PARADYNE®

# OpenLane™ 5.3 Service Level Management for UNIX

Quick Start Installation Instructions

Document Number 7800-A2-GZ41-30

August 2000

---

## Product Description

Paradyne's OpenLane™ Service Level Management Solution is an open, standards-based, highly distributable system offering robust scalability and flexible integration points. A Web browser-enabled user interface provides extensive management functionality.

Paradyne's network management solution features support for diagnostics, real-time performance monitoring, historical reporting, and detailed health and status indicators for Paradyne's wide array of SNMP-managed narrow and broadband network access device families. Support is provided for Paradyne's FrameSaver® Frame Relay Access Units and Hotwire® xDSL and MVL™ products. OpenLane 5.3 also supports Paradyne's 31xx, 7xxx, and 9xxx T1 and subrate access products.

### Network Monitoring

OpenLane 5.3 enables a customer to proactively, as well as reactively, monitor, analyze, and troubleshoot their network via easy-to-use management tools – searching out trouble spots and resolving them before they affect service. With OpenLane 5.3, the user has the ability to verify line quality and the level of service provided, as well as to monitor bandwidth utilization details.

OpenLane is comprised of several integrated features that provide extensive element, network, and service level management capabilities for network service providers, network managers, and their end customers.

### Easy Installation

Installation is completed via a single easy-to-use graphical interface that installs and configures the OpenLane components. OpenLane's highly scalable architecture offers flexibility to grow your system as management scope increases. OpenLane can span customer network sizes from small customers with a few dozen devices and a few users to carrier-class installations with tens of thousands of devices and thousands of users.

# OpenLane 5.3 Features

- Easy-to-use Web browser-based Graphical User Interface
- Support for the full array of Paradyne SNMP-manageable devices
- Support for four levels of user access
- Easy-to-use graphical interface installs and configures each module
- Java-based code interoperates with a variety of existing environments
- E-commerce-class distributed architecture supports small-scale end-user networks up to carrier-class deployments
- Distributed architecture supports:
  - — Customer-supplied Oracle 8i database or Sybase database
  - — Distributed Web server
  - — Distributed Poller/Reader
  - — LDAP directory service
- Compatible with any SNMP management platform, including Adapter Modules for most common platforms
- HP OpenView adapters integrated with the HP OpenView Web-based interface
- Integrated online Help system with full text search capability
- Device configuration through the Web interface
- Scheduled and on-demand Firmware Maintenance downloads
- Service Level Reporting, enabling quality of service (QOS) verification
- Historical data collection and reporting capabilities with on-demand poll feature
- Real-time device health and status, diagnostics, and performance monitoring
- Extensive Web-based diagnostics, including non-disruptive PVC loopback and end-to-end connectivity testing

# Product Documentation Online

Complete documentation for this product is available at **www.paradyne.com**. Select *Library* → *Technical Manuals* → *Network Management Solutions.*

| Document Number | Document Title |
|---|---|
| 7800-A2-GZ42 | *OpenLane 5.3 Service Level Management for Windows Quick Start Installation Instructions* |
| 7800-A2-GZ43 | *OpenLane 5.3 Distributed Database Configuration Quick Start Instructions* |
| 7800-A2-GZ44 | *OpenLane 5.3 Distributed Components Configuration Quick Start Instructions* |

# About These Instructions

These instructions provide you with the necessary information to get your OpenLane Service Level Management software installed and running as quickly as possible. It is not intended to be a complete, detailed reference. Please see the online Help system for detailed instructions on specific operational aspects of the OpenLane 5.3 product. Refer to the readme.txt file for distributed infrastructure details.

Installers should be familiar with UNIX and UNIX administration functions and tasks to use these Quick Start Installation Instructions.

## Planning the Installation

Before installing OpenLane 5.3:

- Review the *Installation Requirements* on page 4.
- Verify the JRE version on your system. Refer to *Checking the Java Runtime Version* on page 5.

# Installation Requirements

Review the following *Minimum Hardware Requirements* and *Software Requirements* to verify that you meet the prerequisites.

## Minimum Hardware Requirements

| Networks with Less Than 500 Devices | Networks with More Than 500 Devices |
|---|---|
| ■ 500 MHz Processor<br>■ 128 MB RAM | ■ Dual 600 MHz Processor<br>■ 256 MB RAM or better |
| ■ 100 MB free disk space<br>■ Additional disk space for storage of performance data:<br>480 KB of disk space per PVC per day (240 KB per DLCI per day)<br>■ Internet Connection:<br>– Required for an online installation<br>– Not required for an installation from CD-ROM | |

## Software Requirements

| Operating System | Java Runtime Environment (JRE) |
|---|---|
| Sun Solaris 2.6 | Java Runtime Environment (JRE) 1.1.8<br>The JRE is available from Sun Microsystems at:<br>**`http://java.sun.com/products/jdk/1.1/jre/index.html`** |
| The following TCP ports are used by the OpenLane server:<br>■ Port 80: Apache Web server 1.3.12 (for http Requests)*<br>■ Port 8007: Apache JServ (for Java Servlet Communications)<br>■ Port 3890: LDAP (Lightweight Directory Access Protocol) Directory Services<br>■ Port 2099: Remote Method Invocation (RMI for Application Communications) | |
| *Optional:* Distributed architecture with customer-supplied:<br>■ Oracle 8i (Standard or Enterprise), or<br>■ Sybase Adaptive Server Enterprise Version 11.9.2 or 12.0 | |

* The port used for the Apache Web server can be changed during the installation process. See *Configuring Apache to Use a Different Port* on page 9.

| Web Client Software Requirements |
|---|
| ■ Internet Explorer (recommended browser)<br>– Version 5.01<br>■ Netscape Communicator<br>– Version 4.7 |

# Checking the Java Runtime Version

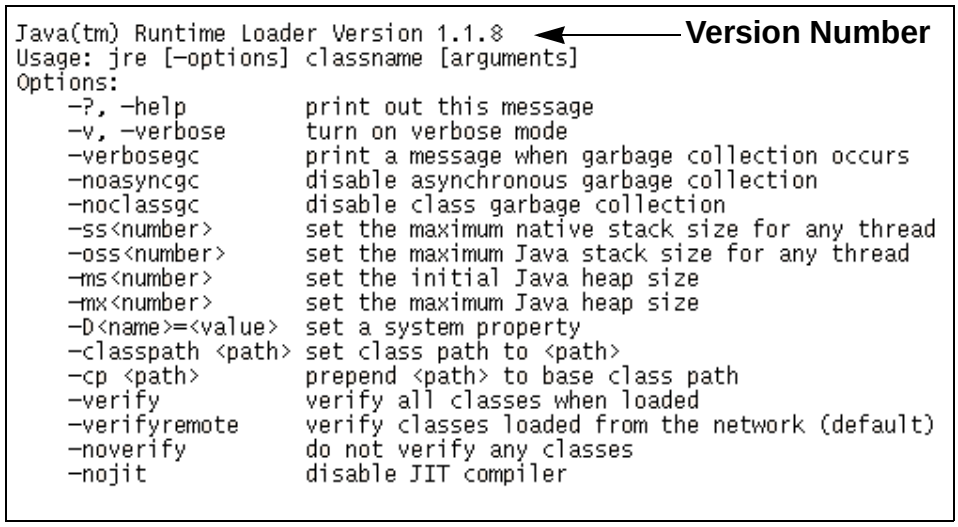
Before installing the OpenLane 5.3 Service Level Management software, you need to verify that the Java Runtime Environment (JRE) has been installed correctly.

### ▶ Procedure

To verify the JRE installation:

1. Open a terminal window. Type **`jre`** and press Enter.

   The window should display the Java Runtime Environment Version number and a list of options.




2. If you receive a message that the JRE cannot be found or another version is found, verify that the path to the correct JRE is in your PATH environment variable. To display the PATH environment variable:

   Type **`echo $PATH`** and press Enter

# Installing the OpenLane 5.3 Software

If you are installing OpenLane 5.3 on a system that is currently running OpenLane 5.1 or 5.2, the upgrade is handled automatically during the OpenLane 5.3 installation.

## What the OpenLane 5.3 Installation Program Will Do

- Installs and configures the Apache 1.3.12 Web server and the Apache JServ. The Apache software is downloaded from **www.paradyne.com** when performing an online installation. If installing from CD-ROM, the Apache software is loaded from the CD.

  By default, the Apache software is installed with the following parameters:

| Apache Parameter | Setting |
|---|---|
| Installation directory | /opt/apache |
| TCP Port for http requests | 80 |
| User | nobody |
| Group | nobody |

  These options can be changed during the installation process. To modify the Apache Web server to use a port other than port 80 after installation, see *Configuring Apache to Use a Different Port* on page 9.

  **Default Installation Path for Apache Software:**

  **`/opt/apache`**

  The Apache location will be referred to in this document as: **`$APACHE`** and refers to: **`/opt/apache`**

- Installs the OpenLane 5.3 components, including the Cloudscape Java SQL Database.

  **Default Installation Path for OpenLane 5.3 Software:**

  **`/opt/pdn/OpenLane`**

  The OpenLane location will be referred to in this document as **`$OL_HOME`**

- Provides a startup command to control all Apache and OpenLane processes.

  — Command is: **`OLControl`**

- OpenLane 5.3 includes Management Platform Integration Adapters for HP OpenView Network Node Manager for Sun Solaris.

  The software-based platform adapters provide integration points for:

  — Paradyne device-specific map icon creation

  — Trap definition files

  **NOTES:**

  — You do not have to install the Apache Web server in **`/opt/apache`** and OpenLane 5.3 in **`/opt/pdn/OpenLane`**. However, it is *highly recommended* that you install Apache and OpenLane 5.3 on the same mount point.

— If you will be distributing the Web server, you must install OpenLane and Apache in the same directory path on the Web server and the OpenLane Management system. The path cannot exceed 18 characters.

## Obtaining the License Key

An OpenLane license key is required to install OpenLane 5.3. Obtain your temporary license key from the Paradyne Web site. A 30-day temporary license key will be provided via e-mail.

After purchasing the product, a license key form is provided. Complete and fax the license key form to obtain your license key.

To locate the license key on the system once OpenLane is installed, use one of these methods:

- Display the OpenLane About screen by clicking the **`About OpenLane Service Level Management`** link on the OpenLane Administration screen
- Display the **`$OL_HOME/pdnKey.txt`** file using a text editor

## Installing from Paradyne's Web Site

### ▶ Procedure

1. Log on to the system as root.
2. Download the OpenLane 5.3 software from **www.paradyne.com**.
3. Save the **`setup.sh`** file in **`/tmp`** or any directory you choose.
4. Exit Netscape if it is running. Change to the **`/tmp`** directory.
5. Change the file permissions: **`chmod 777 setup.sh`**
6. Run the setup.sh file: **`./setup.sh`**
7. Follow the instructions on each screen.
8. When prompted for the Apache User and Group information, use:
   — **`User = nobody`**
   — **`Group = nobody`**

## Installing from CD-ROM

### ▶ Procedure

1. Log on to the system as root.
2. Exit Netscape if it is running. Insert the OpenLane 5.3 CD-ROM into the CD-ROM drive and mount it.
3. Change to the CD-ROM drive.
4. Change to the OpenLane directory and run the **`setup.sh`** file.
5. Follow the instructions on each screen.
6. When prompted for the Apache User and Group information, use:
   - — **`User = nobody`**
   - — **`Group = nobody`**

## Installing from FTP Files

Contact Technical Support to arrange this type of installation:

- 1-800-795-8004

## Starting OpenLane 5.3 Web and Database Services

### ▶ Procedure

1. From a terminal window, change directory to: **`$OL_HOME`**
2. Type **`OLControl start`** and press Enter. The following services are started:
   - — Apache Web Server
   - — Cloudscape JDBMS
   - — OpenLane Management Services
   - — Hotwire SCM Card Poller
   - — LDAP Directory Services
   - — User History Poller
   - — User History Reader/Digester

**NOTE:**

The OpenLane 5.3 new installation is complete. Continue with *Accessing the OpenLane 5.3 Web Applications* on page 10.

### Stopping OpenLane 5.3 Web and Database Services

▶ **Procedure**

1. From a terminal window, change directory to: **`$OL_HOME`**
2. Type **`OLControl stop`** and press Enter.

## Configuring Apache to Use a Different Port

By default, the Apache Web server is installed and configured to use TCP port 80 (unless you changed it at installation time). You can configure the Apache Web server to use another port after installation, as long as that port is not in use by another service.

▶ **Procedure**

To change the TCP port:

1. Change directory to **`$OL_HOME`**
2. To stop the OpenLane services, type **`OLControl stop`** and press Enter.
3. Change directory to: **`$APACHE/conf`**
   - — Edit the file **`httpd.conf`** using a text editor, such as “vi.”
   - — Edit the entry for **`PORT`**. Change the value from 80 to the new port number.
   - — Save the file after making changes.
4. Change directory to: **`$OL_HOME`**.
5. To start the OpenLane services, type **`OLControl start`** and press Enter.

# Accessing the OpenLane 5.3 Web Applications

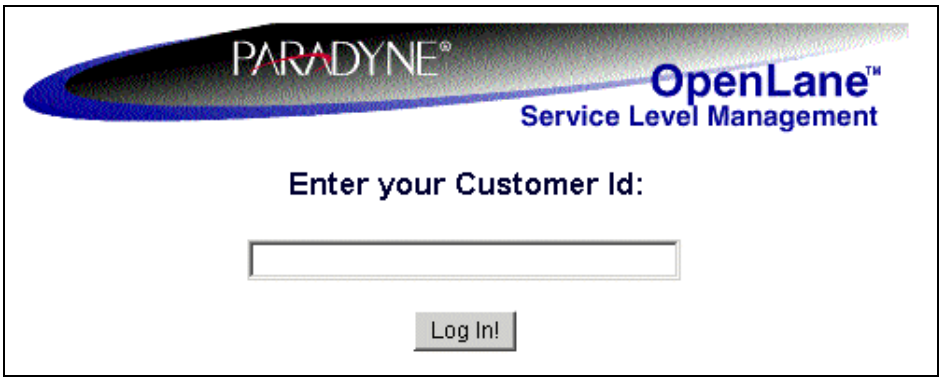
▶ **Procedure**

1. Using your Web browser, enter the URL of the OpenLane 5.3 system.

   Example: **`http://172.24.9.1/OpenLane/`**

   **NOTE:**

   You can use the IP address or the machine name in the URL to access the OpenLane 5.3 system.




2. When the OpenLane 5.3 login screen appears, enter a Customer ID by using the default of **`Admin`** to access the system as an administrator.

You are now ready to create additional Customer Profiles and add manageable devices.

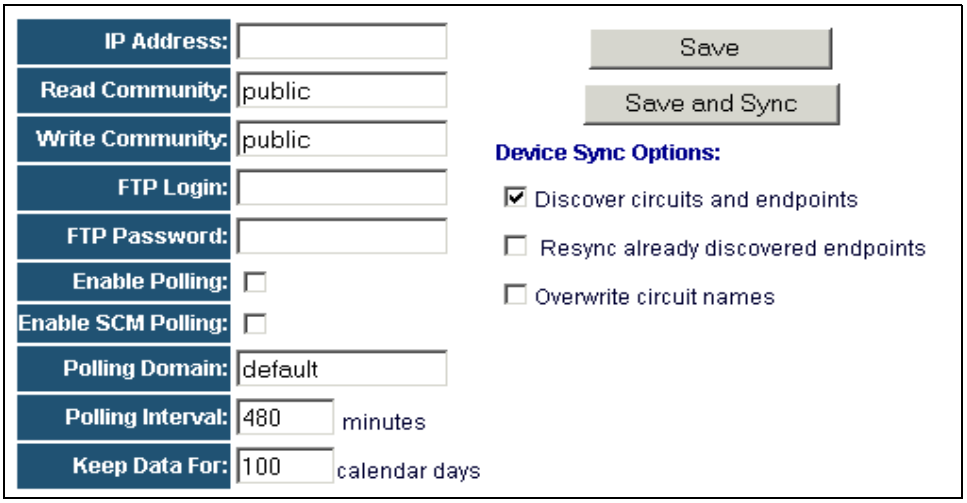
# Adding a Device

▶ **Procedure**

To add a device to the OpenLane 5.3 System:

1. Log in to the OpenLane 5.3 system with the customer ID of **`Admin`**.
2. Select the Network Diagnostics link.
3. Select the New Device button from the bottom frame on the screen.

4. The following New Device screen appears:




| New Device Field Names | Field Description |
|---|---|
| **IP Address** | IP Address of the device being added. |
| **Read Community** | Read Community Name. Must match the Read Community Name set in the device. Default = public. |
| **Write Community** | Write Community Name. Must match the Write Community Name set in the device. Default = public. |
| **FTP Login** | FTP Login. Must match FTP Login in this device. Used by RMON Data Collection and Firmware Download. |
| **FTP Password** | FTP Password. Must match FTP Password in this device. Used by RMON Data Collection and Firmware Download. |
| **Enable Polling** | Enables RMON Data Collection. Default = Disabled. |
| **Enable SCM Polling** | Enables polling for Hotwire GranDSLAM devices. Used to speed the display of cross-connect information. Default = Disabled. |
| **Polling Domain** | User history polling domain. Should be left as “default.” |
| **Polling Interval** | Number of minutes between each RMON Data Collection. Default = 480 minutes. |
| **Keep Data For** | Number of calendar days to keep RMON data in SQL database. Used by the UHAge utility. Default = 100 calendar days. |
| **Save** | Adds the new device to the OpenLane 5.3 Directory Services database. |

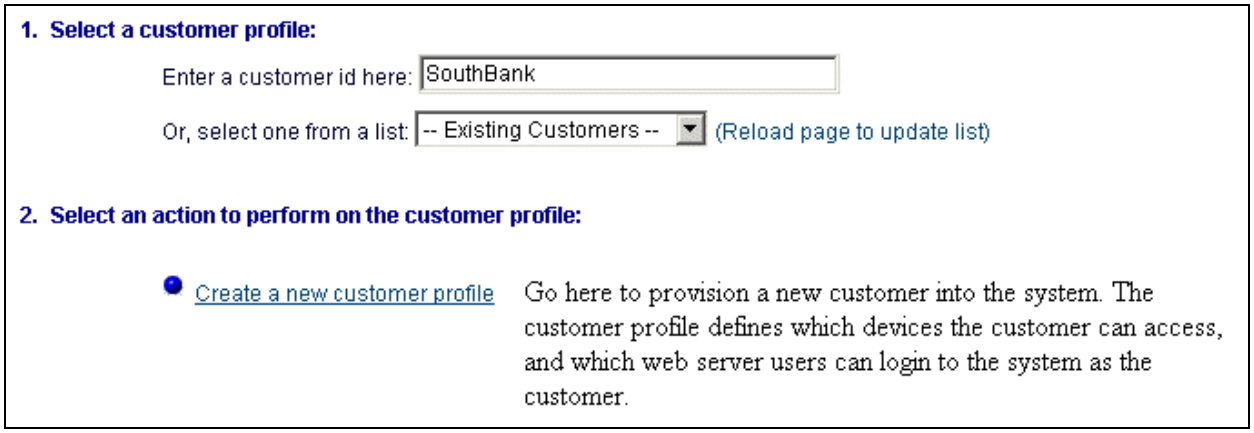
| New Device Field Names | Field Description |
|---|---|
| **Save and Sync** | Adds the new device to the OpenLane 5.3 Directory Services database and performs a device synchronization to ensure that the OpenLane directory matches the current configuration of the device. The behavior of the device synchronization can be changed using the following options:<br>**Device Sync Options:**<br>❑ Discover circuits and endpoints<br>❑ Resync already discovered endpoints<br>❑ Overwrite circuit names |

# Adding a Customer ID

### ▶ Procedure

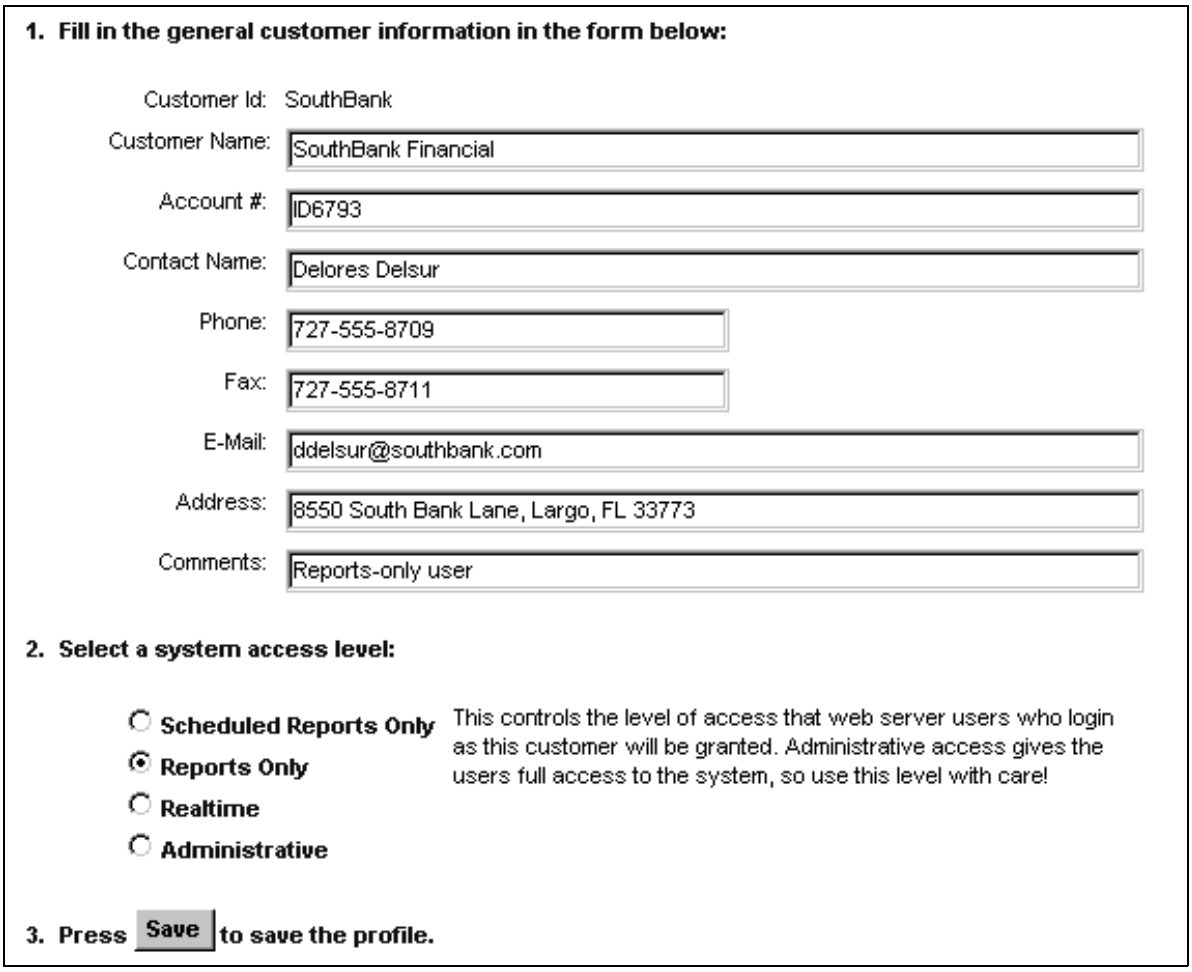
To create a new Customer ID for Web-based report access:

1. Log in to the OpenLane 5.3 system with the Customer ID of **`Admin`**.
2. Choose Customer Profiles.




3. Enter the new Customer ID.
4. Under **`2. Select an action to perform on the customer profile:`**, select Create a new customer profile.

5. The following form appears:




6. Fill in the customer information in the fields provided.
7. Under **`2. Select a system access level:`**, select **Scheduled Reports Only, Reports Only,** or **Realtime**.

   Access Levels:

   — **Scheduled Reports Only** – User can view scheduled FrameSaver SLV reports.

   — **Reports Only** – User can view scheduled FrameSaver SLV reports, and run on-demand reports.

   — **Realtime** – User can generate Performance graphs (real-time and historical), generate on-demand reports, view scheduled reports, view Health & Status, run non-disruptive tests, and use the Device Browser in read-only mode.

   — **Administrative** – Admin has read/write access to all features, including scheduling reports and running disruptive tests.
8. Press the Save button to save the customer profile.

## Warranty, Sales, Service, and Training Information

Contact your local sales representative, service representative, or distributor directly for any help needed. For additional information concerning warranty, sales, service, repair, installation, documentation, training, distributor locations, or Paradyne worldwide office locations, use one of the following methods:

- **Internet:** Visit the Paradyne World Wide Web site at **www.paradyne.com**. (Be sure to register your warranty at **www.paradyne.com/warranty**.)
- **Telephone:** Call our automated system to receive current information by fax or to speak with a company representative.
  - — Within the U.S.A., call 1-800-870-2221
  - — Outside the U.S.A., call 1-727-530-2340

## Document Feedback

We welcome your comments and suggestions about this document. Please mail them to Technical Publications, Paradyne Corporation, 8545 126th Ave. N., Largo, FL 33773, or send e-mail to **userdoc@paradyne.com**. Include the number and title of this document in your correspondence. Please include your name and phone number if you are willing to provide additional clarification.

## Trademarks

OpenLane and MVL are trademarks of Paradyne Corporation. FrameSaver and Hotwire are registered trademarks of Paradyne Corporation. All other products and services mentioned herein are the trademarks, service marks, registered trademarks, or registered service marks of their respective owners

*7800-A2-GZ41-30*