

Communications Server - Rapid Application Development Environment

“Every minute counts in the race to market. And each lost minute costs”

The CallHandler Development Kit is a Microsoft COM Object based Rapid Application Development Environment, that is well known to tens of thousands of development Engineers. It enables the focus to be on your solution, not on the underlying technology – so you get to market faster and more competitively than ever before.

The CallHandler Development Kit creates solutions to run on CallHandler operating environment and is an order above and significantly more effective than existing Application Generator solutions on the market today. The CallHandler Development Kit consists of a collection of tools, well defined programmers API's together with a standard set of modules including Voice, FAX, Conference, IVR, SMS etc, and application examples. The CallHandler Development Kit can be hosted on Analogue, Basic Rate or Primary rate Development cards and includes full documentation and specialist support. Use The CallHandler Development Kit to produce virtually any Communications Server (Computer Telephony) application regardless of functionality – it provides the means to realise your business visions.

Computer Telephony Systems With a Low Cost of Ownership

Feature Summary

- ❑ The CallHandler Development Kit operates on top of CallHandler which has well defined consistent programmers API's across telephony hardware platforms, that support rapid application development to get you to market in the shortest timescales
- ❑ There are developer kits supporting Analogue, Basic Rate or Primary Rate ISDN hardware that enable prototyping before going live. E.g. prototype on a 4 line analogue card for eventual operation on a 30 line ISDN system - with no change to application software because of the consistent API
- ❑ The COM object model is used throughout so the choice of the high productivity programming language is yours. Interfaces and applications can be written in Visual C++ or Visual Basic etc., so development times and support are reduced. This also means the programming load can be shared between engineers with different skills
- ❑ CallHandler is modular so you can easily add functionality - sometimes in a live situation
- ❑ NT based so applications can be readily integrated. e.g. ODBC databases, SQL, TCP/IP etc
- ❑ Incorporates suite of status and configuration tools that:
 - ▶ are Web browser-based allowing remote configuration and administration of applications and telecommunications hardware
 - ▶ incorporates ActiveX components for rapid application development of custom projects
- ❑ LAN/WAN connectivity is built in providing access for control and data storage via standard NT methods
- ❑ It has built-in, switchable debug trace modes for problem solving support

- ❑ It supports dial-in support connectivity so customer care is of the highest quality
- ❑ The modules are 'Install Shield' enabled which provides for simple install and upgrade options
- ❑ Example code and hooks for Aculab and Lernout & Hauspie Text to Speech technology
- ❑ You can purchase complete solutions including hardware, or software only - the choice is yours
- ❑ A pricing model to enable you to get a good return on investment and maintain a competitive edge
- ❑ Chelston provide specialist Developer Support enabling painless development schedules

Specifically, if you want to quickly develop a custom distributed conferencing solution, you can use The CallHandler Development Kit to write new Visual Basic operator and control screens that interface to the CallHandler via our well defined TCP/IP text based communications of methods and events, without having to get into the detailed operation of the telephony cards – either analogue or digital systems. That's fast development, with an additional option of not necessarily needing high-powered programmers.

Compared to other competitive systems

- ❑ Its more than a fixed programming environment
 - ▶ The CallHandler Development Kit operates under Microsoft NT and has a standards based, modular, open, scalable architecture
- ❑ Its more than a development tool with a fixed programming language
 - ▶ supports rapid application development and deployment, ease of set-up and maintenance using COM and ActiveX object models. Choice of highly productive programming languages tools such as Visual C++, Visual Basic etc.

- ❑ Contains graphical scripting tools but you are not restricted to their use



CallHandler Technical Overview

A holistic approach was taken to the design of the CallHandler architecture. It was designed to be modular, constructed from Device and Service COM objects that plug together to create the CallHandler system. This means that parts of the CallHandler can be expanded and updated without re-compiling the whole system. This also means that developers can create their own COM Object based Services and Devices as well as build and integrate with the standard Chelston supplied Devices and Services. The CallHandler architecture is unique; no other telephony software supplier has taken this integrated approach to the telephony problem. Most other telephony companies have a diverse collection of standalone telephony application programs; each program does a specific job, which makes this approach very inflexible.

CallHandler Services

Standard services have been developed to provide Audio Conferencing, Fax, and Voice Mail etc. on the CallHandler. Developers can easily create custom services which will plug-in and integrate seamlessly with Chelston's standard Service library and with other previously written custom Services. They can also modify existing service modules to specifically meet their local needs, such as spoken language control interfaces. Services can take advantage of all the CallHandler support services such as: full featured configurable and switchable logging, CallHandler clustering, event notification via email, SMS, or call-back, and a complete suite of browser based local/remote maintenance tools for configuring the system and Services. CallHandler Services are COM DLL objects, so the developer is free to create the Services in any language that can compile to COM DLL objects, e.g. Visual Basic 6, C, C++, Java, or Perl.

Graphical System Builder

The Graphical System Builder allows the user to configure complex IVR systems, linking together all the Services available on the CallHandler with NO programming knowledge. So, a user with the equivalent experience to, for example, create a Word document, or create an Excel spreadsheet can build a complete IVR system, which could make use of any of the Chelston library components such as Audio Conferencing, Voice Mail, Fax etc. The user can do this from a familiar browser like environment. Voice menus are created by dragging and dropping icons from a floating toolbox onto the menu tree, and then configured using a set-up panel to the right of the menu tree view. Services are added in a similar way, the Service icon is dragged from a floating toolbox onto the menu tree. When the Service icon is highlighted on the menu tree

a configuration window specific to that Service is displayed to configure the Service settings. If users have developed their own Services, they can also develop a configuration Active-X plug-in for the Graphical System Builder to allow their custom service to integrate to the IVR system. The Graphical System Builder produces XML IVR files, which are loaded onto the CallHandler server. The IVR Service on the CallHandler then uses these XML IVR files as a reference for the voice menu the caller hears.

Advantages for System Maintainers

- ❑ Browser based local/remote maintenance configuration tools for maintaining all aspects of the system, with configurable access security
- ❑ Highly detailed, configurable logging with log segmentation for every device and service in the CallHandler system
- ❑ GUI based call router table configuration, allows routing tables to be configured for routing calls based on DDI and/or CLI
- ❑ Graphical System Builder allows the system maintainer build IVR menus to link together CallHandler Services in a drag and drop environment.
- ❑ Configurable event notification via email, SMS, automated phone call

Advantages for Service Developers

- ❑ All elements of the CallHandler including Services link together using COM interfaces
- ❑ Services are COM DLLs, they can be developed in a variety of different development environments e.g. Visual Basic 6, C, C++, Java, Perl etc. whatever the developer is familiar with
- ❑ Fully featured Call Control COM API, supports PRI/BRI ISDN, Analogue Station and Trunk interfaces
- ❑ Fully featured DSP COM API, supports standard audio record/playback, tone generation/detection, speech recognition, fax, audio conferencing and a lot more...
- ❑ Integrated support service APIs e.g. logging, inter-Service call transfer, clustering, SMS, email, IP Networking, etc.
- ❑ Template Active-X Control with API for developing a plug-in to the Graphical System Builder
- ❑ Fully featured PRI, ISDN Call Control API supports most ISDN protocols e.g. DASS, Q931, DPNSS, QSIG, AT&T, and a lot more

Call us on +44 (0) 1923 286501 about your application requirements and we will tell you how using The CallHandler Development Kit with CallHandler will get you to market fast!



Low Cost of Ownership - Communications Solutions
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