



## READ ME FIRST

---

# 5515 IRIX PCI 64 BIT ID1 DRIVER

---

## 1. Introduction

This README file describes the new features in the Integrated Driver 1 (ID1) release of the ATM adapter software. This file should be read carefully before the ID1 software is installed on your system. The ID1 driver provides the following functions in the same driver. All these functions can be enabled and used simultaneously.

- LAN Emulation client (SVC). o Ethernet o Token Ring
- LAN Emulation services (LES, BUS and LECS). o Ethernet o Token Ring
- IP-ATM (RFC-1577) client (SVC)
- IP-ATM (RFC-1577) server
- Bridged PVCs based on RFC-1483 o LLC Encapsulated Ethernet/802.3 o LLC Encapsulated 802.5 o Null Encapsulated Ethernet/802.3 o Null Encapsulated 802.5 - Routed PVCs based on RFC-1483 o LLC Encapsulated o Null Encapsulated

The configuration and the statistics display of the driver software is done with a GUI based utility, cellview.

## 2. Configuration

After the software is installed on a system, the system should be rebooted before the driver software can be configured with cellview. Once the software is configured, it does not have to be configured again after each system reboot.

In the ID1 release, all the configuration data is stored in a single configuration file, `/etc/atm/cvconf`. Configuration files `/etc/leconf.(n)` and `/etc/atmconf.(n)` in pre-ID1 releases do not exist in this release. There is an on-line man page for `cvconf` that describes the format of this file.

When the ID1 package is removed from a system, the configuration file `/etc/atm/cvconf` is saved as `/etc/atm/cvconf.save`. If an ID1 package is installed again, `/etc/atm/cvconf.save` can be moved to `/etc/atm/cvconf` to quickly restore the configuration of the previous installation.

### 3. Cellview

Cellview is a GUI based utility for ATM software configuration and statistic display. When an entity, such as LECS, is configured with cellview, in addition to configuring the software, the configuration information is stored in the configuration file so that upon subsequent system reboots, the software configuration can be restored without having to configure the software manually again. At the system boot time, all the software entities are initialized with the configuration information in the configuration file.

With the configuration capabilities of cellview, command line configuration utilities such as les, lecs, etc. are not needed. The command line configuration utilities are included in the package but their usage is not recommended unless for some reason you can not run cellview on your system. Command line configuration utilities configure the software based on the options specified, but do not update the configuration file.

In the "Setup" mode, cellview displays the configuration stored in the configuration file. In the "Stats" mode, cellview displays the actual configuration of the software. Normally the configuration file mirrors the software configuration. If the command line configuration utilities are used, the configuration file and the software configuration may get out of synchronization. This can cause subsequent configuration changed from cellview to not work properly.

### 4. PVCs

The LAN Emulation and IP-ATM clients include both SVC and PVC capabilities.

In LAN Emulation clients, SVC capabilities are based on ATM Forum's "LAN Emulation Over ATM Specification - Version 1.0". The PVCs supported are bridged PVCs as described in RFC-1483. Clients can be enabled in PVC only or PVC and SVC mode. A 6 byte MAC address and a VCI number is associated with each PVC. Each PVC can be individually enabled as "Broadcast PVC". If enabled as "Broadcast PVC", all the broadcast/multicast packets received by that client from the upper layers are transmitted on that PVC. A maximum of 16 PVCs can be enabled as "Broadcast PVC".

In IP-ATM clients, SVC capabilities are based on RFC-1577. The PVCs supported are routed PVCs as described in RFC-1483. Clients can be enabled in PVC only or PVC and SVC mode. An IP address and a VCI number is associated with each PVC. Like RFC-1577, IP-ATM PVCs do not support transmission of broadcast/ multicast packets.

### 5. Other Notes

- If the signalling parameters are changed from cellview, the changes will not take effect until the system is rebooted or signalling daemon is restarted. Signalling daemon can be restarted by entering the command "restart\_signal".

- The mapping of IP interface number to LANE and IP-ATM clients is as follows:

LANE clients: IP interface number = (board number \* 4) + client number

IP-ATM clients: IP interface number = 32 + board number

If there are two adapters installed in the system, IP interface number for all the clients that can be enabled is shown below. 'li' is the IP interface prefix for Interphase ATM adapters.

li0 Board 0, LAN Emulation client 0 li1 Board 0, LAN Emulation client 1 li2 Board 0, LAN Emulation client 2 li3 Board 0, LAN Emulation client 3 li4 Board 1, LAN Emulation client 0 li5 Board 1, LAN Emulation client 1 li6 Board 1, LAN Emulation client 2 li7 Board 1, LAN Emulation client 3 li32 Board 0, IP-ATM client li33 Board 1, IP-ATM client

- MAC address for Bridged PVCs should be entered in the natural order of the emulated LAN. For Ethernet emulation, the MAC address should be entered in the conical format. For Token Ring emulation, MAC address should be entered in the non-conical format.

- After the software package is installed, all the entities, including the LAN Emulation and IP-ATM clients, are initially configured as disabled. Run cellview or edit the file /etc/atm/cvconf to enable and configure desired entities.

## 6. Bug (missing features) list

- After system reboot, if a LAN Emulation or IP-ATM client is disabled and then enabled again, PVC associated with that client are not configured in the driver automatically . In this situation, pvc command can be used to configure the PVCs.

- Cellview does not support LECS client database management. lecs command should be used for LECS client database management. See on-line lecs manual page for details.

## Contact Information

### Customer Support

United States:	Telephone: (214) 654-5555
	Fax: (214) 654-5500
	E-Mail: <a href="mailto:intouch@iphase.com">intouch@iphase.com</a>
United Kingdom:	Telephone: 44 (0) 1869-321222
	Fax: 44 (0) 1869-247720
France:	Telephone: 33 (0)1 41 15 44 00
	Fax: 33 (0)1 41 15 12 13
Asia/Pacific Rim:	Telephone: + 81 35423 6513
	Fax: + 81 3 5423 6511

### World Wide Web

<http://www.ipphase.com>

### Anonymous FTP Server

<ftp.ipphase.com>