



Microsoft Office Communications Server Speech Server Installation Guide for the Aumtech MRCP Connector

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Revision History

Revision	Date	Description	Name
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1.0.1	2007/07/03	ArcMrpConnector Application Properties Changed in OCS Server 2007.	Sherry L. Nulty
1.0.2	2007/17/03	Moved Connector and Client flows to the MRCP Connector Guide	A. Kapoor

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1. Introduction

The Aumtech MRCP (Media Resource Control Protocol) Connector for the Microsoft® Office Communications Server 2007 Speech Server (OCS) provides an open standards-based access to Speech Recognition and TTS (Text-to-Speech) functions of the OCS. Since the MRCP Connector is based on the W3C's open standard MRCP, applications running on Microsoft or open platforms such as Linux can access the Speech Recognition and TTS functions of the OCS.

The Aumtech MRCP Connector runs on the same server machine as the OCS. The purpose of this document is to illustrate the installation and configuration of the Microsoft Office Communications Server 2007 Speech Server (Beta) for use with the MRCP Connector. This document does not include instructions for installing the Microsoft outline the loading or reloading of the Microsoft Server 2003 or the MRCP Connector.

The document is intended for Microsoft Windows systems administrators responsible for installing and configuring OCS, MRCP connector and related products.

2. Hardware Requirements

The computer on which you install Speech Server must meet the following hardware requirements.

Feature	Requirement for Speech Server Installation
Processor	Pentium 4 class running at 2.5 gigahertz (GHz) or faster
Number of Processors	1 (2 recommended)
RAM	1 GB (4 GB recommended)
DVD-ROM Drive	Required only if installing from DVD rather than from a network
Network Interface Card (NIC)	Required
Free hard disk space (for installation)	NTFS-formatted local partition with 3.5 GB of available hard disk space
Free hard disk space (for logging)	5 GB minimum for Speech Server with Development Tools; 20 GB minimum for Speech Server with other components. Requirement depends on the amount of log data you want to store on the computer.

3. Operating System Versions Supported

The following Windows Operating Systems are supported:

Microsoft Windows Server 2003 Standard Edition
Microsoft Windows Server 2003 Enterprise Edition

4. Prerequisites for Speech Server

4.1. Microsoft Server 2003

The Microsoft Speech Server requires a fresh installation of the Server 2003 Standard or Enterprise Edition Operating System with SP2. A pre-installed operating system from a hardware/software vender is not supported. After the operating system has been installed do not install windows updates until the prerequisites have been installed.

4.2. User Permissions

You must be a member of the Administrators group on the target computer to install Speech Server and all prerequisite software. To verify that you are an Administrator, see the **User Accounts** Control Panel on your computer. If you are not an Administrator, see your network administrator.

Speech Server sets permission levels on the computers where it is installed. When Speech Server is installed on a computer running Windows Server 2003, only administrators and power users (not users or guests) are able to log on interactively. For more information, see the Help topic "Logon Permissions for the Computer Running Speech Server".

4.3. Prerequisite Components

The following table illustrates the prerequisites and the order in which the prerequisites should be installed. If steps are skipped or not installed in the exact order as laid out in this document the Microsoft Speech Server will not function properly.

After installing the prerequisite software, install the latest service packs and all critical updates for the Server 2003 operating system from Windows Updates and Microsoft Updates.

Prerequisites
IIS and MSMQ
Microsoft .NET Framework 3.0 Redistributed Package
MSXML 6.0.3883
Hotfix for Microsoft Framework 2.0 (KB917833) for Windows Server 2003
Integrated Windows Authentication enabled

4.4. Installation Notes for Prerequisites

4.4.1 IIS and MSMQ

On Windows Server 2003

1. Click **Start**, click **Control Panel**, and then click **Add or Remove Programs**.
2. Click **Add/Remove Windows Components**.
3. In the **Components** list box, highlight **Application Server**, and then click **Details**.
4. In addition to what is checked please check the boxes next to **ASP.NET** and **Message Queuing**. So Application Server Console and Enable Network DTC Access are the only two **unchecked**.
5. (**Note** Selecting **ASP.NET** also causes Windows to automatically select all of the components of IIS that are required for Speech Server.)
6. Click **OK**, click **Next**

7. If the system prompts you for the Server installation disk please place it in the DVD drive and wait a few seconds and click ok. After it is done copy the files from the DVD click **Finish**.
8. Close Add/Remove Programs.

4.4.2 Microsoft .NET Framework 3.0 Redistributable Package

***Important** Speech Server does not support pre-release versions of .NET Framework 3.0. If you have a pre-release version installed, you must first uninstall the pre-release version and then install the released version.*

1. Insert the Microsoft Speech Server DVD. If the installation page for Microsoft Speech Server opens click **exit**.
2. Goto the %DVDROOT%\Prerequisites\dotNetFramework\ and double click **dotnetfx3.exe**.
3. Read and accept the End User License Agreement and then click **Install**.
4. After installation is complete you will get a message that Microsoft .NET Framework 3.0 has been installed successfully. **DO NOT DOWNLOAD AND INSTALL THE LATEST UPDATES**.
5. Click **Exit**.

4.4.3 Microsoft XML 6.0.3883

1. On the Speech Server DVD go to %DVDROOT%\Prerequisites\MSXML6\ double click **msxml6.msi**.
2. After double clicking you will get a message the installation failed because there is a higher version installed. Click **ok** and then **finish**. Go to Add/Remove Programs and uninstall the higher version of MSXML6.0 Parser. Then run the installation again.
3. When the installation is complete you will get a message that the software was installed successfully and click **finish**.

4.4.4 Hotfix for Microsoft .NET Framework 2.0 (KB917833)

1. On the Speech Server DVD, change directory to %DVDROOT%\Prerequisites\dotNetFramework\KB917833
2. Double-click **NDP20-KB917833-X86.exe** and follow the instructions to install the Hotfix.
3. After the Hotfix is installed click **ok**.

4.5. Enable Integrated Windows authentication

1. Click **Start**, click **Control Panel**, click **Administrative Tools**, and then click **Internet Information Services (IIS) Manager**.
2. Expand the local computer node and then expand **Web Sites**.
3. Right-click **Default Web Site** and then click **Properties**.
4. Click **Directory Security** and then click the first **Edit** button. On Windows Server 2003, the first Edit button appears in the area labeled **Authentication and access control**.
5. Under **Authenticated access** enable **Integrated Windows authentication** and then click ok and then on the next screen apply, and then ok.
6. Close IIS Manager.

***Note:** Now proceed to installing **all updates** from Windows Updates and Microsoft Updates from, start, programs and then windows updates websites before installing Speech Server.*

5. Installing Speech Server

Before installing Speech Server, deactivate any real-time virus monitoring software that is running on the target computer. Once installation is complete, reactivate real-time virus monitoring. In addition, close any running programs before installing or uninstalling Speech Server.

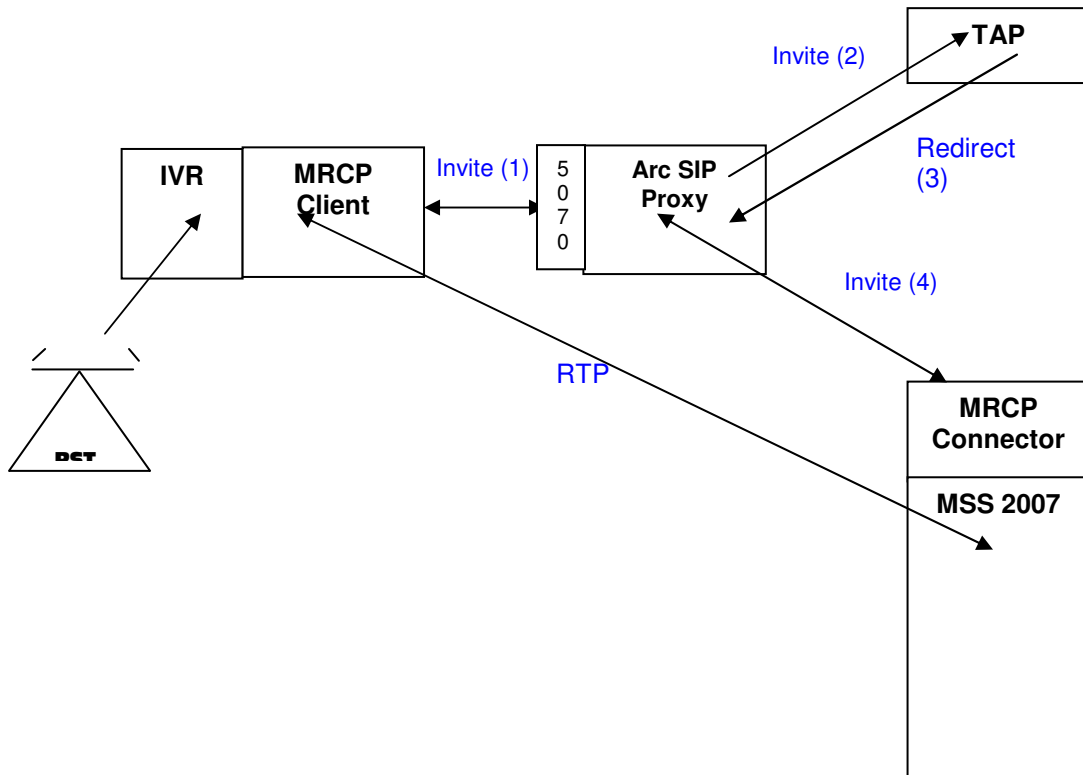
To install Speech Server

1. Verify that you have installed all Prerequisites for Speech Server Components that you intend to install.
2. Close all open programs.
3. Run **Setup.exe** from the %DVDROOT% of the Speech Server installation DVD.
4. Click under Install; **Microsoft Office Communications Server 2007 Speech Server Beta**.
5. Click next.
6. Read and accept license agreement
7. Click next.
8. Select **Server components, Documentation, Administrative Tools, and Data Processing Utilities**.
9. Click next.
10. Read summary and click install.
11. When installation is complete you will be prompted to install Language packs. Click on **install from DVD** and it will open the Language pack folder on the DVD it would like %DVDROOT%\Language Packs. Open the English(United States) folder and double click **enus32.msi**. When installation is complete click finish.
12. Then go back to the Installation Complete window click on install from DVD again and then go to %DVDROOT%\Language Packs\ and open the folder Spanish (United States) and double click **esus32.msi**. Click finished when installation is complete and then click finished on the Speech Server Installation Complete window.

6. Aumtech MRCP Connector Installation

The ARC MRCP Connector needs to be installed. Please refer to the MRCP Connector Users Guide. After the installation is complete, please proceed to the configuration of the Microsoft Speech Server.

7. MSS Overview

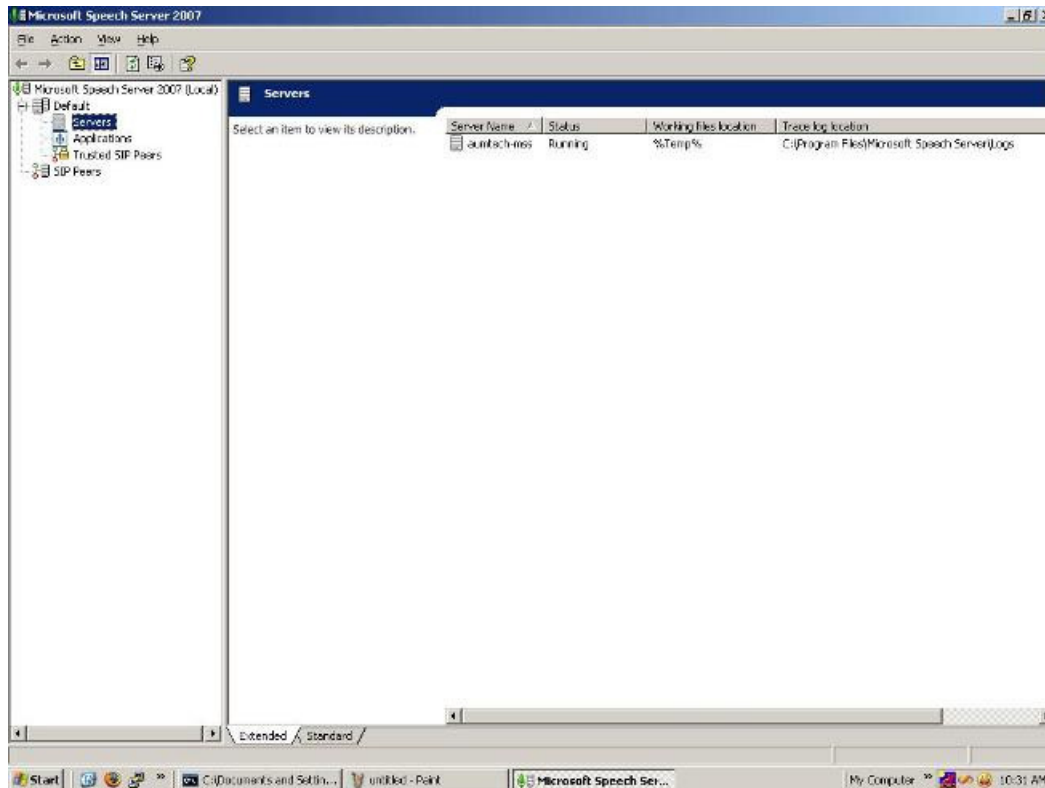


8. MSS Configuration (On MSS server box)

Open the Administrator Console by clicking **Start, All Programs, Microsoft Office Communication Server 2007 Speech Server Beta**, and then click **Administrator Console**.

8.1. Steps for configuration:

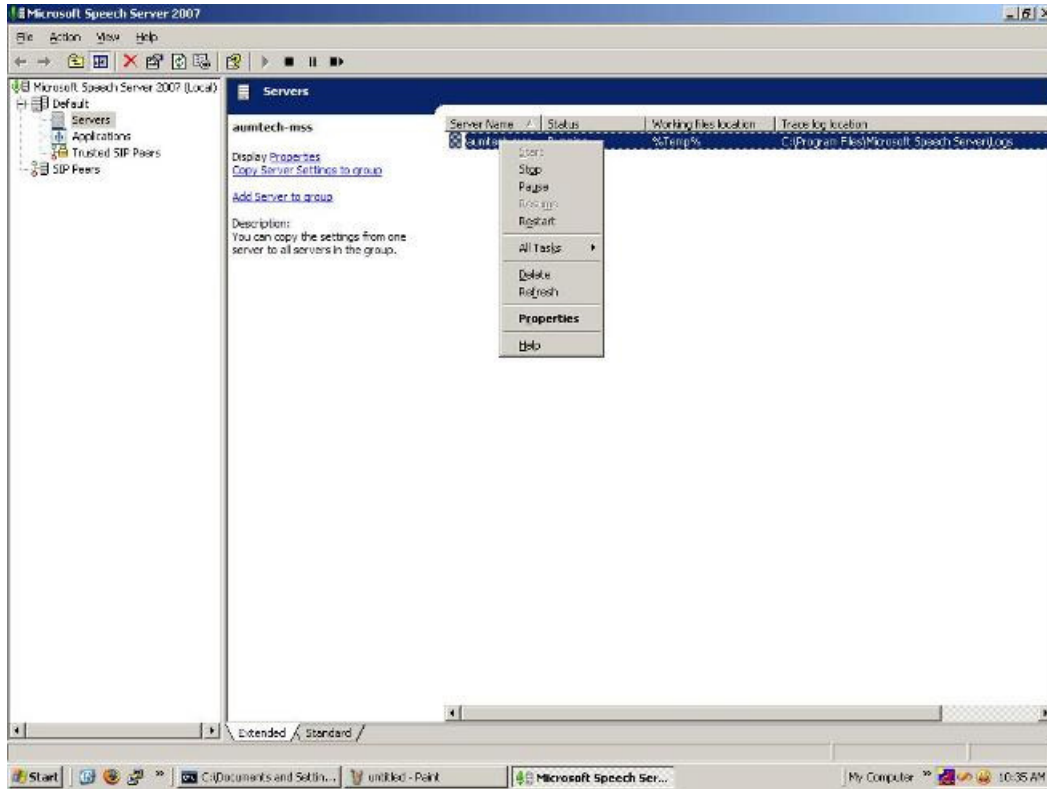
When you click on Administrator Console, it will appear like the figure shown below:-



1. Highlight **Microsoft Office Communications Server 2007 Speech Server 2007 (Local)**
2. Then click **Default**
3. Then click **Servers** if the server is not listed on the right pane then
4. Right click **Servers** and **Add** the server make sure the radio button local computer is selected, then click **ok**. If you get a message that the server localhost already exists in the group then just click **ok**.

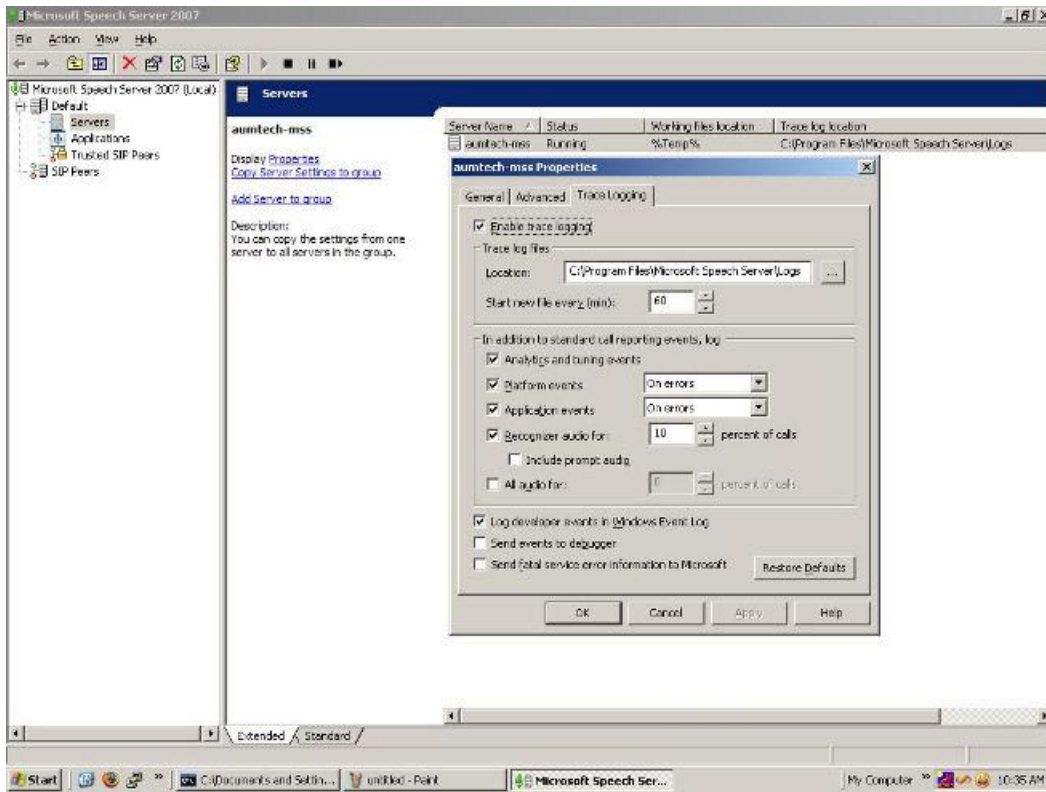
8.2. Properties of Added Server

To check the properties -> Right click on Server Name and select properties.



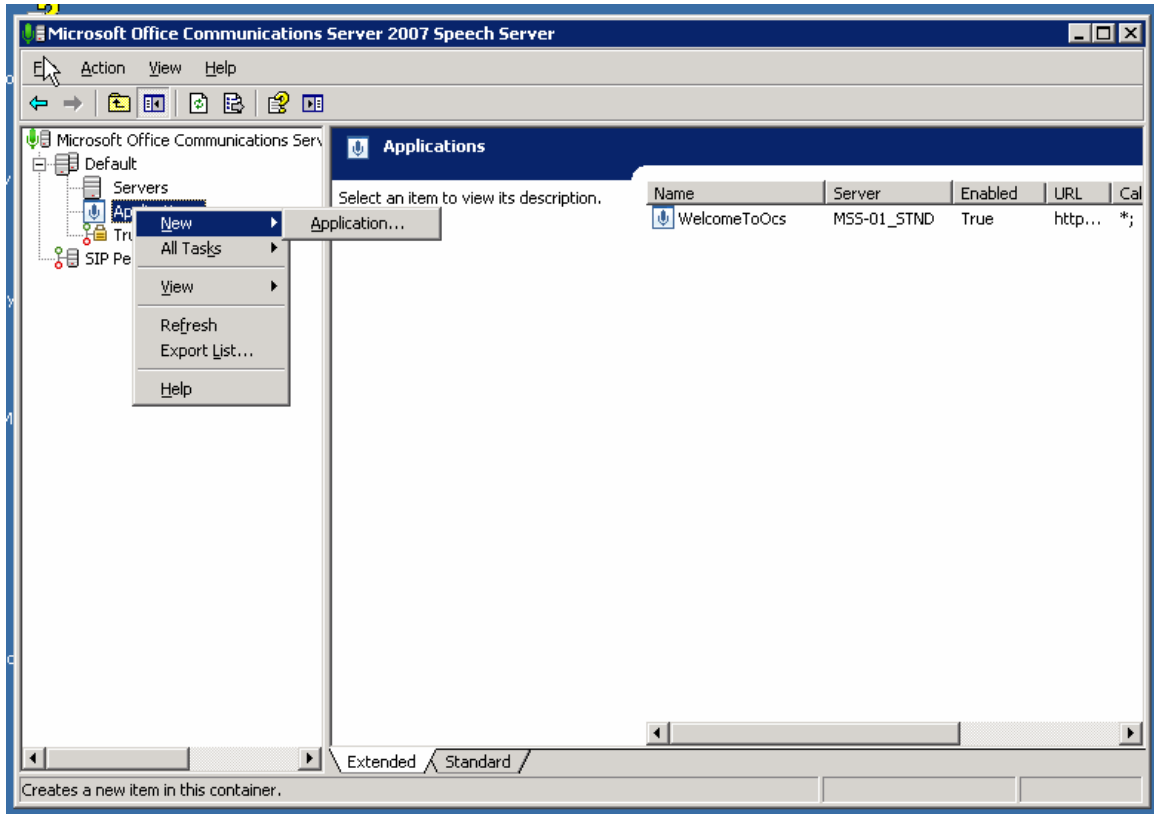
8.2.1 Enable Trace Logging

Click the **Trace Logging** Tab and make sure that Enable Trace logging is selected. Click **ok**.

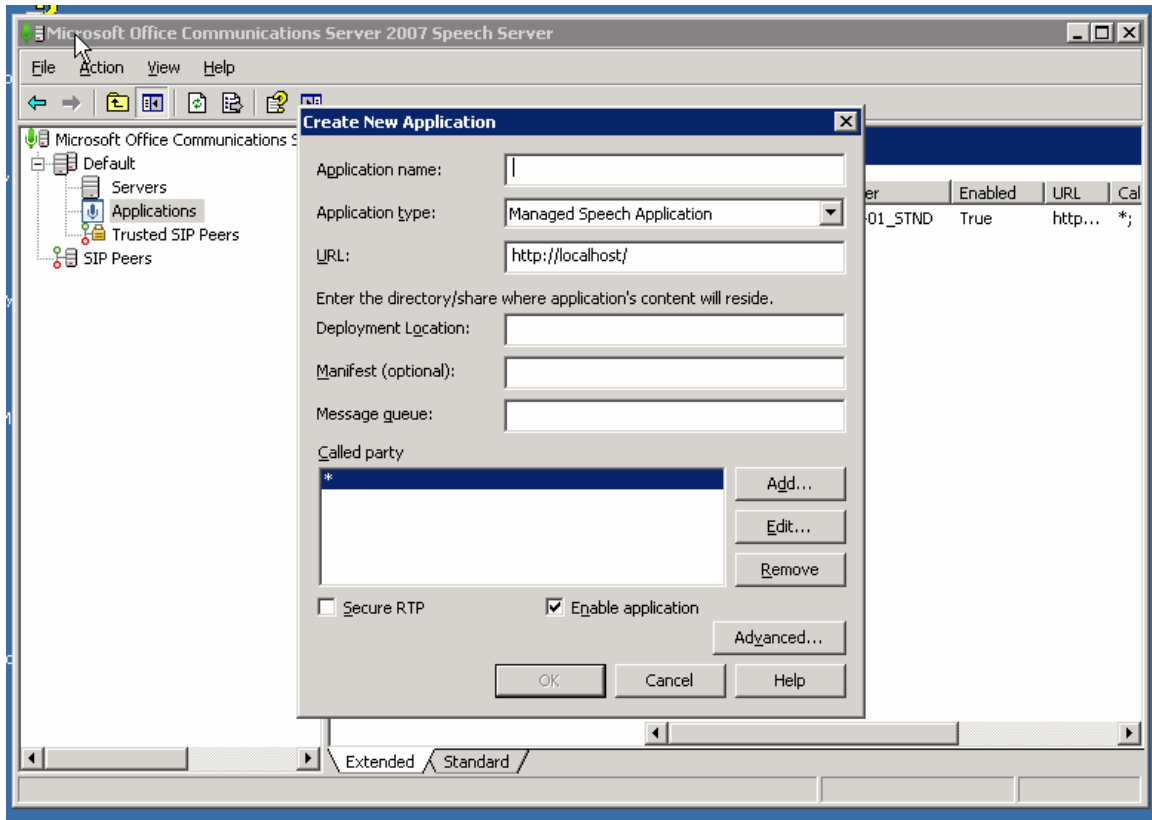


8.2.2 Add MRCP Connector as an Application

1. Right mouse **click** on applications select **New** and then click on **Application**.



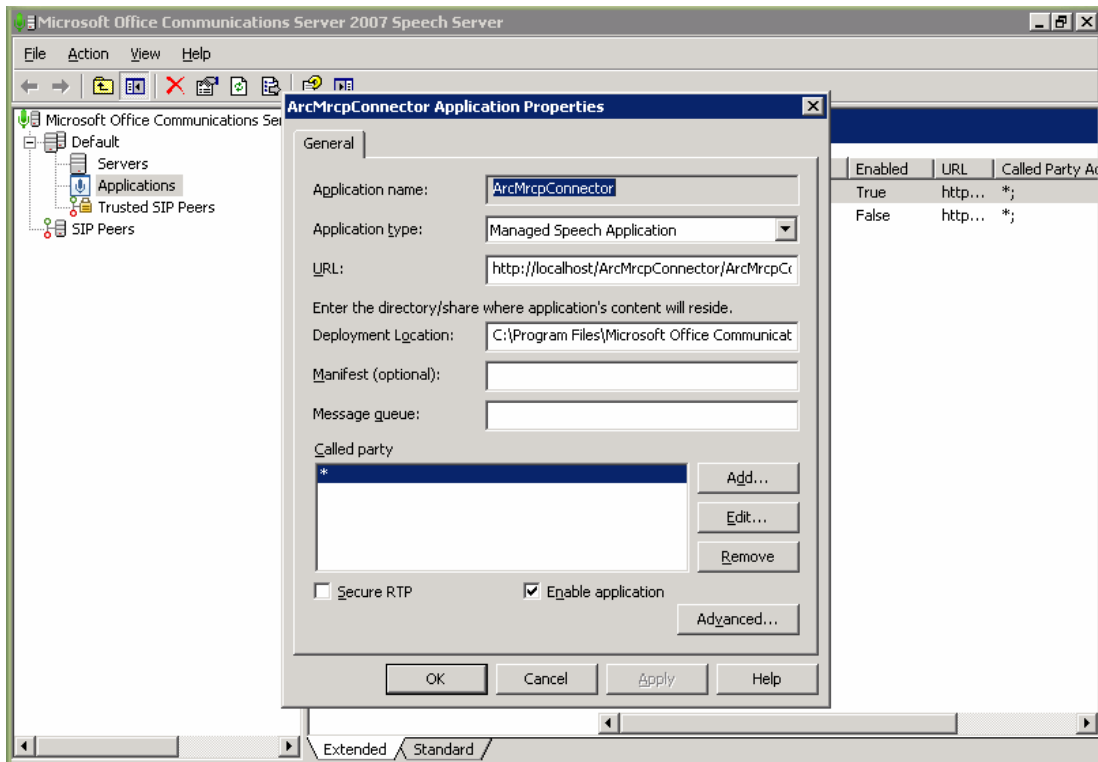
The Create new application window opens. In the Application Name field **type** in **ArcMrpcConnector** *exactly how it appears*. The URL automatically changes.



This is what the window should look like when complete. The URL should read <http://localhost/ArcMrcpConnector/ArcMrcpConnector.speax>

1. In the Deployment Location field type in **C:\Program Files\Microsoft Office Communications Server 2007 Speech Server\Applications\ArcMrcpConnector\ArcMrcpConnector** *exactly how it appears*.
2. In the Called Party field make sure there is an asterisk (*).
3. Click **ok**
4. Another window will pop up asking the server name where the application should be created.
5. Highlight the local host name and click **ok**.

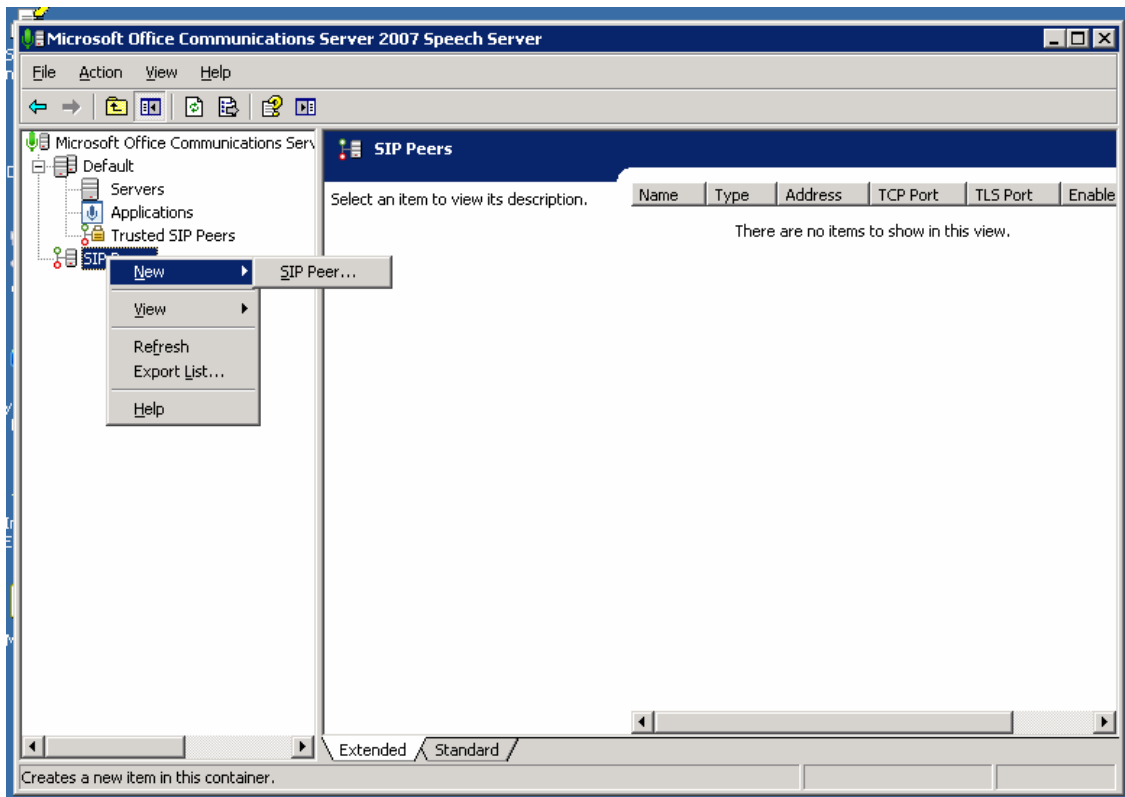
8.2.3 Disable Other Applications with Called party *



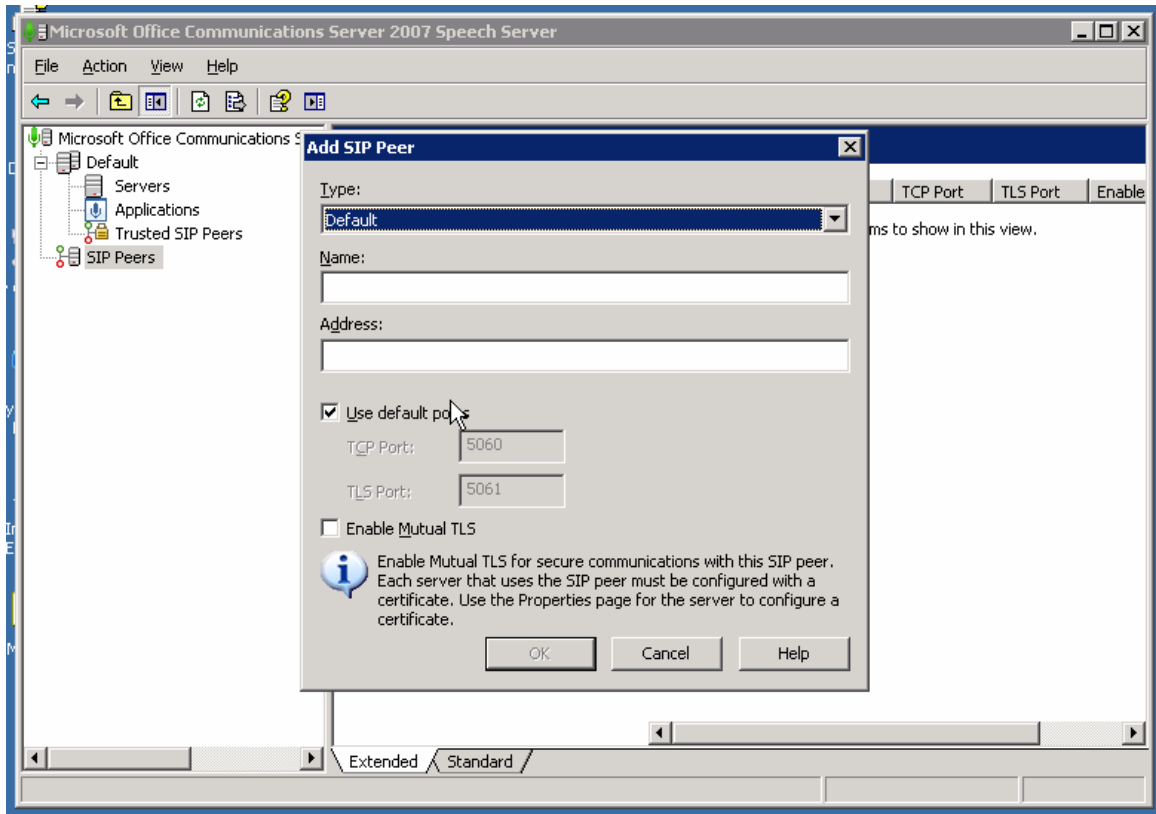
If there are other applications using "", please disable them by right clicking on the application name and left clicking on "Disable Application."*

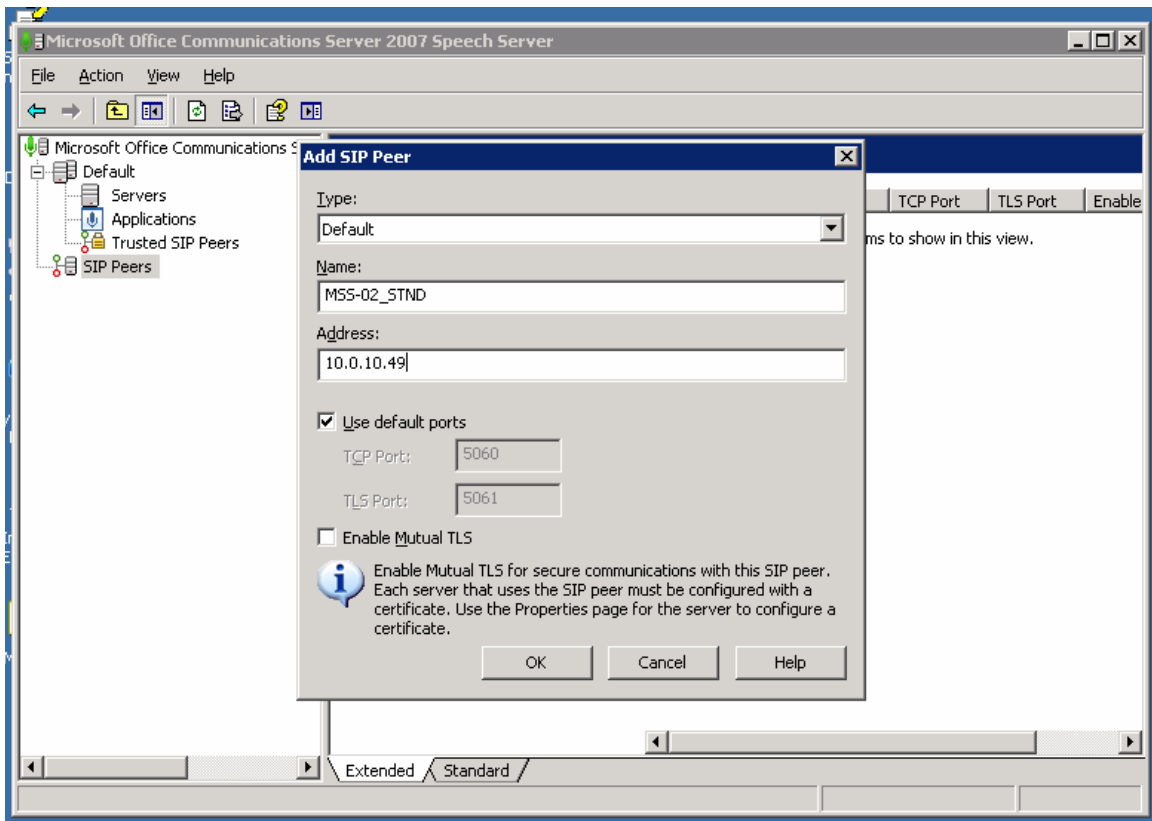
8.2.4 Add SIP peers

Highlight Sip Peers and right mouse click and click **New** then **Sip Peer**.



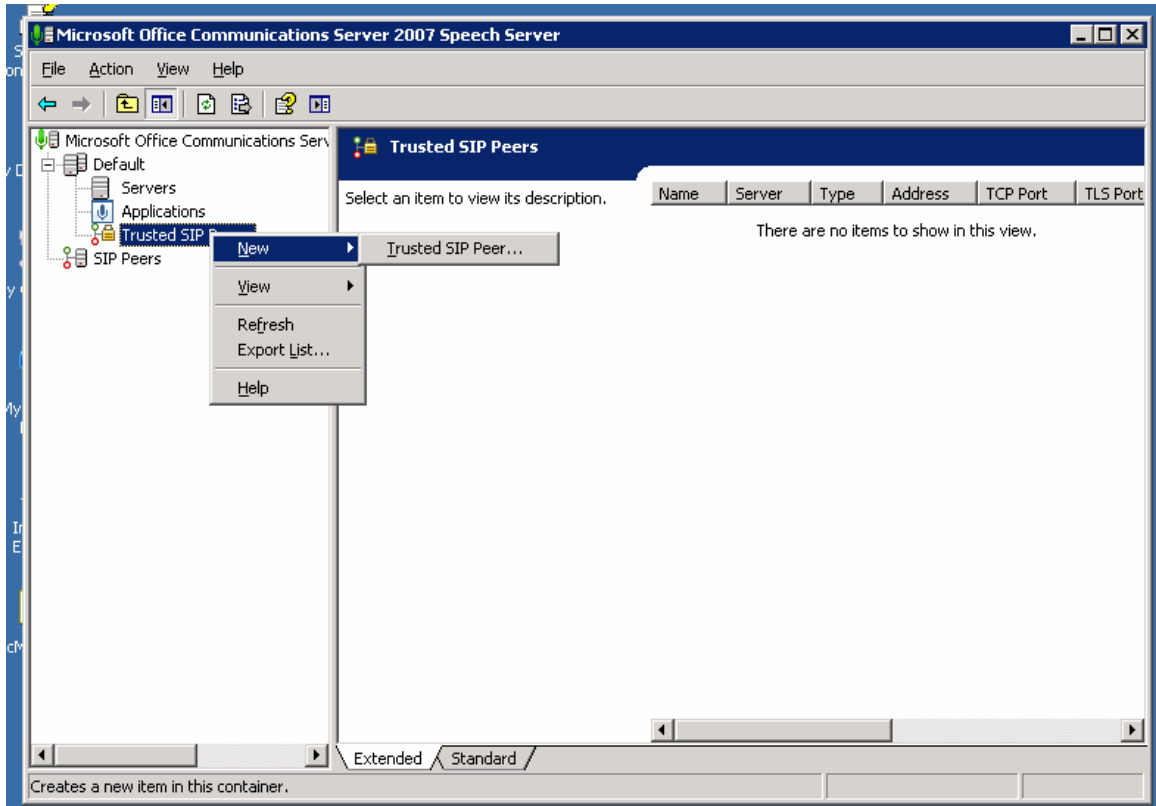
The “Add SIP Peer” window opens.



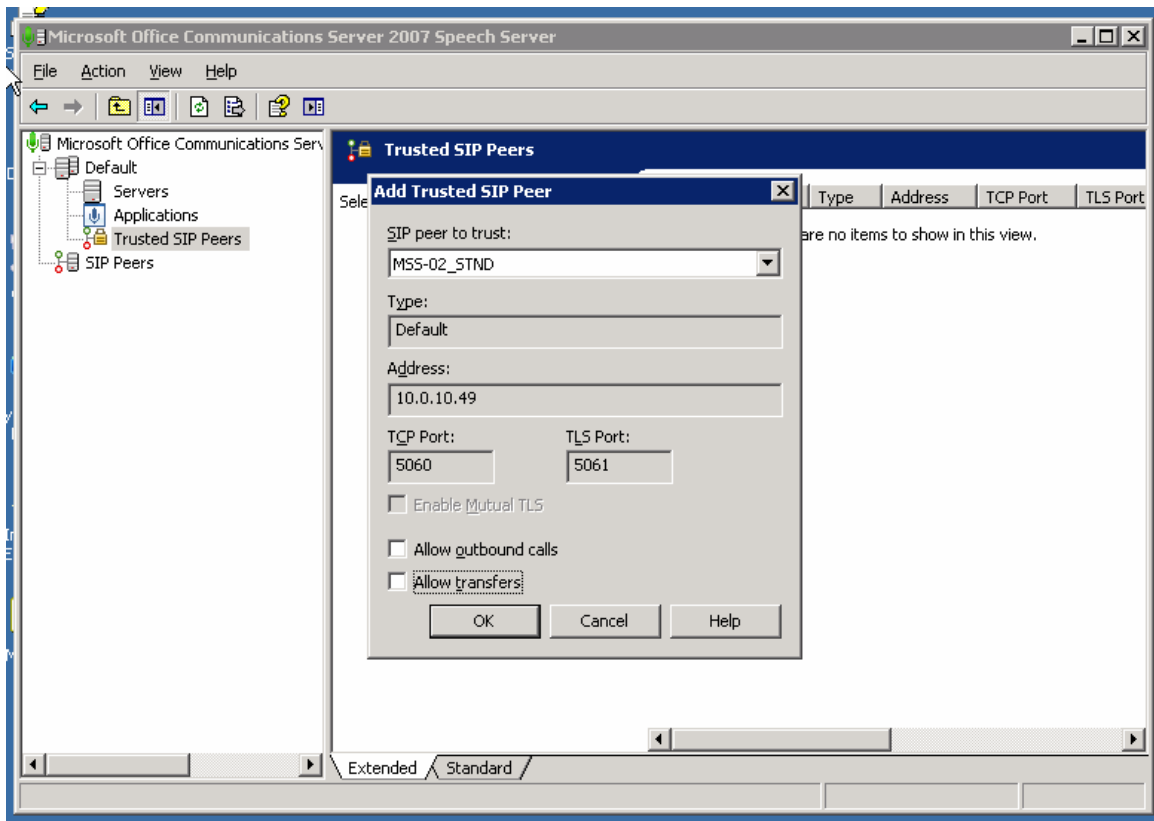


In the name field enter the local host name and the IP address. Then click **ok**.

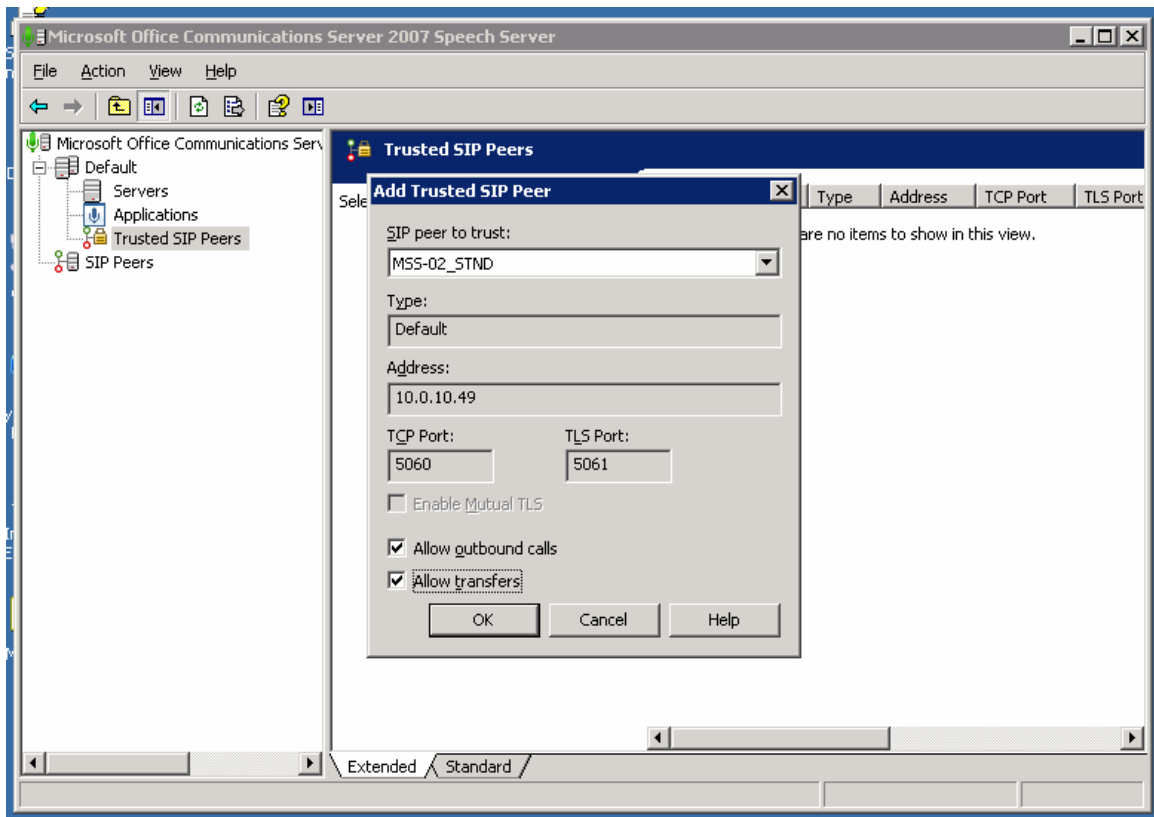
Add an already added SIP peer as a Trusted Peer. Highlight Trusted SIP Peer and right click and then select **New** and then **Trusted SIP Peer**. Enter the name of the local host to be trusted.



Then right mouse click on Trusted SIP Peer select **New** and then **Trusted SIP Peer**.



Check the boxes **Allow outbound calls** and **Allow transfers**. Click **ok** and a window will pop up asking to select the server on which the peer should be trusted. Select the **local host** and then click **ok**.



Then **close** Microsoft Office Communications Server 2007 Speech Server. Reboot the server.

This task is complete.

9. Uninstalling Speech Server

Uninstalling Speech Server removes all components for Speech Server.

Important: Before uninstalling Speech Server, close any running programs.

To uninstall Speech Server

1. Click **Start**, click **Control Panel**, and then click **Add or Remove Programs**.
2. Select **Microsoft Office Communications Server Speech Server** from the list of currently installed programs.
3. Click **Change/Remove** and then click **Remove**.
4. Click **Next** and then click **Uninstall**.
5. Click **Finish** after uninstallation completes.

10. MSS Logging

MSS Logs:

- The MSS logs are in the ".etl" format and found in the *MSS logs (.etl)*
- Those can be converted to text format (.txt) using the tool *MssLogToText.exe* (Located at path:- C:\Program Files\Microsoft Office Communications Server 2007 Speech Server\SDK)
- The MSS logs (.etl) can be transformed to database using the tool *MssLogToDatabase.exe* (Located at path:- C:\Program Files\Microsoft Office Communications Server 2007 Speech Server\SDK)