

Using Avahi The “Right Way”

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Contents

Who Are We?

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Introduction

What is Avahi?

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Given that you are visiting a technical conference you already have an idea what this hot technology is. If not, here's are a quick overview.

What is Zeroconf?

Short for “Zero Configuration Networking”:

- Automatic IPv4 Address Allocation
- Name Resolution
- Service Discovery

What is Automatic IPv4 Address Allocation?

In ad-hoc networks without a DHCP server this technology provides automatic assignment of non-routable IP addresses from the link-local subnet `169.254.0.0/16` .

This allows computers to communicate without the need for expertise or painful manual configuration or without a centralized DHCP server at all.

What is Name Resolution?

In ad-hoc networks without a DNS server this technology provides automatic registration of host names from the special Zeroconf DNS zone `.local`.

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This technology provides a convenient way for applications to discover and register network services, avoiding the need to manually enter IP addresses, server names or port numbers.

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Also seen in many popular network games for discovering other players.

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Why is this useful?

See for yourself!

News

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- We got a logo!
- We installed `avahi.org`
- Now used by at least:
 - 37 software applications
 - 19 major distributions (and most enable it by default)
 - 3 embedded distributions
 - 3 embedded hardware devices

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Wide-Area service publishing!

NAT-PMP (tedp, we count on you! You've got 12 months!)

Examples

Service Browsing Example

```
www.avahi.org/browser/trunk/examples/  
client-browse-services.c
```

Service Publishing Example

```
www.avahi.org/browser/trunk/examples/  
client-publish-service.c
```

GLib Integration Example

`www.avahi.org/browser/trunk/examples/
glib-integration.c`

That's all, folks.

That's all, folks. Any questions?

Avahi

`http://avahi.org/`

`#avahi on irc.freenode.org`

