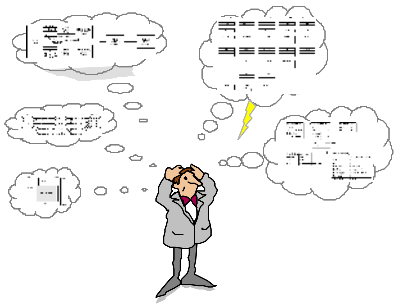
UHAPI Foundation: a 2-day class

UHAPI foundation

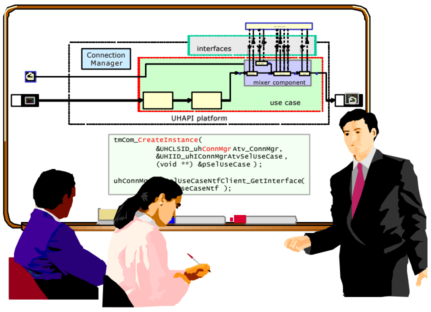
Benefits

Get started quicker and work more productively, with clarity and understanding, thanks to the insights offered by this ‘foundation’ seminar series.

In this 2-day class we clarify and explain how to use the Universal Home API (UHAPI) to build powerful and complex systems that will work on a wide variety of platforms. We explain how to use UHAPI and give insights into its basis that get you past the initial learning curve and start you on a productive path.



Steep learning curve?



```
tmCom_CreateInstance(
          &UHCLSID_uhConnMgrAtv_ConnMgr,
          &UHIID_uhIConnMgrAtvSelUseCase ,
          (void **) &pSelUseCase );

uhConnMg          elUseCaseNtfClient_GetInterface(
                 seCaseNtf );
```

We make UHAPI

Contents

In this 2-day class we explain and clarify all aspects of UHAPI including the concepts that motivate its architecture, the role played by uhCOM, and its implementation in the Philips nh8550 SDK Software Development Kit. We also examine in detail some UHAPI components, and their use in a sample program application. This class is aimed at developers (such as third party Independent Software Vendors, and manufacturers) who will be developing middleware and applications for the UHAPI.

Overview

UHAPI implements some advanced and high level ideas for We introduce the main concepts behind, and functions of, UHAPI.

- UHAPI in overview
- simple program example
- UHAPI aims
- frameworks, platforms and SDKs
- Streaming Media
- Use cases

Concepts

We explain the concepts that lie behind UHAPI: illustrating with concrete programming examples that help to relate the higher levels of abstraction directly to the programming job that a user faces.

- Connection Manager
- Components
- Contracts
- Interfaces

uhCOM

We clarify the role of uhCOM (Component Object Model) in UHAPI, and show how it works and why it is used.

- uhCom
- uhCom interface call
- uhCom function tables
- uhCom interfaces
- Notifications

SDK

We introduce the nh8550 SDK as an example of a UHAPI platform instance implementation. the rest of the class. We explain the SDK hardware, and show how the UHAPI LOgical Components are mapped in this platform instance.

- nh8550 platform SDK
- hardware
- audio/video connectors
- Core Development Module
- pnx8550
- TriMedia
- AVIP Module

Components

We review some UHAPI components, their functionality and interfaces.

- components
- concepts
- interfaces
- notifications

Sample application

We examine a sample application program , relating each step to the concepts and interfaces that have been taught during the class.

- sample application
- mapping to platform
- Use Cases
- Connection Manager
- Getting an interface
- IUnknown, AddRef, QueryInterface
- Component concepts
- Component Interfaces
- Component interface functions

Making applications

We look at the process of building an application, where to find and store files and libraries, and makefiles.

- Building an application

Time and arrangements

The ‘UHAPI foundation’ class gives a thorough grounding in using the UHAPI and in building software systems based on UHAPI. It uses examples based on the Philips nh8550 SDK platform.

Class schedules are posted on the Internet from time to time:

- http://www.bores.com/schedule.htm

It is also presented ‘on-site’ by arrangement.

Scheduled classes

- 2-day class
- £900 (€1,500: $1,800) per person
- on-site by arrangement

On-site classes

- 2-day class
- £900 (€1,500: $1,800) per person
- minimum charge applies
- travel and accommodation extra

To book or find out more

Call us by ‘phone or send email to book or to ask questions.

- contact: Dr Chris Bore
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- mobile: +44 (0)7785 268905
- email: chris@bores.com

TriMedia foundation seminars

The nh8550 SDK is based on TriMedia Media Processors. Our ‘TriMedia foundation’ is a 4-day class designed to give a thorough understanding of all aspects of the TriMedia: it is valuable for those who wish to know what lies beneath the UHAPI

- TriMedia CPU cores
- Nexperia peripheral architectures
- TriMedia software optimization
- TriMedia Software Architecture