

Zeroconf and Bonjour for engineers

A 2 day **Hands on** training course



Description

A hands on training course focusing on Microsoft and Apple implementations of Zeroconf. The course covers all three main areas: Interface configuration, name resolution and service discovery. Hands on with Apple Bonjour and Microsoft UPnP compliment all the major theory sessions.



Key outcomes

By the end of the course delegates will be able to:

- ✓ Describe the Zeroconf architecture.
- ✓ Explain how link local addresses work.
- ✓ Explain how mDNS and LLMNR work.
- ✓ Explain how DNS-SD and SSDP work.
- ✓ Recognise the role of service discovery gateways.



Training approach

This structured course uses Instructor Led Training to provide the best possible learning experience. Small class sizes ensure students benefit from our engaging and interactive style of teaching with delegates encouraged to ask questions throughout the course. Quizzes follow each major section allowing checking of learning. Hands on sessions are used throughout to allow delegates to consolidate their new skills.



Details

Who will benefit?

Technical staff working with Zeroconf.
Developers using Zeroconf.

Prerequisites

TCP/IP Foundation for engineers.

Duration: 2 days

Overall rating: ★★★★★

Generic training



Generic training compliments product specific courses covering the complete picture of all relevant devices including the protocols "on the wire".

"Friendly environment with expert teaching that teaches the why before the how."
G.C. Fasthosts

Small class sizes



We limit our maximum class size to 8 delegates; often we have less than this. This ensures optimal interactivity between delegates and instructor.

"Excellent course. The small class size was a great benefit..."
M.B. IBM

Hands On training



The majority of our courses use hands on sessions to reinforce the theory.

"Not many courses have practice added to it. Normally just the theoretical stuff is covered."
J.W. Vodafone

Our courseware



We write our own courses; courseware does not just consist of slides and our slides are diagrams not bullet point text.

"Comprehensive materials that made the course easy to follow and will be used as a reference point."
V.B. Rockwell Collins

Customise your course



Please contact us if you would like a course to be customised to meet your specific requirements. Have the course your way.

"I was very impressed by the combination of practical and theory. Very informative. Friendly approachable environment, lots of hands on."
S.R. Qinetiq

Zeroconf and Bonjour for engineers

Course content

What is Zeroconf?

Zeroconf, architecture, Microsoft UPnP, Apple, Bonjour, devices, components. Home networks, enterprise networks, BYOD.

Plug and play without Zeroconf

DHCP, DNS, A, PTR, SRV records, DDNS. Hands on: DHCP configuration.

Address selection

IPv4 link local addresses, IPv6 link local addresses. Hands: Addresses without DHCP.

Name resolution

mDNS, finding names, announcing names, .local DNS namespace, LLMNR. Hands on: Names without DNS.

Role of multicasting

Multicast addresses, multicasts and switches, multicasts and routers. Hands on: Multicasts, TTL.

Service discovery

DNS-SD, SRV and TXT lookups, SSDP, HTTP. Hands on: Browsing for services

Zeroconf in a routed environment

Service Discovery gateways, configuration, service filters, DNS-LLQ, NAT-PMP.

Miscellaneous

Security, automatic multicast addresses, wireless auto configuration.

What our customers say

"Absolutely brilliant, very knowledgeable and helpful trainer would recommend to teach anyone. Kept me interested 100% of the time which is very impressive as this does not happen often, if at all!"

O. B. Network Rail

"The best technical course I've been on!"

L. W. Fujitsu Telecoms Europe

"Very well thought out and structured course. Would recommend 100%. Lots of equipment, good quality."

A.R. Unipart

"Course content is interesting. Relevant to current systems and presented well."

S.S-T. Arqiva

Step back

TCP/IP foundation for engineers

Zeroconf and Bonjour for engineers

Step forward

Total IPv6 for engineers

Total IP multicast for engineers