

Lucent Technologies
Bell Labs Innovations

Wireless Communications and Networking Division

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Application Note

for

ORiNOCO Windows Client S/W Re-branding

Date: 29-Sep-00

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CHANGE SHEET					
Rev.	Date	Description of change			Appr. Date
		Page	Par.		
A	29Sep00	All	All	Initial Issue	

Note:

- *I assume that information for Readme.txt and License.txt files (like Web-site reference) are part of the "CD Re-branding".*

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1. INTRODUCTION

1.1 Summary

This Application Note specifies the OEM re-branding of the ORiNOCO Client software for Microsoft Windows Operating System environments. It gives an overview of the ORiNOCO Client architecture, explains identification and compatibility aspects of re-branding, and specifies the re-branding items that require input from the OEM partner.

1.2 Scope

The term "re-branding" is used to refer to a way to customize, by Lucent Technologies WCND, the ORiNOCO client system for OEM partners. This consists of the costomization of information displayed to the user, and optional removal of certain functions.

OEM partners who wish to change functionality should request development kits. Such changes are outside the scope of this document.

This document addresses the re-branding of the Client software for MS Windows environments: NDIS Miniport Drivers, including their installation and configuration tools, and the Client utilities Client Manager and Wireless Station Update utility (WSU).
This includes the re-branding items of the firmware on the Cards (CIS, production data, etc.), as these firmware items have a direct relation with the Client software.

1.3 Purpose

This document serves the following purposes:

- Explain that each OEM variation of the ORiNOCO system - further referred to as "OEM system" - forms a logical whole that can be migrated to future versions independent from other OEM systems.
- Explain that different OEM systems, including the Lucent system, do not “interfere” with each other when installed in one client system.
- Upfront definition of customizable options between Lucent Technologies and (potential) OEM partners.

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2. THE ORINOCO WINDOWS CLIENT SYSTEM

Figure 2-1 gives an overview of the ORiNOCO Client System for the Windows environments, as far as relevant for this document. The lefthand part represents the runtime system, consisting of the NDIS Miniport Driver, the Client Manager and the Card Settings Program. The righthand part shows the elements that play a role at installation time.

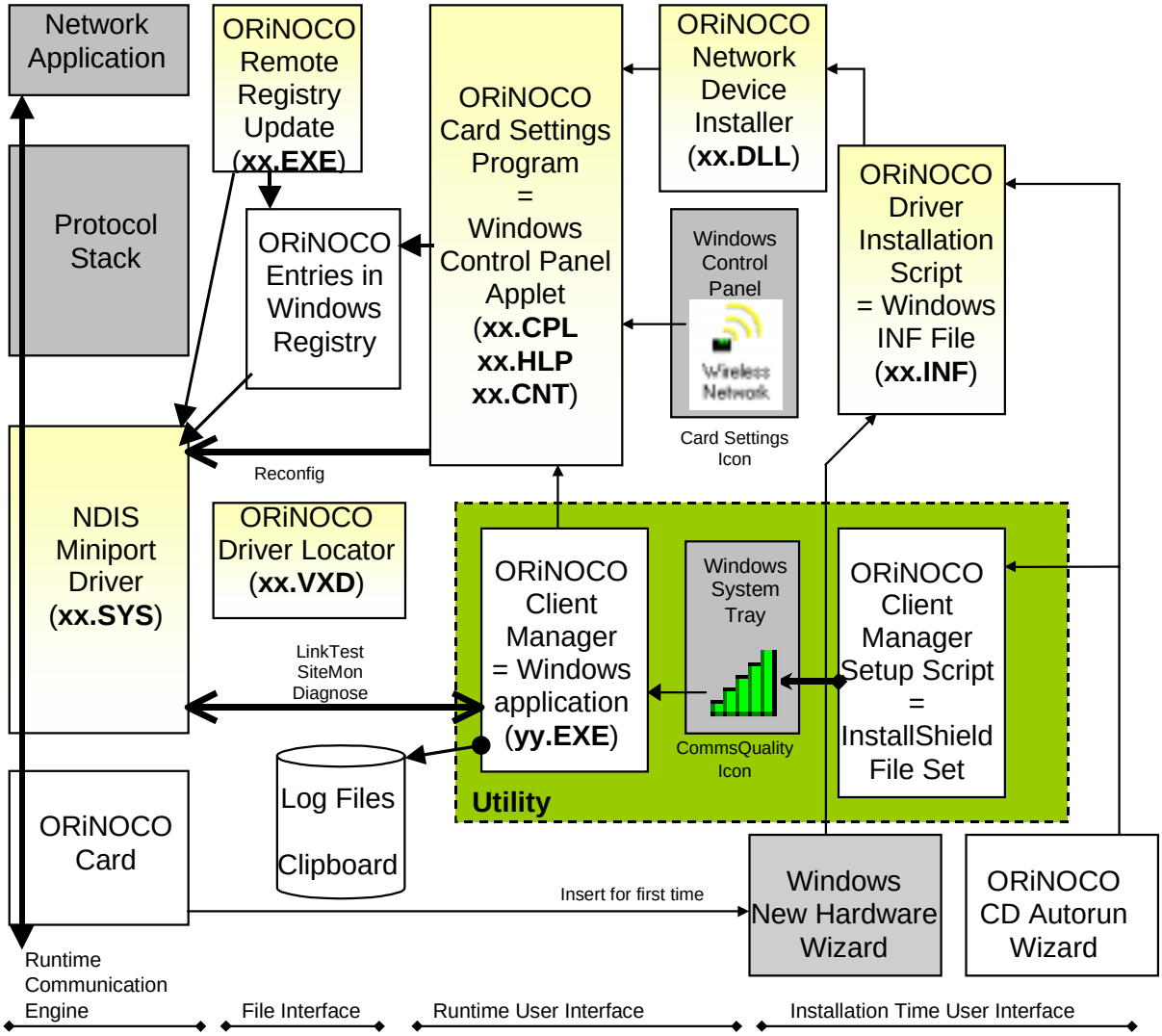


Figure 2-1: ORiNOCO Windows Client Architecture

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2.1 The Runtime Client (Sub)Components

At runtime, the Windows Client consists of the following (sub-)components[1] working closely together:

- **ORiNOCO Card**
  The ORiNOCO Network Interface Card. Various hardware solutions are available:
  – ORiNOCO PC Card
  – ORiNOCO ISA Adapter + ORiNOCO PC Card
  – ORiNOCO PCI Adapter + ORiNOCO PC Card
  – ORiNOCO Integrated Card
  – ORiNOCO USB Card
  – ORiNOCO Embedded Card (mini PCI)

- **NDIS Miniport Driver**
  Various types of NDIS Miniport Drivers are provided, for different MS-Windows environments and card types.
  For the PC Card (incl. Adapters), Integrated Card, and Embedded Card (mini PCI):
  – NDIS 3 Miniport Driver for MS-Windows 95
  – NDIS 4 Miniport Driver for MS-Windows NT v4
  – NDIS 5 Miniport Driver for:
    MS-Windows 98 (including Gold and Second Edition),
    MS-Windows 2000, and
    MS-Windows Millennium Edition (Me).

  For the USB Card:
  – NDIS 5 Miniport USB Driver for:
    MS-Windows 98 (including Gold and Second Edition),
    MS-Windows 2000, and
    MS-Windows Millennium Edition (Me).

  The NDIS Miniport Driver provides the link between the protocol stack(s) and the ORiNOCO Card, as well as the link between the utilities and the ORiNOCO Card.

  The NDIS Miniport Driver component is delivered with the following configuration sub-components:

  - **ORiNOCO Card Settings Program**
    Implemented as a Windows Control Panel Applet, and viewed as a sub-component of the NDIS Miniport Driver component, this is present in the run-time client system. It allows for dynamic runtime change of the configuration profile to be used by the driver and card, and for dynamic changes in the individual settings within each profile.
    The User Interface of this program can be called via a Card Settings Icon in the Windows Control Panel, or via the ORiNOCO Client Manager.

  - **Remote Registry Update**
    A separate method to change information in an ORiNOCO entry in the Registry is via the ORiNOCO Remote Registry Update program, which is also provided as part of the NDIS Miniport Driver component. This executes locally on the station, and is intended for use by centralized applications (login scripts, SMS, etc.) for periodic update of certain ORiNOCO Card parameters. Notably the Encryption

[1] A "component" is an element in the ORiNOCO system architecture that has its own life cycle of versions, in principle independent from other components. It is user identifiable and installable.
"Sub-components" are parts (modules/files) of such component, which follow the life cycle of the component, and are not separately user installable.

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keys can be updated regularly controlled by a central application, without the user of the client system being involved.

- **Windows Registry**
  The Windows Registry is used to store driver configuration parameters. Most parameters are used directly to configure the ORiNOCO Card. The NDIS Miniport Driver loads configuration values at start-up time and uses these to configure the card. The structure of the Registry entries supports the simultaneous storage of configuration parameters for up to four different configuration profiles. Information is put in the Registry at installation time by the ORiNOCO Driver Installation Script, the Network Device Installer and by the Card Settings Program.

- **ORiNOCO Client Manager**
  This is a Windows application, which interacts with the Driver and Card. It offers a quick path to the Card Settings Program, and provides identification and diagnostic functions.
  The User Interface of this program can be called via the Comms Quality Icon in the Windows System Tray on the Windows Task Bar.

- **ORiNOCO Wireless Station Update utility (WSU)**
  This is also a Windows application, which interacts with the Driver and Card. It offers a function to update the firmware on the Card. A new WSU is provided for each new version of the Card's firmware (set). The firmware is embedded in the application.
  Note: The WSU is not shown in Figure 2-1.

2.2 The Install Time Client (Sub)Components

At installation time, the following (sub-)components come into play to guide the proper installation of the ORiNOCO Windows Client:

- **ORiNOCO Card attributes:**
  - **PC Card Card Information Structure (CIS)**
    In Windows systems, the embedded plug-and-play functions to detect PC Card hardware and to load the appropriate driver and other software needed for such hardware is controlled by certain elements in the CIS present on each PC Card.
    – Product Name String (for Windows NT)
    – CIS Signature String (for Windows 95, Windows 98 and Windows 2000)
    This CIS-based identification applies to the ORiNOCO PC Card (incl. applications via the ISA and PCI Adapters) as well as to the ORiNOCO Embedded Card (mini PCI).

    For the CIS tuple CISTPL_VERS_1, subfield TPLLV1_INFO, the CIS standard defines a free format string comprised of a series of zero-separated text strings, with a description for the first two strings:
    String 1 = **Manufacturer Name**
    String 2 = **Product Name**

    This part of the CIS determines the OEM variation of the PC Card in a Client system. It ties the software of the OEM system to the hardware. Therefor, unique strings must be defined for each OEM system.

  - **USB Card Identification**
    In Windows systems, the embedded plug-and-play functions to detect USB devices and to load the appropriate driver and other software needed for such device is controlled by the USB Vendor ID (VID) and Product ID (PID) provided by the USB device.

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These identifiers determine the OEM variation of the USB Card in a Client system. It ties the software of the OEM system to the hardware. Therefor, a unique value combination must be defined for each OEM system.

- **NDIS Miniport Driver sub-components:**
  - **ORiNOCO Driver Installation Script (xxx.INF)**
    This script is activated during the first insertion of an ORiNOCO card in a client device. It is tied to the unique PC Card Plug&Play String derived from the CIS (see also above), or from the USB VID/PID (see also above); Windows searches all files of type .INF until it finds one that has a matching string in the "Models" section. It controls the following actions, carried out by the Windows installation wizard (the NDI Installer):
    – storing in registry the specific text strings to be displayed in several Windows screens
    – copying the files for the driver installation to the appropriate directories
    – storing in registry the information for removal of files by standard Windows Remove / Update
    – starting the Network Device Installer program (DLL)
    During Remove or Update, the same script is used by Windows as guide for knowing what to remove and what procedure to follow for update.
  - **ORiNOCO Network Device Installer (xxx.DLL) (Windows 9x only)**
    This is a program that gets activated during Windows 9x driver installation on directions of the information stored in the Installation Script. It creates the standard Windows tabs "Driver Type" and "Bindings" in the Properties panel for the card. At the end it gives control to the Card Settings program.
    This program applies to Windows 95 and 98 only; for Windows NT and Windows 2000 this functionality is integrated in the Card Settings Program.
- **ORiNOCO Client Manager sub-component:**
  - **ORiNOCO Client Manager Setup Script**
    This script will create the required files for the Client Tool from a packed format and copy them to the specified directories. It also creates the required information to do a Remove or Replace of the program in the future.
- **ORiNOCO CD Autorun Wizard**
  The ORiNOCO CD-ROM starts up with an autorun wizard when inserted in a client system. This guides the user through installation of the Client Manager and optional applications (RG Setup Utility, AP Manager), and provides easy access to the User's Guides on the CD.
  Note: This auto-run wizard does not install the NDIS Miniport Driver. That requires insertion of the card and installation via the Windows New Hardware Wizard.
- **Windows New Hardware Wizard**
  Windows will activate an installation program when it detects a Card which has no matching entry in the Windows Registry (based on CIS information or USB VID/PID). The Windows programs will interpret the items in the Driver Installation Script and execute accordingly, causing Registry entries to be generated and appropriate further programs to be started.

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3. SYSTEM SEPARATION

Two important requirements have been set for the re-branding of the ORiNOCO system:

- Each OEM system forms a logical whole that can be migrated to future versions independent from other ORiNOCO-derived OEM systems.

  i.e. The OEM Partner has full control over what components and what versions of those components are part of the system, and when they are introduced.

- Different OEM systems, including the Lucent system, do not “interfere” with each other when installed in one client system.

  i.e. The components of a particular OEM system interact only with other components of the same system, allowing “parallel” installations of different OEM systems in a single client station.[2]

This system separation is achieved by assuring unique values for the major interface items. These items are directly or indirectly derived from the Vendor Name (see also 5.1.1).

- PC Card CIS, couples the PC Card Driver to the PC Card.
- USB VID/PID combination, couples the USB Driver to the USB Card.
- File names, couple the various software parts:
  - Card Settings Control Panel Applet to the Driver, directly and via information stored in the Windows Registry,
  - Client Manager to the Driver,
  - Client Manager to the Card Settings Control Panel Applet, and
  - WSU to the Driver.
- Identification items in the User Interface, identify the components as part of the "Brand X" system.

[2] An example where that would be useful is a situation where an employee of a company has one OEM variation installed at his office (card supplied by his employer) and another variation installed at home (bought by himself), both required on the same portable PC which he is allowed to use at home. Another example is the wireless LAN test system of magazines and interoperability test labs.
Another problem that would arise with no system separation is that there is likely to occur a desynchronization sooner or later, where one OEM variation requires a new version of a component and where the other variation gets the change “for free”, but may be incompatible with that change.

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4. IDENTIFICATION AND COMPATIBILITY

To ensure system integrity and allow controlled migration, the standard ORiNOCO component identification and interface compatibility checking rules apply within each OEM system.

4.1 Components Identification

The names of the hardware and software components (e.g. PC Card Type-II Extended, NDIS *n* Miniport Driver, Client Manager) are determined by the parent ORiNOCO system. They can **not** be customized.
Each component carries a unique Variant number and Version number (Major.Minor), controlled by the parent ORiNOCO system. There are **not** separate Variant and Version numbering schemes per OEM system.

4.2 Component Migration Provisions

4.2.1 Interface Compatibility between Components

Component interface checks in the ORiNOCO Client system can be direct (e.g. between the NDIS Miniport Driver and the Card, and between Client Manager and the Driver) or indirect (e.g. the WSU checks that the Station Functions firmware that is embedded in the WSU is compatible with the Card it is to be loaded on).

For the interfaces between separate components the standard ORiNOCO compatibility range check is applied to determine in a runtime environment whether all components are capable to work together. This uses the actor range attribute and the supplier range attribute in the two components that share an interface.

4.2.2 Compatibility between Sub-Components

During run-time, the NDIS Miniport Driver consists of a number of sub-components[3] (the .SYS file and various configuration parts). The sub-components that need to interact with each other have a built-in test on an exact version number match. This will ensure that always a complete set of a specific component version is used. This will force the release of a new version of each sub-component even when nothing has changed in that particular sub-component. This avoids mixing up of sub-component files (which will use the same file names for all their versions!) across versions.

[3] For the distinction between components and sub-components, see footnote 1 on page 3.

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5. BRANDING ITEMS

To create a customized version of the ORiNOCO Windows Client software, so called production options are used for the various software components. A production option is a variation in the standard product, on specification of an OEM partner, that is applied during the production of the software. These are all the things that turn the ORiNOCO software into “Brand-X” software.

5.1 Identification Items

5.1.1 Vendor Name

Value in Lucent ORiNOCO system: "Lucent Technologies".
Format = Display string of up to 32 ASCII printable characters.

This name is used in multiple places:

- In the PC Card's Card Information Structure (CIS) as the "Manufacturer Name" (see also section 2.2).
- As the "Manufacturer Name" shown in various places in Windows.
- In README.TXT and LICENSE.TXT files.

5.1.1.1 PC Card's CIS Manufacturer Name

This name in the PC Card's CIS is used as part of the Windows card recognition (see section 2.2), but never displayed by the ORiNOCO Client software.

However, other tools, like PC Card Agents, may show it:

Example: SystemSoft CardWizard for Windows NT



5.1.1.2 Windows Manufacturer Name

This is a descriptive name for the company that manufactures the associated device. It appears in the Windows Registry:

…ENUM\PCMCIA\plug-and-play-string\0\Mfg **<<Vendor Name>>**
…CLASS\NET\0000\ **<<Vendor Name>>**

Windows shows this as part of the Card properties:

Window:	My Computer on desktop
Panel:	System Properties
Tab:	Device Manager
Item:	Network Adapters [Open Adapters]
Subitem:	Highlight PC Card, Select Properties
Tab:	General
Item:	Manufacturer



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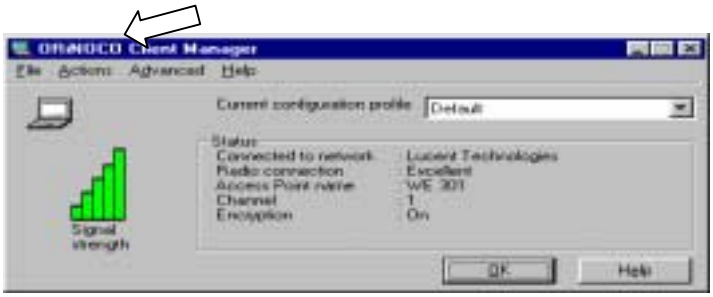
5.1.2 Product Range Name

Value in Lucent ORiNOCO system: "ORiNOCO".
Format = Display string of up to 32 ASCII printable characters.

Utilities that are generic for all different card types (within an OEM system), typically use the name of the product range (e.g. ORiNOCO) rather than a specific Product Name (e.g. ORiNOCO PC Card).

5.1.2.1 Client Manager Title Bar

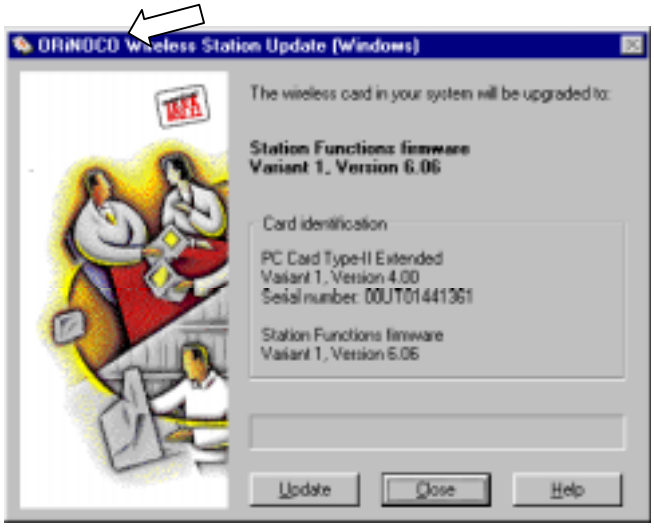
Window: Comms Quality icon in the Tooltray
Panel: Various Client Manager screens
Text: "**<<Product Range Name>>** Client Manager" in title bar.
(Note: “Client Manager” is not customizable.)



5.1.2.2 WSU Title Bar

Window: WSU screen
Text: "**<<Product Range Name>>** Wireless Station Update (Windows)" in title bar.

(Note: “Wireless Station Update (Windows)” is not customizable.)



5.1.3 Product Name

Value in Lucent ORiNOCO system:
For PC Card: "ORiNOCO PC Card (5 Volt)" [4]
For mini PCI Card: "ORiNOCO Embedded Card"
For USB Card: "ORiNOCO USB Card"
Format = Display string of up to 32 ASCII printable characters.

This name is used in multiple places:

- In the PC Card's Card Information Structure (CIS) as the "Product Name" (see also section 2.2).
- As the "Network Card Description" shown in various places in Windows.
- In README.TXT and LICENSE.TXT files.

[4] Actually, in the CIS we use "WaveLAN/IEEE" for backward compatibility with pre-ORiNOCO software.

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5.1.3.1 PC Card's CIS Product Name

This name in the PC Card's CIS is used as part of the Windows card recognition (see section 2.2), but never displayed by the ORiNOCO Client software.

However, other tools, like PC Card Agents, may show it:

Example: SystemSoft CardWizard for Windows NT

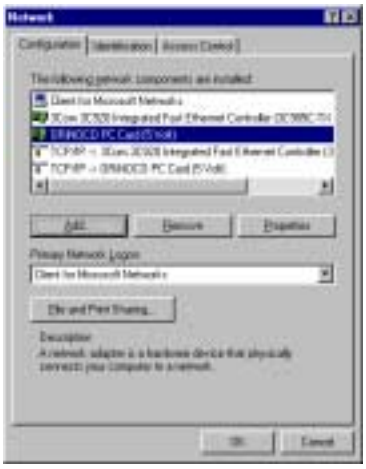


5.1.3.2 Windows Network Card Description

This is a descriptive name for a network card known by the Windows system. It is referred to as "Network Adapter" or "Network Component" in different screens.

It appears in the Windows Registry:
…ENUM\PCMCIA\plug-and-play-string\0\DeviceDesc **<<Product Name>>**
…CLASS\NET\0000\DriverDesc **<<Product Name>>**

Window: Control Panel
Panel: Network
Tab: Configuration
Item: PCB icon



Window: PCMCIA Card Icon in System Tray
Panel: PC Card (PCMCIA) Properties
Tab: Socket Status
Item: PCB icon:
<<Product Name>> – Socket No.

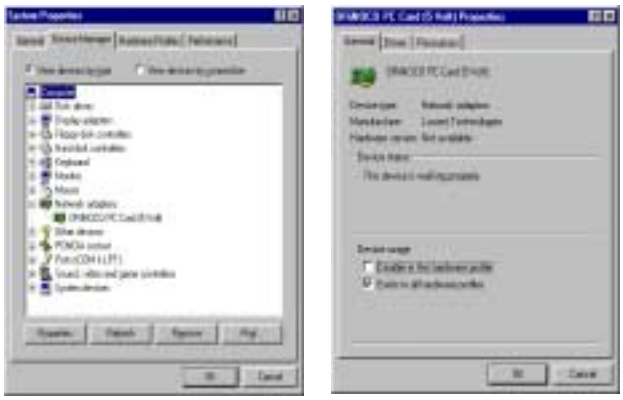


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Window: System Tray
Item: PC Card icon
Subitem: Stop **<<Product Name>>**



Window: My Computer on desktop
Panel: System Properties
Tab: Device Manager
Item: Network Adapters
Subitem: PCB icon: **<<Product Name>>**
Subpanel: **<<Product Name>>** Properties (title bar)
Tab: All tabs show **<<Product Name>>** in header



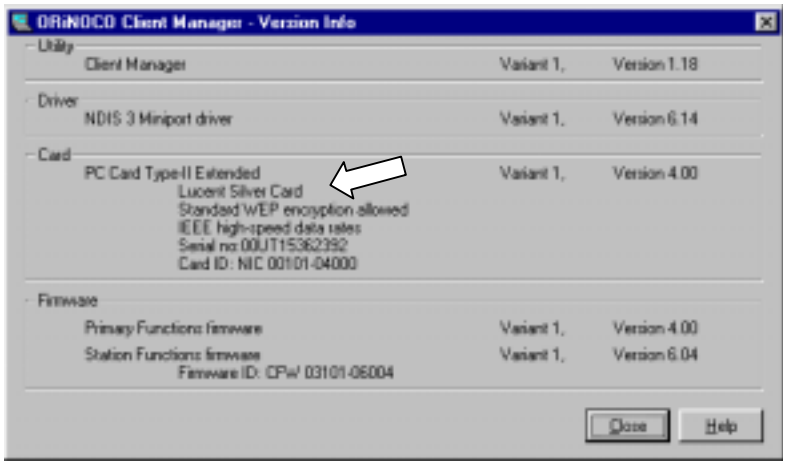
5.1.4 Card Type

Value in Lucent ORiNOCO system: "Lucent Silver Card", "Lucent Gold Card".
Format = Display string of up to 32 ASCII printable characters.

There can be different types of the same card product. Typically, this card type has a direct relationship with the allowed capabilities of the card (like WEP or 128RC4). It may also reflect physical differences (label, antenna-cap).

Optionally, an encoded value to differentiate card types can be stored on the card during production, in the so-called Production Data Area. This encoded value is used by the Client Manager to optionally display an associated text in the Version Info screen.

Window:
Client Manager,
Help, Version Info.
Panel: Card info, second line
(Note: Line is empty if no Card Types are defined.)



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5.1.5 Installation Disk Name

Value in Lucent ORiNOCO system: "ORiNOCO Disk".
Format = Display string of up to 32 ASCII printable characters.

This is a descriptive name for the medium where the installation files can be found.

Window: Update Device Driver Wizard
Panel: Copying Files
Text: The file 'filename' on
<<Installation Disk Name>>
could not be found

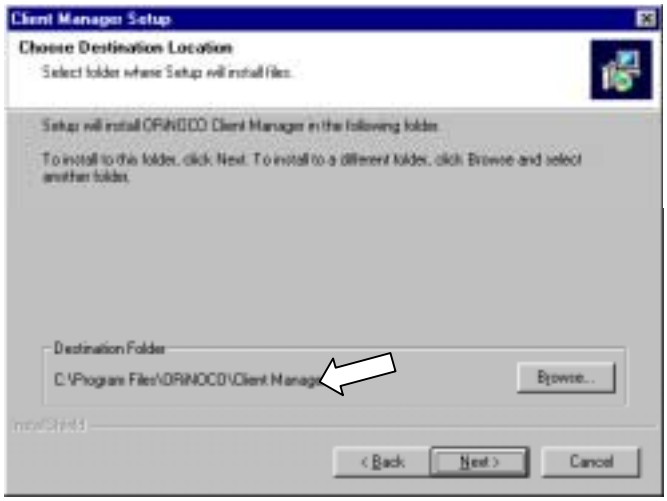
5.1.6 Program Files Destination Folder

Value in Lucent ORiNOCO system: "ORiNOCO".
Format = Display string of up to 64 characters, as allowed for Windows path names. It may contain "\"(s) to indicate sub-directory(ies).

5.1.6.1 Client Manager Installation

The Program Files Destination Folder is part of the default path presented to the user for the installation of the Client Manager program files.
The total default path is:
C:\Program Files**<<Program Files Destination Folder>>**\Client Manager
The user can change all but the "\Client Manager" part.

Window: Client Manager Setup, Choose Destination Location
Panel: Destination Folder
Text: default value = C:\Program Files\ **<<Program Files Destination Folder>>**\ Client Manager



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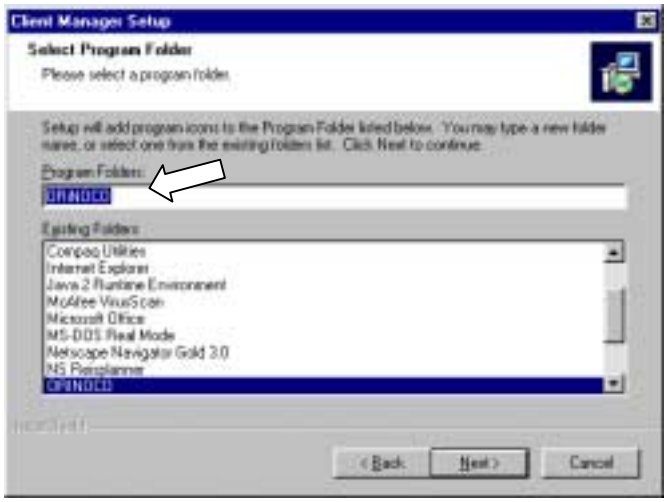
5.1.7 Start Menu Program Folder

Value in Lucent ORiNOCO system: "ORiNOCO".
Format = Display string of up to 64 characters, as allowed for Windows path names. It may contain "\"(s) to indicate sub-directory(ies).

5.1.7.1 Client Manager Installation

The Start Menu Program Folder is the default folder name presented to the user for the installation of the shortcut to the Client Manager program, and the shortcut to PC Card Settings, in the start menu Programs folder.

Window: Client Manager Setup, Select Program Folder
Panel: Program Folders
Text: default value = **<<Start Menu Program Folder>>**



5.1.8 MAC Address Range

During production, each card is assigned a universally unique MAC address. For Lucent cards these are currently taken from the following range

0x00 02 2D 00 00 00 - 0x00 02 2D FF FF FF

An OEM Partner can choose between using MAC addresses out of the Lucent range, or providing a block of MAC addresses from the Partner company's own range.

The MAC address is stored on the card during production, in the so-called Production Data Area.

5.1.9 Serial Number Format

During production, each card is assigned a unique Serial Number.
Format = Display string of up to 12 ASCII printable characters.
For Lucent cards this has the following format:

yyUTwkidxxxx

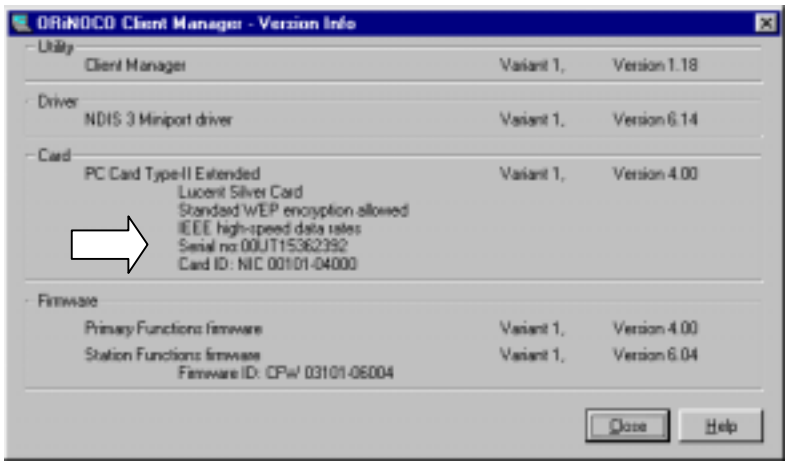
Where:
- yy = last two digits of the year this card was produced in.
- UT = fixed location code (UTrecht).
- wk = number of the calendar week this card was produced in.
- id = ID of the production system that generated the serial number.
- xxxx = consecutive number, starting at 0000 at beginning of each week.

An OEM Partner can choose between this format or specifying an own format.

The Serial Number is stored on the card during production, in the so-called Production Data Area.

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The Serial Number is displayed by the Client Manager in the Version Info screen.



5.1.10 USB Card's VID/PID

For a re-branded USB Card product, the OEM must provide the Vendor ID and Product ID (see also section 2.2).

5.2 Display Items

5.2.1 Client Manager Install Startup Graphic

Value in Lucent ORiNOCO system: None.
Format = Bitmap 640x480, 16 or 256 color.

During installation of the Client Manager a startup graphic can optionally be shown.

Window: Client Manager InstallShield Wizard
Panel: Starting up (Background screen)



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5.2.2 Icons

Due to limitations in the Help file generation, the **icons can not be customized**. They are shown here for information only:



The Card Settings icon presents the Card Setting Program in the Windows Control Panel.

The Comms Quality Icon presents the status of the wireless network interface on the ToolTray of the Windows Task Bar.



(all columns green) excellent connection



(4 columns green) good connection



(3 columns yellow) marginal connection



(1 column red) poor connection



(1 column red, "broken line") no connection



(all blank) no quality info available (no driver, incompatible driver, Peer-to-Peer mode, etc.)

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5.3 Optional Functions/Features

5.3.1 Installation Options

The ORiNOCO client products are designed to be installed by the client station's user, and therefor interact with the user during the installation and initial start-up.
In order to support the creation of pre-load images, and to support remotely controlled installations, some options can be set to disable unsolicited user interactions.

The OEM should specify for each of these options whether it should be enabled or not. Default = not enabled.

5.3.1.1 Silent Install

When this option is enabled, all user interaction is suppressed during the installation of the Driver. This includes the "Driver not installed" warning at the end of the Client Manager installation, in case it doesn't find the Driver. (The system needs to be rebooted for the Driver to be loaded.)

5.3.1.2 Suppression of Card Settings Pop-up

Normally, the Card Settings Control Panel Applet pops up automatically during the installation of the Driver, to let the user do the (basic) configuration.
When this option is enabled, the card is set to have been configured during the installation, without actually bringing up the Card Settings Control Panel Applet.

The card is configured for the following default configuration:
Profile type = As specified; see 5.3.2.1.
Note: When this option is enabled, the default profile type must be "Access Point".
Network Name = ANY.
Encryption = disabled.

This probably needs some further explanation. When to use what option?

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5.3.2 Card Configuration Items

The ORiNOCO Client System and each of its OEM customized systems offer a certain repertoire of parameters and options that can/must be configured by the end user. The decisions on what will and what will not be offered to the end user will be a company decision based on the targetted end users, and on desired perception of the product.

The result of this expected variation in what will be offered to the end users will manifest itself in the GUI parts of the system, and will be fixed once a certain production option has been selected.

Changes in required configuration options translate into different sets of tabsheets or different menu items on certain tabsheets.

To keep the customization required for this category of variation manageable, there is limited freedom offered to OEM Partners.

Following are the options offered to OEM Partners compared to the Lucent Technologies card configuration (underlined). Note, that the presence of the configuration items can be customized; not their values.

5.3.2.1 Card Configuration Profiles

The OEM Partner can select the profile types to be available to the user. The profile type determines what configuration tabs and items are presented to the user.
(The underlines values are the settings in the Lucent system.)

- Allow configuration profiles for (at least one of):
  - Access Point — Yes/No
  - Residential Gateway — Yes/No
  - Peer-to-Peer Group — Yes/No
  - Station as AP — Yes/No
- The default profile type — one of the types selected above (default = Access Point)
- The name of the default profile — ("Default")

Window: Client Manager,
Add/Edit Configuration Profile.



5.3.2.2 Card Configuration Advanced Items

For the configuration profile for "Access Point" the following additional options are offered (All are available in the Lucent system):

- Advanced tab, to be left out completely (if no item selected) or selected items:
  - Card Power Management — Yes/No
  - Interference Robustness — Yes/No
  - RTS/CTS Medium Reservation — Yes/No

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Window: Client Manager,
Add/Edit Configuration Profile,
select profile, Edit Profile.

Tab: Advanced

(Note: "Advanced" tab is not present if all these items are not available.)



5.3.2.3 Card Configuration Admin Items

For the configuration profile for "Access Point" the following additional options are offered (All are available in the Lucent system):

- Admin tab, to be left out completely (if no item selected) or selected items:
  - Distance between Access Points Yes/No
  - Network assigned (local) MAC address Yes/No

Window: Client Manager,
Add/Edit Configuration Profile,
select profile, Edit Profile.

Tab: Admin

(Note: "Admin" tab is not present if all these items are not available.)



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5.3.3 Client Manager Functions

Some of the Client Manager functions can be left out.

The OEM should specify for each of these functions whether it should be available or not. Default = available.

5.3.3.1 Link Test

The Link Test function provides link quality information and statistics between the client and its access point (Infrastructure network), or between the client and another peer station (Peer-to-Peer network).
In Lucent ORiNOCO system: available.

Window: Client Manager, Advanced, Link Test.

(Note: "Link Test" is grayed out if function is left out.)



5.3.3.2 Site Monitor

The Site Monitor function provides an overview of available access points and/or networks.
In Lucent ORiNOCO system: available.

Window: Client Manager, Advanced, Site Monitor

(Note: "Site Monitor" is grayed out if function is left out.)



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6. ANNEX A – ABBREVIATIONS

AP	=	Access Point
ASCII	=	American Standard Code for Information Interchange
CD	=	Compact Disk
CIS	=	(PC Card) Card Information Structure
DLL	=	Dynamic Link Library
ISA	=	Industry Standard Architecture
MAC	=	Medium Access Control
NDI	=	Network Device Installer
NDIS	=	(Microsoft's) Network Driver Interface Specification
NT	=	(Microsoft Windows) New Technology
OEM	=	Original Equipment Manufacturer
PC	=	Personal Computer
PCB	=	Printed Circuit Board
PCI	=	Peripheral Component Interface
PCMCIA	=	Personal Computer Memory Card International Association
PDA	=	Production Data Area
PID	=	(USB) Product ID
RG	=	Residential Gateway
ROM	=	Read-Only Memory
SMS	=	(Microsoft) Systems Management Server
USB	=	Universal Serial Bus
VID	=	(USB) Vendor ID
WEP	=	Wired Equivalent Privacy

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7. ANNEX B - SUMMARY OF BRANDING ITEMS

The OEM Partner is requested to fill in this form, and return it to Lucent Technologies WCND.

Item	Reference	(Sample) value(s)	Requested OEM value(s)
<<Vendor Name>> (max. 32 chars) used in: PC Card's CIS Manufacturer Name Windows Manufacturer Name	5.1.1 5.1.1.1 5.1.1.2	"Lucent Technologies"	
<<Product Range Name>> (max. 32 chars) used in: Client Manager Title Bar WSU Title Bar	5.1.2 5.1.2.1 5.1.2.2	“ORiNOCO”	
<<Product Name>> (max. 32 chars) used in: PC Card's CIS Product Name Windows Network Card Description	5.1.3 5.1.3.1 5.1.3.2	“ORiNOCO PC Card” "ORiNOCO USB Card"	
<<Card Type>> (max. 32 chars) Optional; used in: Client Manager Version Info	5.1.4	"Lucent Silver Card" "Lucent Gold Card"	
<<Installation Disk Name>> (max. 32 chars) used in: Windows Installation Files Disk	5.1.5	"ORiNOCO Disk"	
<<Program Files Destination Folder>> used in: (max. 64 chars) Client Manager Installation	5.1.6	"ORiNOCO"	
<<Start Menu Program Folder>> (max. 64 chars) used in: Client Manager Installation	5.1.7	"ORiNOCO"	
MAC Address Range	5.1.6	Lucent's range, or own (specify)	

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Item	Reference	(Sample) value(s)	Requested OEM value(s)
Serial Number Format (max. 12 chars)	5.1.9	Lucent's format, or own (specify)	
USB Card's VID/PID (only for USB Card) Vendor ID (VID) Product ID (PID)	5.1.10	(for Lucent:) 0x047E 0x0300	(must be different from Lucent's)
<<Client Manager Install Startup Graphic>> Optional; used in: (640x480) Client Manager Install	5.2.1	(None for Lucent)	(provide bitmap)
<<Installation Options>> Silent Install Suppression of Card Settings Pop-up	5.3.1 5.3.1.1 5.3.1.2	 Yes/No Yes/No	 No No
Card Configuration Items Card Configuration Profiles Configuration profile for Access Point Configuration profile for Residential Gateway Configuration profile for Peer-to-Peer Group Configuration profile for Station as AP Default configuration profile for: The name of the default configuration profile Card Configuration Advanced Items Advanced tab, Card Power Management Advanced tab, Interference Robustness Advanced tab, RTS/CTS Medium Reservation Card Configuration Admin Items Admin tab, Distance between Access Points Admin tab, Network assigned (local) MAC address	5.3.2 5.3.2.1 5.3.2.2 5.3.2.3 	 Yes/No Yes/No Yes/No Yes/No Access Point / Residential Gateway / Peer-to-Peer Group/ Station as AP "Default" Yes/No Yes/No Yes/No Yes/No Yes/No	 Yes Yes Yes No Access Point Yes Yes Yes Yes Yes

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Item	Reference	(Sample) value(s)	Requested OEM value(s)
Client Manager Functions	5.3.3		
Link Test	5.3.3.1	Yes/No	Yes
Site Monitor	5.3.3.2	Yes/No	Yes

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