Microsoft Live Communication Server (LCS)

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Abstract

Microsoft Office Live Communications Server 2003 is a manageable and extensible instant
messaging server (IMS) that provides a real-time collaboration solution. It enables corporations to
reach, collaborate, and respond to information more quickly as compared to telephones and e-
mail. It uses the following protocols:

- ? SIP (Session Initiation Protocol)
- ? SIMPLE (Instant Messaging and Presence Leveraging Extensions) and
- ? RTP (Real-Time Transport Protocol).

Windows Messenger 5.0 is the only client application that is used with Live Communications
Server (LCS).

This article doesn't explain the configuration of the IM Archiving feature and provides only some
high level steps to configure LCS.

This article is based on Windows 2003 Enterprise Edition (Build 3790) and Microsoft Live
Communication Server 2003

Reference: Exchange LCS Documentation on installation media

Introduction

Microsoft divided the Live Communication Server in three parts to fulfil all requirements of modern
computing business.

Home Server
On a home server, Live Communications Server is configured to host users who communicate in
real-time and to run Live Communications applications. You must configure at least one server in
the environment as a home server. To configure a home server, the computer must be a member
of an Active Directory domain.

Front-End Server
You configure Live Communication Server on a front end server because a front end server can
reduce the load on LCS home servers by redirecting initial registration requests from clients to
their assigned home servers. The front-end server redirects the client to its correct home server.
The client now contacts its home server for all subsequent traffic. A front-end server must be a
member of an Active Directory domain.

Live Communications IM Archiving Agent
The Live Communications IM Archiving Agent component allows you to save IM messages in an
MSDE or MS SQL database. The IM Archiving feature collects instant message data and sends
it through Microsoft Message Queuing (MSMQ) to a computer that runs Live Communications IM

Archiving Service. You must install Live Communications IM Archiving Service on a computer in the same domain before you install the Live Communications IM Archiving Agent component.

Hardware / Software requirements

The installation of the LCS Server has the following Hardware requirements:

Hardware Component	Recommended Minimum
CPU	Dual x86-based processors >1.4 GHz
Network adapter	1 Gb/second
RAM	2 GB
Hard drive	2 x 36.4 GB Ultra2 SCSI in RAID 0 configuration

Live Communications Server can be installed on the following platforms:

- ? Windows Server 2003, Standard Edition
- ? Windows Server 2003, Enterprise Edition
- ? Windows Server 2003, Datacenter Edition

Prerequisites to using the Microsoft Office Real-Time Communications Server include:

- ? Active Directory (Windows 2000 or Windows Server 2003)
- ? Public key infrastructure (PKI)

Microsoft Windows Messenger 5.0 client software, which can be installed on the following platforms:

- ? Windows Server 2003, Standard Edition
- ? Windows Server 2003, Enterprise Edition
- ? Microsoft Windows XP Home Edition
- ? Windows XP Professional
- ? Microsoft Windows 2000 Professional with Service Pack 3 (SP3)
- ? Windows 2000 Server with SP3
- ? Windows 2000 Advanced Server with SP3

Installation

The setup process begins by executing the file SETUP\I386\SETUP.EXE from the LCS CD

Figure 1: LCS installation
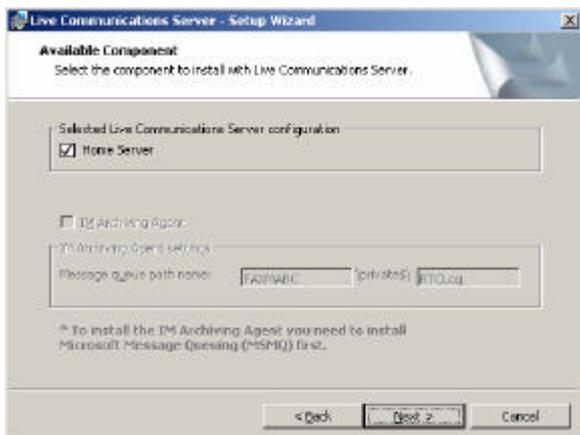
Figure 2: LCS installation – the following picture

Installer Files

LCS provides the following files for a manual installation:

RTCSRV.MSI   = The LCS core components
RTCADMIN.MSI   = The Admin-Interface
RTCARCH.MSI   = LCS archiving components
RTCSDK.MSI   = LCS Software Development Kit

Client Distribution

The Windows Messenger 5.0 Client can be distributed by the following ways:

- ? Group Policy
- ? SMS
- ? Logon Script
- ? IntelliMirror
- ? Software Distribution Point

Expanding the Active Directory Schema

rtcsrv.msi PREP=SCHEMA /L*V drive letter:\setup_schema.log
rtcsrv.msi PREP=ENTERPRISE /L*V drive letter:\setup_enterprise.log
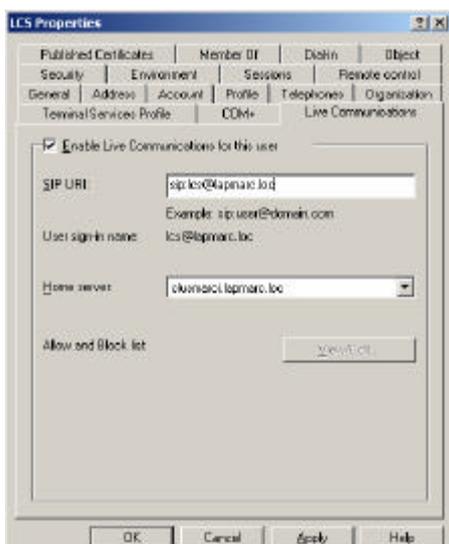
Figure 3: ADUC properties after schema extension

DNS Server configuration
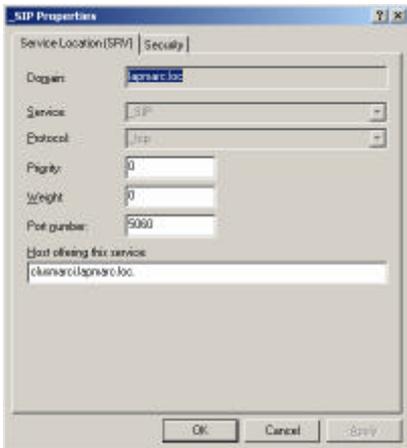
Figure 4: DNS Server configuration

Windows Messenger Configuration

You must configure the Windows Messenger 5.0 to use SIP and IM – go to Tools – Options – Accounts – select Sign in with … Communications Service (Figure 6) and specify the Communications Service Account in the field Sign-in-name (Figure 6).

Click Advanced and specify how to find the communication service (Figure 7). Select Automatic configuration when you have configured your responsible DNS Server with the required SIP records or configure this settings manually.


Figure 5: Windows Messenger 5.0
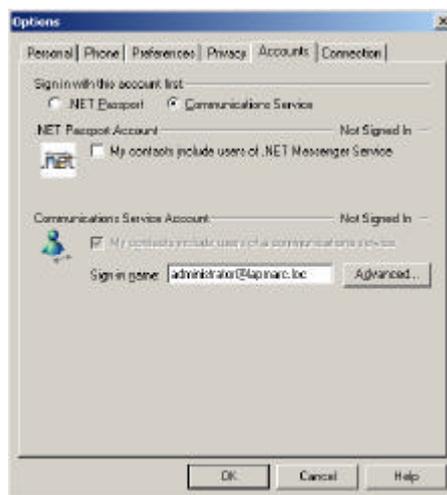
Figure 6: Account properties
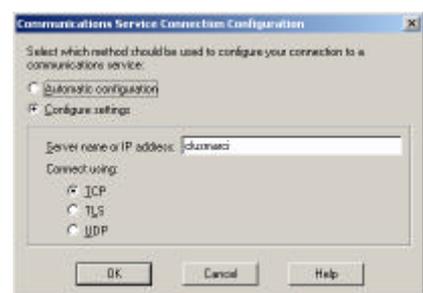
Figure 7: Connection configuration

LCS Server Console

You can use the LCS Console SnapIn to configure general properties for all LCS users
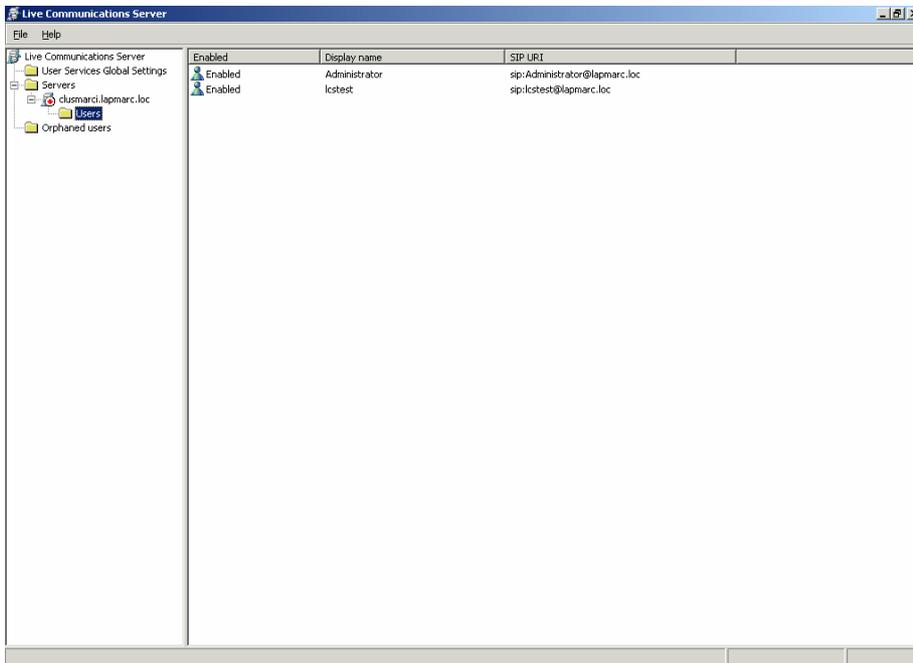

Figure 8: LCS console

Conclusion

Live Communication Server provides a much better way to deploy realtime communication services in a Microsoft Windows / Exchange environment. LCS is a expandable, secure and highly manageable business solution.

Related Links

Microsoft Exchange 2003 Homepage
http://www.microsoft.com/exchange
LCS Deployment and Reference Guide on the installation media of LCS