

# **1 APR::IpSubnet - Perl API for accessing APRs ip\_subnet structures**

## 1.1 Synopsis

```
use APR::IpSubnet ();

my $ipsub = APR::IpSubnet->new($pool, "127.0.0.1");
$ok = $ipsub->test($sock_addr);
```

## 1.2 Description

APR::IpSubnet object represents a range of IP addresses (IPv4/IPv6). A socket connection can be matched against this range to test whether the IP it's coming from is inside or outside of this range.

## 1.3 API

APR::IpSubnet provides the following functions and/or methods:

### 1.3.1 *new*

Create an IP subnet representation object

```
$ipsubnet = APR::IpSubnet->new($pool, $ip);
$ipsubnet = APR::IpSubnet->new($pool, $ip, $mask_or_numbits);
```

- **obj:** `APR::IpSubnet` (class name)
- **arg1:** `$pool` (APR::Pool object)
- **arg2:** `$ip` (string)

IP address in one of the two formats: IPv4 (e.g. "127.0.0.1") or IPv6 (e.g. "::1"). IPv6 addresses are accepted only if APR has the IPv6 support enabled.

- **opt arg3:** `$mask_or_numbits` (string)

An optional IP mask (e.g. "255.0.0.0") or number of bits (e.g. "15").

If none provided, the default is not to mask off.

- **ret:** `$ret` (APR::IpSubnet object)

The IP-subnet object

- **except:** `APR::Error`
- **since:** 2.0.00

## 1.3.2 test

Test the IP address in the socket address object against a pre-built ip-subnet representation.

```
$ret = $ipsub->test($sockaddr);
```

- **obj: \$ipsub (APR::IpSubnet object)**

The ip-subnet representation

- **arg1: \$sockaddr (APR::SockAddr object)**

The socket address to test

- **ret: \$ret (boolean)**

true if the socket address is within the subnet, false otherwise

- **since: 2.0.00**

This method is used for testing whether or not an address is within a subnet. It's used by module `mod_access` to check whether the client IP fits into the IP range, supplied by `Allow/Deny` directives.

Example:

Allow accesses only from the localhost (IPv4):

```
use APR::IpSubnet ();
use Apache2::Connection ();
use Apache2::RequestRec ();
my $ipsub = APR::IpSubnet->new($r->pool, "127.0.0.1");
ok $ipsub->test($r->connection->remote_addr);
```

## 1.4 See Also

`mod_perl 2.0` documentation.

## 1.5 Copyright

`mod_perl 2.0` and its core modules are copyrighted under The Apache Software License, Version 2.0.

## 1.6 Authors

The `mod_perl` development team and numerous contributors.



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