ARLAN 655 Wireless Client Card

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This document applies to V3.0

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General Information

Summary

The MikroTik RouterOS supports Arlan 655 Wireless Interface client cards. This card fits in the ISA expansion slot and provides transparent wireless communications to other network nodes.

Specifications

Packages required: ***arlan***
License required: ***level4***
Home menu level: ***/interface arlan***
Hardware usage: ***Not significant***

Installation

Example

To add the driver for Arlan 655 adapter, do the following:

```
[admin@MikroTik]> driver add name=arlan io=0xD000
[admin@MikroTik]> driver print
Flags: I - invalid, D - dynamic
  #   DRIVER                                IRQ IO       MEMORY   ISDN-PROTOCOL
  0 D RealTek 8139
  1   Arlan 655                                 0xD000

[admin@MikroTik] driver>
```


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Wireless Interface Configuration

Home menu level: ***/interface arlan***

Description

The wireless card status can be obtained from the two LEDs: the **Status LED** and the **Activity LED**.

Status	Activity	Description
Amber	**Amber**	**ARLAN 655 is functional but nonvolatile memory is not configured**
Blinking Green	**Don't Care**	**ARLAN 655 not registered to an AP (ARLAN mode only)**
Green	**Off**	**Normal idle state**
Green	**Green Flash**	**Normal active state**
Red	**Amber**	**Hardware failure**
Red	**Red**	**Radio failure**

Property Description

add-name (*text*; default: **test**) - card name (optional). Must contain less than 16 characters.

arp (*disabled* | *enabled* | *proxy-arp* | *reply-only*; default: **enabled**) - Address Resolution Protocol setting

bitrate (*1000* | *2000* | *354* | *500*; default: **2000**) - data rate in Kbit/s

frequency (*2412* | *2427* | *2442* | *2457* | *2465*; default: **2412**) - channel frequency in MHz

mac-address (*MAC address*) - Media Access Control address

mtu (*integer*; default: **1500**) - Maximum Transmission Unit

name (*name*; default: **arlanN**) - assigned interface name

sid (*integer*; default: **0x13816788**) - System Identifier. Should be the same for all nodes on the radio network. Must be an even number with maximum length 31 character

tma-mode (*yes* | *no*; default: **no**) - Networking Registration Mode:

- **yes** - ARLAN
- **no** - NON ARLAN

Example

```
[admin@MikroTik] > interface print
Flags: X - disabled, D - dynamic, R - running
  #    NAME                                      TYPE            MTU
  0  R outer                                     ether           1500
  1  X arlan1                                    arlan           1500
[admin@MikroTik] interface> enable 1
[admin@MikroTik] > interface print
Flags: X - disabled, D - dynamic, R - running
```


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```
  #    NAME                                                TYPE            MTU
  0  R outer                                               ether           1500
  1  R arlan1                                              arlan           1500
```

More configuration and statistics parameters can be found under the **/interface arlan** menu:

```
[admin@MikroTik] interface arlan> print
Flags: X - disabled, R - running
  0  R name="arlan1" mtu=1500 mac-address=00:40:96:22:90:C8 arp=enabled
       frequency=2412 bitrate=2000 tma-mode=no card-name="test"
       sid=0x13816788

[admin@MikroTik] interface arlan>
```

You can monitor the status of the wireless interface:

```
[admin@MikroTik] interface arlan> monitor 0
      registered: no
    access-point: 00:00:00:00:00:00
        backbone: 00:00:00:00:00:00

[admin@MikroTik] interface arlan>
```

Suppose we want to configure the wireless interface to accomplish registration on the **AP** with a sid **0x03816788**. To do this, it is enough to change the argument value of **sid** to **0x03816788** and **tma-mode** to **yes**:

```
[admin@MikroTik] interface arlan> set 0 sid=0x03816788 tma-mode=yes
[admin@MikroTik] interface arlan> monitor 0
         registered: yes
    access-point: 00:40:88:23:91:F8
        backbone: 00:40:88:23:91:F9

[admin@MikroTik] interface arlan>
```

Troubleshooting

Description

Keep in mind, that not all combinations of I/O base addresses and IRQs may work on particular motherboard. It is recommended that you choose an IRQ not used in your system, and then try to find an acceptable I/O base address setting. As it has been observed, the IRQ 5 and I/O 0x300 or 0x180 will work in most cases.

- **The driver cannot be loaded because other device uses the requested IRQ.**
  Try to set different IRQ using the DIP switches.
- **The requested I/O base address cannot be used on your motherboard.**
  Try to change the I/O base address using the DIP switches.
- **The pc interface does not show up under the interfaces list**
  Obtain the required license for 2.4/5GHz Wireless Client feature.
- **The wireless card does not register to the Access Point**
  Check the cabling and antenna alignment.

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