



>THIS IS THE WAY
TO COST-EFFECTIVE, SIMPLE-TO-USE SOLUTIONS

>THIS IS NORTEL™

Product Brief

Nortel Communication Control Toolkit

The Nortel Communication Control Toolkit (CCT) is the cost-effective, simple-to-use, next-generation unified integration middleware platform for the Communication Server 1000 switch range and Media Processing Server 500 and Media Processing Server 1000 Self-Service platforms. CCT enables integration of these telephony systems with business applications to unify the business, enhance customer interactions and drive improved efficiency and cost savings. The product is deployed as a runtime middleware that functions as the call control and monitoring interface between the telephony and self-service systems and the customer's business applications. The product provides a CTI middleware compatible to Nortel platforms and is supported across multiple switch types, including open switch connectivity based upon the Microsoft .Net framework. It supports integrations for Microsoft Windows, Terminal Services and highly

secure solution deployments. The product is suitable for server and client integrations and application development.

The Communication Control Toolkit is designed as a full multimedia/multi-channel middleware and toolkit product, supporting full telephony and extending to additional media types including e-mail, instant messaging and video.

The Communication Control Toolkit also supports existing Symposium TAPI SP 3.0 or IVR CTI 2.1-compliant integrations for backwards compatibility, enabling customers to schedule their solution and applications to migrate to CCT. This permits existing applications written to these service providers to be utilized directly with CCT, replacing those service providers on a nodal or network-wide basis.



The Communication Control Toolkit implements a secure transport layer based on TCP sockets within the .NET Remoting framework to provide the required level of authentication and security. The transport layer utilizes the Microsoft Security Support Provider Interface (SSPI) to authenticate the user associated with each new connection made to the server. SSPI provides authentication and security services based on the Windows authentication scheme and uses industry-standard NTLM or Kerberos authentication protocols.

Features and benefits

The Communication Control Toolkit is the evolution of Nortel's Computer Telephony Integration (CTI) products, including Symposium TAPI SP 3.0 and IVR CTI 2.1. Designed as a common toolkit and API for deployment in contact center, knowledge worker and self-service environments, the Communication Control Toolkit offers these new powerful features:

- A new easy-to-use graphical toolkit based on Windows Form Controls
- Choice of CCT Application Programming Interface; Full, Light and Graphical
- A reference implementation — this implementation can be used in testing, and can be easily modified to create a custom client application. The source code for this reference implementation is supplied as part of the associated CCT SDK
- Support for Windows Server 2003 Standard Edition and Enterprise Edition
- Enhanced security — Clear, Signed and Encrypted secure transport layers based on TCP sockets provide authentication and security for the toolkit

Figure 1. Graphical Toolkit

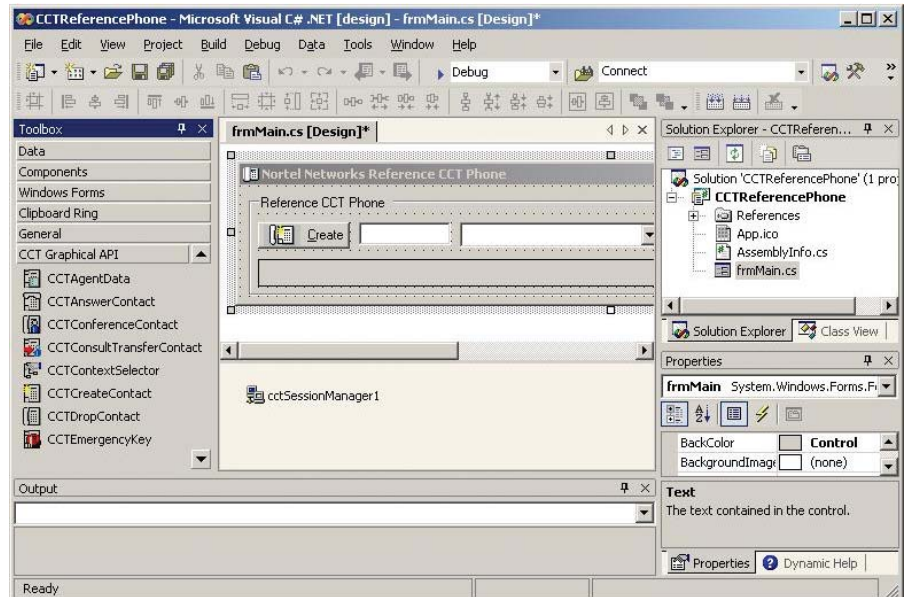
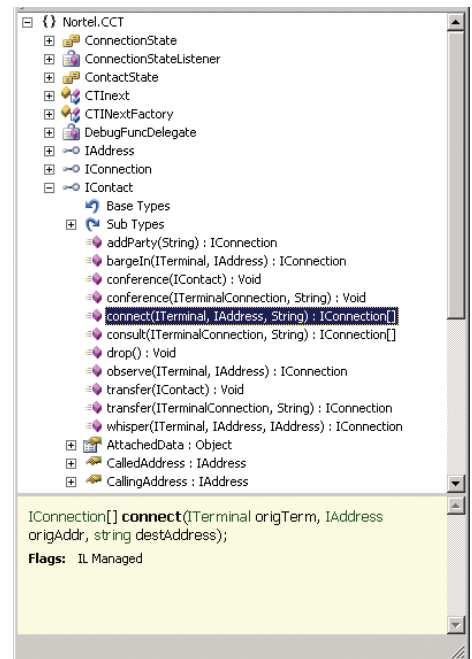


Figure 2. Object-Oriented Full API Toolkit

- Firewall friendliness
- Citrix/Terminal Services support — the toolkit is designed to operate in a terminal services environment supporting both Citrix and Microsoft Terminal Services
- Co-residency with SCCS/Web Client (6.0) or MPS (Windows)
- Seamless integration with CRM and ERP solutions including Seibel, SAP, Microsoft CRM and Oracle/Peoplesoft

Contact center architecture

In a contact center environment, Communication Control Toolkit enhances the skill-based routing ability of Symposium Call Center Server by allowing for the creation of customized agent applications such as soft phones, agent telephony toolbars with screen pops and intelligent call management applications. Communication Control Toolkit enables the integration with business applications such as CRM systems.



In this environment, the TAPI Service Provider element of Communication Control Toolkit uses Meridian Link Services to communicate with Symposium Call Center Server over the CLAN. Through Symposium Call Center Server, it communicates with the switch.

Optionally, the IPML Service Provider element of Communication Control Toolkit connects to an IVR server on the CLAN

Knowledge worker environment

In a knowledge worker environment, skill-based routing is not required. The switch directs incoming calls to agents, and Communication Control Toolkit delivers caller information, such as ANI/DNIS or CLID. In this environment, Communication Control Toolkit connects directly to the switch over the ELAN. It connects to client PCs and application servers over the CLAN.

Self-service environment

In a self-service environment, callers use a self-service system, such as the Media Processing Server 500 or Media Processing Server 1000, to answer queries or request services. For example, bank customers might use self-service to find out their account balance or to transfer funds. Calls are not handled by agents. In this environment, Communication Control Toolkit and the Self-Service server connect to the switch through

Meridian Link Services. Communication Control Toolkit connects to the Self-Service system over the CLAN. Desktop integration can be performed with the Communication Control Toolkit SDK, directly replacing the Active X toolkit previously utilized by the Nortel Professional Services organization.

Nortel Professional Services organization

Nortel Professional Services organization may be employed to:

- › Implement CCT to replace IPML 2.04, 2.05 and 2.1 or CallSPONSOR
- › Implement CCT to create screen pops and soft phones for use in M1/Communication Server 1000 switching environments
- › Implement CCT as a Symposium TAPI SP 3.0 upgrade for support of SWCP R4.0 and Symposium Agent R2.3
- › Implement CCT 5.0 Self-Service for integrations to Avaya G3 switching platforms or Genesys T server

System requirements

The Communication Control Toolkit is a platform vendor independent (PVI) application that runs on a customer-supplied server running Microsoft Windows 2000, 2000 Advanced or Windows 2003 Standard and Enterprise operating systems. Optionally, CCT may be ordered to be factory loaded onto the Media Processing Server 500 Windows 2000 Applications Processor platform.

Refer to the Product Documentation for the detailed Server Specifications and Guidelines to supported Communication Control Toolkit.

Co-residency

Server consolidation may be achieved by co-residency of the Communication Control Toolkit with the Media Processing Server 500 Windows 2000 Applications Processor platform supported up to 480 IVR ports.

Engaging Nortel Professional Services for application development and installation

Nortel Professional Services Organization (PSO) can provide installation and application development services. If PSO is not writing the CCT application, you must contact Nortel Converged Networks Solutions to obtain a quote for installation serviced (see below).

To engage Nortel PSO, call 1-800-4NORTEL Express Routing Code (ERC) 1146.

Engaging Nortel Converged Network Solutions for installation services

Nortel Converged Network Solution (CNS) can coordinate installation and support services.

To engage Nortel CNS, call 952-897-7425 (ESN 676) or FAX- 952-838-3633.

Channel Partners and customers should contact their local Nortel Enterprise account manager for further product information.

Figure 3. CCT IVR Toolkit



In the United States:

Nortel
35 Davis Drive
Research Triangle Park, NC 27709 USA

In Canada:

Nortel
8200 Dixie Road, Suite 100
Brampton, Ontario L6T 5P6 Canada

In Caribbean and Latin America:

Nortel
1500 Concorde Terrace
Sunrise, FL 33323 USA

In Europe:

Nortel
Maidenhead Office Park, Westacott Way
Maidenhead Berkshire SL6 3QH UK
Phone: 00800 8008 9009 or
+44 (0) 870-907-9009

In Asia Pacific:

Nortel
Nortel Networks Centre
1 Innovation Drive
Macquarie University Research Park
Macquarie Park, NSW 2109
Australia
Tel +61 2 8870 5000

In Greater China:

Nortel
Sun Dong An Plaza
138 Wang Fu Jing Street
Beijing 10000
China
Phone: (86) 10 6510 8000

Nortel is a recognized leader in delivering communications capabilities that enhance the human experience, ignite and power global commerce, and secure and protect the world's most critical information. Serving both service provider and enterprise customers, Nortel delivers innovative technology solutions encompassing end-to-end broadband, Voice over IP, multimedia services and applications, and wireless broadband designed to help people solve the world's greatest challenges. Nortel does business in more than 150 countries. For more information, visit Nortel on the Web at www.nortel.com.

For more information, contact your Nortel representative, or call 1-800-4 NORTEL or 1-800-466-7835 from anywhere in North America.

This is the Way. This is Nortel, Nortel, the Nortel logo, the Globemark, Meridian and Symposium are trademarks of Nortel Networks. All other trademarks are the property of their owners.

Copyright © 2005 Nortel Networks. All rights reserved. Information in this document is subject to change without notice. Nortel assumes no responsibility for any errors that may appear in this document.

