

NAME

Lintian::Architecture -- Lintian API for handling architectures and wildcards

SYNOPSIS

```
use Lintian::Architecture qw(:all);

print "arch\n" if is_arch ('i386');
print "wildcard\n" if is_arch_wildcard ('any');
print "either arch or wc\n" if is_arch_or_wildcard ('linux-any');
foreach my $arch (expand_arch_wildcard ('any')) {
    print "any expands to $arch\n";
}
```

DESCRIPTION

Lintian API for checking and expanding architectures and architecture wildcards. The functions are backed by a data file, so it may be out of date (use `private/refresh-archs` to update it).

Generally all architecture names are in the format “\$os-\$arch” and wildcards are “\$os-any” or “any-\$cpu”, though there are exceptions:

- “all” is the “architecture independent” architecture.
Source: Policy X5.6.8 (v3.9.3)
- “any” is a wildcard matching any architecture except “all”.
Source: Policy X5.6.8 (v3.9.3)
- All other cases of “\$arch” are short for “linux-\$arch”
Source: Policy X11.1 (v3.9.3)

Note that the architecture and cpu name are not always identical (example architecture “armhf” has cpu name “arm”).

FUNCTIONS

The following methods are exportable:

`is_arch_wildcard ($wc)`

Returns a truth value if `$wc` is a known architecture wildcard.

Note: ‘any’ is considered a wildcard and not an architecture.

`is_arch ($arch)`

Returns a truth value if `$arch` is (an alias of) a Debian machine architecture OR the special value “all”. It returns a false value for architecture wildcards (including “any”) and unknown architectures.

`is_arch_or_wildcard ($arch)`

Returns a truth value if `$arch` is either an architecture or an architecture wildcard.

Shorthand for:

```
is_arch ($arch) || is_arch_wildcard ($arch)
```

`expand_arch_wildcard ($wc)`

Returns a list of architectures that this wildcard expands to. No order is guaranteed (even between calls). Returned values must not be modified.

Note: This list is based on the architectures in Lintian’s data file. However, many of these are not supported or used in Debian or any of its derivatives.

The returned values matches the list generated by `dpkg-architecture -L`, so the returned list may use (e.g.) “amd64” for “linux-amd64”.

`wildcard_includes_arch ($wc, $arch)`

Returns a truth value if `$arch` is included in the list of architectures that `$wc` expands to.

This is generally faster than

```
grep { $_ eq $arch } expand_arch_wildcard ($wc)
```

It also properly handles cases like “linux-amd64” and “amd64” being aliases.