, performs DSL line configuration in the IP DSLAM, and executes a complete operational verification of the Ethernet Access Node, including hardware operation and DSL port operation.*

## LCT functionality

The LCT is typically a standard notebook computer for easy handling and transportation. No special software needs to be installed on the LCT, as standard Operating System embedded software components are used.

In the field the LCT is connected directly to the Ethernet Access Node (EAN) and does not require a connection to the central Public Ethernet Manager (PEM) server during operation.

The LCT supports the following functions:

- Performs initial configuration by defining basic parameters such as IP address, management VLAN, etc.
- Downloads the operational firmware to the EAN (the firmware that will be used during operation)
- Performs a configuration of the DSL ports in the EAN, allowing for port verification using a CPE modem
- Monitors the status of the EAN during the installation process
- Performs a complete DSL port scan test, providing graphical feedback to the technician

## Ethernet Access Node

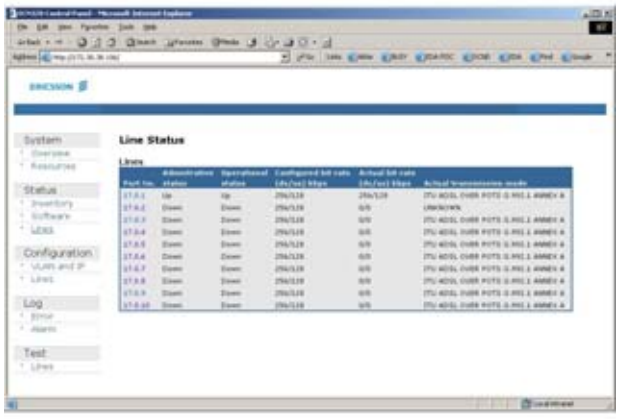
The LCT setup for the Ethernet Access Node (EAN) is depicted in the figure below.


The LCT is connected to the EAN via the serial console connector and an Ethernet port, typically the uplink port. On the LCT, a standard terminal program and a WEB Browser are running along with an FTP client. The LCT is configured to use DHCP in order to receive an IP address from the EAN, and thus belongs to the internal EAN management VLAN.

The overall procedure is as follows:

- Enter basic EAN data via the terminal program
- The LCT receives an IP address from the EAN DHCP server
- Insert the EAN software CD in the LCT
- Download firmware to the EAN via the FTP client
- Verify that all components are operational by checking the LEDs (steady green light) or view status in WEB Browser
- Perform a DSL port configuration using CLI commands (scripts can be prepared up front)
- Enter DSL port verification page in WEB Browser and initiate port scan test
- Verify DSL ports and cabling by connecting a DSL modem, going from port to port (feedback is provided in WEB Browser and by the Line LEDs on the IP DSLAM)
- Save port verification WEB page for documentation
- Revert to EAN default DSL port configuration (i.e. clear port configuration)

By following this procedure, the field technician can ensure that the EAN is installed correctly and runs with the correct software. As an option it is also possible to keep the DSL port configuration in the




EAN, leaving the site in full operation with end-user traffic.

When the EAN is discovered by the PEM management system, PEM will upload information about installed software and any active DSL port configuration. The port configuration will be matched towards the existing service profiles in PEM, and in case of a mismatch a new profile will automatically be created.

### Operation & Maintenance

General O&M of an EDA site is done from the PEM management system. After completion of the installation and verification process supported by the LCT, and the discovery of the EAN by the PEM system, all service provisioning and software upgrading of the site must be done remotely from PEM.

## Technical data

THIS DOCUMENT IS VALID FOR RELEASE

- EDA 2.0, EDA 2.1 and EDA 2.2

HARDWARE REQUIREMENTS

- Pentium III processor
- 256 Mbytes RAM
- Serial communication port
- Ethernet LAN port
- CD-ROM drive

SOFTWARE REQUIREMENTS

- Windows 2000 Professional
- Windows XP Professional
- Linux Red Hat 9.0
- HTML 4.01