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Introduction
Welcome to MultiMedia Module

The modern enterprise can no longer rely on outdated models for managing marketing, sales, support, and client relations. Technology convergence has presented both new challenges and new opportunities. Businesses need to create customer-centered policies and employ the tools that make them work.

MultiMedia Module (MMM), is a customer contact software solutions that enables companies and departments to manage multimedia contacts into and out of the organization. MMM provides applications that manage Telephony, Web Chat, E-mail and Web Call Back communications. These robust applications convert any organization into a multi-channel, enterprise-wide customer contact center that will accept multimedia calls and route them to specified members of a group (or groups).

MMM provides the connection between your communications platform, data infrastructure and customer interaction strategy. As a Microsoft BackOffice based communications server, it has been developed to connect seamlessly with a variety of standard off-the-shelf, third-party software applications and legacy systems. MMM has been designed to run on a Windows NT/2000 and Windows 98-based client/server platforms for easy deployment.

MMM furnishes the user interface and support modules for assigning Group Members to specific communications related responsibilities. MMM routes customer interactions to the right people, generates contacts lists, monitors both the system and individual performance and hence ensures that customers are entitled to individualized attention, no matter who they may encounter in your company.
Use of this Manual

This manual covers the installation and administration of Avaya’s MultiMedia Module (MMM) at software Level 2.1+. on the following communications platforms:

- INDeX operating Software Level 10.0+
- IP Office operating Software Level 1.3+

This guide is intended for use by installers and administrators who are familiar with the relevant communications platform and have successfully completed the appropriate training courses.

Ensure that you have read and understood this Guide before beginning installation.

About this Manual

This manual provides the information necessary to set up and install MultiMedia Module (MMM). The following diagram illustrated the sequence of actions required to successfully set up and install MMM:

Once installed, to administer MMM, refer to the following Manuals:

- IContact
- MultiMedia Administrator's Manual

These manuals can be found on the MMM Installation CD.
Platform Support

These modules have been designed to manage all interactions on a single NT server with tight integration to other Microsoft BackOffice products, including Exchange, SQL Server, IIS and Microsoft Office.

- **MS Windows**
  MMM users are able to take advantage of Windows 98/2000/ME/NT WS features, comfort, and familiarity.

- **Windows NT/2000**
  As a network foundation for client/server solution Windows NT integrates seamlessly into existing network configurations and provides a versatile set of security functions, utilities and services.

- **Microsoft Outlook**
  MMM fully exploits Microsoft Outlook E-mail and scheduling functionality to synchronize with its customer interaction capability. Outlook’s features (Task, Contact, E-mail, and appointment) can be accessed directly from the MMM client application.

- **SQL Server**
  Microsoft’s SQL Server combines the lowest cost and ease of operation with the advanced data management relational database features, including enforced data integrity, full ODBC compliance, and secure transaction processing.

- **Exchange Server**
  Exchange Server is a server that incorporates Internet standards and extends rich messaging and Web collaboration to businesses of all sizes.

- **IIS Server**
  Microsoft’s Internet Information Server provides the services necessary for enabling MMM to support Chat, browser-based reporting and rule-enabled Web contacts.

- **POP3 Email Server**
  An exchange server that supports the Post Office Protocol version 3 protocol.
MMM’s Application Structure

Each MMM component contributes to creating a harmonized environment for managing customer interactions. While they are media independent, the applications are designed to work together to provide a comprehensive solution that incorporates interaction processing, setup, reporting, campaign management and routing.

MMM is composed of a generic user interface (iContact) and a series of integrated support modules. These support modules have been designed specifically for the needs of the small to medium sized enterprise. In environments where both human and technological resources are in scarce supply, being able to react quickly to changing conditions is a critical operational consideration. MMM’s support structure allows any computer literate user to install, configure, and make the system functional in a matter of hours. The following figure shows the major components of MMM.

MultiMedia Module Components

The following conceptual mapping diagram, although for Telephony, is identical to that for Web Chat, E-mail and Web Call back. The relationship between an incoming multimedia call and the MMM Media Queue is defined by the Resource Manager, with the Domain Administrator allocating the calls within the MMM Queue to the required group member.
Server Side Components

- **iServer**
  iServer consists of two parts. One is MMM iService for Microsoft Transaction Server (MTS), and the other is a combination of different server components that run on the MTS.

- **iEmail**
  iEmail is responsible for forwarding incoming E-mail messages to the E-mail queue or to the agent. iEmail also forwards Web Callback requests to the Web callback queue.

- **iChat**
  iChat is a service that forwards chat requests to the chat queues. It logs onto the chat server and creates the proper rooms based on the contents of the chat queues created by using the Resource Manager. Depending on the browsed page, the pop-up chat will log onto a defined chat room. iChat will detect the presence of the user in the chat room and log a chat request into the database.

- **Resource Manager**
  The Resource Manager administration module consists of components that enable you to add queues, define interaction results, and assign human resources to all from a single, unified console. Resource Manager has a user-friendly Microsoft Explorer look and feel interface.

- **Rules Wizard**
  With the simplicity of an Outlook Wizard look and feel, the Rules Wizard defines the rules for incoming contact treatment for telephone, E-mail, chat and Web callback contacts, e.g. defines the route to the person(s) specified to answer the incoming contact.

**Note:** All MultiMedia Module reporting activities are perform by the CCC Reporting module. Refer to the separate CCC System Supervisors and Administrator Manuals for details.
### Client Side Components

- **iContact**
  Converts the PC to an all-in-one communications and data tool and hence permits MMM users to prioritize and manage all interactions from one interface. An agent can see queued Telephone calls, E-mail messages, Web calls, and Web Chats and can communicate with group members from one centralized view.

- **Resource Manager**
  The Resource Manager administration module consists of components that enable you to add queues, define interaction results, and assign human resources to all from a single, unified console. Resource Manager has a user-friendly Microsoft Explorer look and feel interface.

- **Rules Wizard**
  With the simplicity of an Outlook Wizard look and feel, the Rules Wizard defines the rules for incoming contact treatment for telephone, E-mail, chat and Web callback contacts, e.g. defines the route to the person(s) specified to answer the incoming contact.

- **Proactive List Manager**
  The Proactive List Manager module facilitates the importing and assignment of outbound calling lists to Proactive Campaigns. It provides the administrator with the ability to manage outbound Proactive Campaign Lists. It furnishes the tools to create draft calling lists, attach them to campaigns, and run the campaigns.
System Requirements

MultiMedia Module requires specific hardware and software to be preinstalled on your system. The installation procedures vary, depending on your requirements. For example, MMM server components can be installed on multiple servers or on a single Microsoft BackOffice Small Business Server. This section contains the following sections describing system requirements:

- MMM Telephony Platform
- Domain Requirements
- Network Protocol
- Hardware Requirements
- Software Requirements

MMM Telephony Platform

MMM is designed to support a variety of telephony services using TAPI. Prior to installing the MMM software package, you must install and configure your PBX.

The telephony platforms currently supported by MMM include:

- INDeX operating with Level 10.0+ software.
- IP Office operating with Level 1.4+ software.

Domain Requirements

MMM is based on client/server architecture that divides processing tasks between clients and servers. Clients (often called the “front end”) request services, such as file storage and printing, and Servers (often called the “back end”) deliver them. Server computers typically are more powerful than client computers, or are optimized to function as servers. In Windows NT/2000, server-based networks are organized into what are called domains. Domains are collections of networks and clients that share security information. Domain security and logon permission are controlled by special servers called domain controllers. There is one master domain controller, called the Primary Domain Controller (PDC), that may be assisted by a secondary domain controller called the Backup Domain Controller (BDC) during busy times or when the PDC is not available for some reason.

No computer users can access the resources of servers in a domain until they have been authenticated by a domain controller.

Support is provided for Windows 2000 Active Directory domains. Inter-Domain working is not supported by MMM.

Network Protocol

Various protocols can be used to facilitate communication among the computers on the LAN (that is, clients and servers). TCP/IP is the most widely used of these protocols, as it is the best choice for supporting heterogeneous networks. TCP/IP is selected by default during the installation of the NT Server. MMM software is supported by this protocol. In choosing TCP/IP, either you must be a DHCP client to a DHCP server or you must supply an IP address and a subnet mask.
Hardware Requirements

Recommendations for hardware requirements are dependent on many variables, including scalability, that should be carefully considered before implementation. The following table lists minimal hardware configuration standards.

<table>
<thead>
<tr>
<th>Server (S)</th>
<th>Client</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Processor: Intel Pentium 800 MHz or faster&lt;br&gt;• Memory: 256 MB of RAM&lt;br&gt;• Storage: 4.0 GB of available HD space (6 GB or more recommended)&lt;br&gt;• CD-ROM drive&lt;br&gt;• Network adapter card&lt;br&gt;• Super VGA monitor compatible with Microsoft Windows 2000 or NT Server 4.0</td>
<td>• Processor: Intel Pentium 450 MHz or faster&lt;br&gt;• Memory: 128 MB of RAM&lt;br&gt;• Storage: 3.0 GB of available HD space (4 GB or more recommended)&lt;br&gt;• CD-ROM drive&lt;br&gt;• Network adapter card&lt;br&gt;• Super VGA monitor compatible with Microsoft Windows NT WS 4.0, 98 or 2000 Pro (workstation)&lt;br&gt;• Soundcard compatible with Microsoft Windows 98/ME/NT WS/2000&lt;br&gt;• Speaker</td>
<td>• Hub&lt;br&gt;• LAN wire connections</td>
</tr>
</tbody>
</table>
Software Requirements

The following sections provide software requirements for MS and MMM Servers plus Client Servers:

### Software Requirements for MS Server(s)

The Microsoft software components for Windows NT and 2000 Servers are listed in the following table and must be installed prior to installing MMM.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 2000 Server</td>
<td>Win NT 4.0 Server with SP1</td>
<td>Win 2000 Server</td>
</tr>
<tr>
<td>Windows 2000 SP3</td>
<td>NT 4.0 Option Pack</td>
<td></td>
</tr>
<tr>
<td>MS SQL Server **</td>
<td>Win NT 4.0 SP4</td>
<td>Win 2000 Server SP3</td>
</tr>
<tr>
<td>MS SQL Server SP **</td>
<td>SQL Server **</td>
<td>SQL Server **</td>
</tr>
<tr>
<td>MS Exchange 2000 Enterprise (with Chat Service) *</td>
<td>SQL Server **</td>
<td>SQL Server SP **</td>
</tr>
<tr>
<td>Windows Critical Updates</td>
<td>MS Exchange 5.5</td>
<td>MS Exchange 5.5</td>
</tr>
<tr>
<td>MS OutLook 98/2000/2000 SR1</td>
<td>MS Exchange 5.5 Chat Service</td>
<td>MS Exchange 5.5 Chat Service</td>
</tr>
<tr>
<td></td>
<td>MS Exchange 5.5 SP3</td>
<td>MS Exchange 5.5 SP3</td>
</tr>
<tr>
<td></td>
<td>Win NT 4.0 SP6a High Encryption (HE)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Windows Critical Updates</td>
<td>Windows Critical Updates</td>
</tr>
</tbody>
</table>

**Note:**
* The Chat Service is integral to Exchange 2000 and not a separate module as with Chat in Exchange 5.5.

** For NT domains, you have the option of using SQL Server 7 with SP2, SQL Server 2000 with SP3 or MSDE 2000 with SP3.
For Active Directory domains, you have the option of using SQL Server 2000 with SP3 or MSDE 2000 with SP3.

### Software Requirements for MMM Server

The following table lists the software that must be installed on an MMM Server prior to installing MMM.

<table>
<thead>
<tr>
<th>Software</th>
<th>Version</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Windows NT Server</td>
<td>4.0</td>
<td>Standalone Server/BDC/PDC</td>
</tr>
<tr>
<td>MS Windows 2000 Server</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS Windows 2000 AD member server</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS NT 4.0 Service Pack</td>
<td>6.0a</td>
<td></td>
</tr>
<tr>
<td>MS Internet Explorer</td>
<td>5.5</td>
<td>Full installation</td>
</tr>
<tr>
<td>MS Outlook</td>
<td>98/2000/2000 SR1</td>
<td></td>
</tr>
<tr>
<td>MS NT 4.0 Option Pack</td>
<td>4.0</td>
<td></td>
</tr>
</tbody>
</table>

### Software Requirements for MMM Client(s)

The following table lists the software that must be installed on an MMM Client prior to installing MMM.

<table>
<thead>
<tr>
<th>Software</th>
<th>Version</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 98/ME/NT WS/2000 Pro</td>
<td></td>
<td>To setup clients NT WS Version 4.0</td>
</tr>
<tr>
<td>MS Internet Explorer</td>
<td>5.5</td>
<td>Full installation</td>
</tr>
<tr>
<td>MS Outlook</td>
<td>98/2000/2000 SR1</td>
<td></td>
</tr>
<tr>
<td>MS NT 4.0 Service Pack</td>
<td>6.0A</td>
<td></td>
</tr>
</tbody>
</table>
# Dependencies

The following table shows the elements that need to be installed for each of the iServer Components.

<table>
<thead>
<tr>
<th>Resource Manager</th>
<th>iServer</th>
<th>iEmail ACD Service</th>
<th>iChat ACD Service</th>
<th>Rules Wizard (server side)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NT Server 4.0/Windows 2000</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>NT Service Pack 6.0a</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Exchange 5.5/Exchange Service Pack/Exchange 2000</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Chat Service</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Outlook 98 or 2000</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>SQL 7.0/SQL 7.0 Service Pack</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet Information Server (Option Pack 4.0)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Transaction Server (Option pack 4.0)/Com 4</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet Explorer 5.5 or higher</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Notes:**

1. Resource Manager may be installed on both a server and a client system. Therefore a Windows 98/ME or NT Workstation 4.0 or Windows 2000 Pro system is acceptable.

2. While the table shows that Exchange, SQL and their service packs are not necessary for component installation, they are necessary for the proper operation of MultiMedia Module.

3. Once all necessary components are installed, you must identify and record the locations of the iServer service and chat server and other servers when first opening Resource Manager and the other components.

4. To make the total installation work more smoothly, install, configure and test the back office components before you begin to install the MultiMedia Module Components, including a functional web site.
Summary of System Requirements for MMM

When planning your system for MMM installation, ensure that all of the following have been implemented:

- You **must** have a Win NT/2000 Domain account(s) on an NT Domain or, on Win 2000, NT domain only.
- When there is more than one Domain, define which Domain you are going to use.
- The exchange Server **must** be in the Domain defined above.
- TCP/IP is running on all PCs that you are going to use.
- All Client/Servers are on the same sub-net.
- All Client/Servers must be able to browse and see each other on the network.
- The Web Server/Operating System/Service Packs/etc. meet the requirements defined in Section 2.
- Note the Name and location of the Web Server.
- You must have Administration Privileges on the Domain of your Network, including IIS, SQL and Exchange Server. (If on an external Server, you must have Administration rights to that web site).
- You must have access to a CD ROM drive on the Network.
- You will have to reboot the MMM Server during installation. **This will take your MMM system down during the reboot.**
- There must be a dedicated connection between the Chat Server and the MMM Server
  OR
  A dedicated connection between the Chat Server and the ISP.
- You must have Administration access to your telephone system.
- On IP Office, you must create an empty Group and then reboot **This will take your IP Office down during the reboot.**
- On INDeX, allocate an unused analogue extension per analogue queue.
- You must have the appropriate licenses to operate MMM.
- TAPI must be installed, functional and be the correct version for both the switch and MMM.
MS BackOffice Installation/Configuration

This section provides a step-by-step sequence for installing Microsoft components. You may have some or all of these already installed on your system. Refer to your BackOffice documentation for installation and configuration of these components prior to installing the MMM applications.

You can install MS BackOffice components in one system, which will be your main MS Server. To improve performance and reliability we recommend installing the MS BackOffice software on multiple servers.

Installing MS BackOffice on MS Server(s)

The MMM Server can be installed in a Windows Active Directory domain or a NT domain environment. The table below shows the sequence in which a MS Server for MMM must be setup for each type of domain. Perform the Active Directory domain activities first.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Active Directory (Windows 2000 Native) domain</th>
<th>Windows NT Server 4.0 (in a NT Domain)</th>
<th>Windows 2000 Server (in a NT Domain)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Windows 2000 Server</td>
<td>Win NT 4.0 Server with SP1</td>
<td>Win 2000 Server</td>
</tr>
<tr>
<td>2</td>
<td>Windows 2000 SP3</td>
<td>NT 4.0 Option Pack *</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SQL Server ***</td>
<td>Win NT 4.0 SP4</td>
<td>Win 2000 Server SP1</td>
</tr>
<tr>
<td>4</td>
<td>SQL Server SP ***</td>
<td>SQL Server ***</td>
<td>SQL Server ***</td>
</tr>
<tr>
<td>5</td>
<td>Exchange 2000 Enterprise Edition with Chat Service</td>
<td>SQL Server SP ***</td>
<td>SQL Server SP ***</td>
</tr>
<tr>
<td>6</td>
<td>Windows Critical Updates</td>
<td>MS Exchange 5.5</td>
<td>MS Exchange 5.5</td>
</tr>
<tr>
<td>7</td>
<td>MS OutLook 98/2000/2000 SR1</td>
<td>MS Exchange 5.5 Chat Service **</td>
<td>MS Exchange 5.5 Chat Service **</td>
</tr>
<tr>
<td>8</td>
<td>MS Exchange 5.5 SP3</td>
<td>MS Exchange 5.5 SP3</td>
<td>MS Exchange 5.5 SP3</td>
</tr>
<tr>
<td>9</td>
<td>Win NT 4.0 SP6a High Encryption (HE)</td>
<td>Windows Critical Updates</td>
<td>Windows Critical Updates</td>
</tr>
<tr>
<td>10</td>
<td>Windows Critical Updates</td>
<td>Win NT 4.0 SP6a High Encryption (HE)</td>
<td></td>
</tr>
</tbody>
</table>

The NT 4.0 SP6a HE can be downloaded from the Internet from the following link:

In an NT 4.0 environment, it is possible to split the software requirements across the PDC & BDC servers. The table below shows a recommend split.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Primary Domain Controller (PDC)</th>
<th>Backup Domain Controller (BDC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Win NT 4.0 Server with SP1</td>
<td>Win NT 4.0 Server with SP1</td>
</tr>
<tr>
<td>2</td>
<td>NT 4.0 Option Pack</td>
<td>NT 4.0 Option Pack</td>
</tr>
<tr>
<td>3</td>
<td>Win NT 4.0 SP4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SQL Server ***</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SQL Server SP ***</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>MS Exchange 5.5</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>MS Exchange 5.5 Chat Service</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>MS Exchange 5.5 SP3</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Win NT 4.0 SP6a High Encryption (HE)</td>
<td>Win NT 4.0 SP6a High Encryption (HE)</td>
</tr>
<tr>
<td>10</td>
<td>Windows Critical Updates</td>
<td>Windows Critical Updates</td>
</tr>
</tbody>
</table>

* The NT 4.0 Option Pack has its own pre-requisites of NT 4.0 SP3, Internet Explorer 4.01 which must be installed first.
** The MS Exchange 5.5 Chat Service MUST be installed on the same machine that runs Internet Information Service (IIS).
*** For NT domains, you have the option of using SQL Server 7 with SP2, SQL Server 2000 with SP3 or MSDE 2000 with SP3. For Active Directory domains, you have the option of using SQL Server 2000 with SP3 or MSDE 2000 with SP3.

The MMM Server can now be installed on either the PDC or the BDC.
Configuring MS Back Office and Client and Servers

The following table lists the components that you must configure prior to installing MMM components.

<table>
<thead>
<tr>
<th>Component to Configure</th>
<th>Where to Configure</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Users</td>
<td>User Manager for Domains/Active Directory</td>
</tr>
<tr>
<td>Mailbox</td>
<td>Where MS Exchange is installed</td>
</tr>
<tr>
<td>Profile</td>
<td>On all Client(s) system(s)</td>
</tr>
<tr>
<td>New Group</td>
<td>User Manager for Domains/Active Directory</td>
</tr>
<tr>
<td>E-mail Address</td>
<td>MS Exchange Administrator.</td>
</tr>
</tbody>
</table>

Installing MS BackOffice on the MMM Server

The following table shows the order of installation for Microsoft BackOffice components in the iServer. This can be a separate system from MS BackOffice Server.

<table>
<thead>
<tr>
<th>Component</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Windows NT Server</td>
<td>4.0</td>
</tr>
<tr>
<td>MS Windows 2000 Server</td>
<td></td>
</tr>
<tr>
<td>MS NT 4.0 Service Pack</td>
<td>6.0</td>
</tr>
<tr>
<td>Option Pack 4.0 (Microsoft Transaction Server)</td>
<td>4.0</td>
</tr>
<tr>
<td>MS Windows 2000 Service Pack 3</td>
<td>-</td>
</tr>
<tr>
<td>MS Internet Explorer</td>
<td>5.5</td>
</tr>
<tr>
<td>MS Outlook</td>
<td>98/2000</td>
</tr>
</tbody>
</table>

Installing MS BackOffice on Client(s)

The following table shows the order of installation for Microsoft BackOffice components in Client(s).

<table>
<thead>
<tr>
<th>BackOffice</th>
<th>Component Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Windows NT Workstation (or Win 9X)</td>
<td>4.0 (NT)</td>
</tr>
<tr>
<td>MS NT 4.0 Service Pack (Version 6.0a)</td>
<td>Ignore for Win 98</td>
</tr>
<tr>
<td>MS 2000Pro Service Pack 2</td>
<td>-</td>
</tr>
<tr>
<td>MS Internet Explorer</td>
<td>5.5</td>
</tr>
<tr>
<td>MS Outlook</td>
<td>98/2000</td>
</tr>
</tbody>
</table>
System Planning

Prior to installing and configuring the software it is recommended that you develop a plan for how you want your interactions handled. Elements including expected traffic volume, human and technical resources and hours of operation should be considered before provisioning the system:

- Divide the organization into logical groups
- Decide what members should be assigned to each group
- Decide what media each group will handle
- Determine which pages on the Web will be activated. Make them available
- Create Global Groups in NT User Manager
- Create users using NT manager and assign them to groups (Remove users from the default domain users group).

Configuring Exchange server

On MS Exchange you must create users and their mailboxes in order to receive and send E-mail. Also you need to create virtual users and mailboxes for E-mail queues and web call queues so they can be routed to different groups. For more information about creating groups, users, and mailboxes please contact your administrator.

IMPORTANT NOTES:
1. You must make a record of the data gathered in the following paragraphs as this will be required when installing MMM. See page 18.
2. Your Network Administrator must create a shared directory for the storing of E-mail attachments. It is recommended that this is created in the MMM Server.

Configuring a New User

1. Return to the MS Server(s) where MS Exchange is installed.
2. Log in as Administrator and from the Start menu select Programs | Administrative | Tools | User Manager for Domains.
4. In the User Name text box enter the User name (wwwemail or wwwasp).
5. Enter the Password and confirm Password.
6. Check the User Cannot Change Password option is ticked.
7. Check the Password Never Expires option is ticked and click Add.

Mailbox Setup

1. From the Start menu select programs: Microsoft Exchange | Exchange Administrator.
2. From File | New Mailbox/Properties and select the General tab.
3. Enter the E-mail address in the Name, First, Display and Alias fields.
4. After making changes click Apply and then OK.
5. To add more E-mail address users click Add and click Close.

Creating a Global Group

1. Log in as Administrator.
2. From the Start menu select Programs | Administrative | Tools | User Manager for Domains.
4. In the Group Name text box enter the name of the group.
5. Select User(s) from the Not Members list, click Add and OK.
Configuring Chat Service

If you are using Exchange Server v5.5, then the Chat Service does not require any configuration.

If you are using Exchange Server 2000, then the Chat Service does require some configuration. The following task list shows what needs be done.

Configuring the Chat Community

Here you can create a new Chat Community or use an existing one to work with IM.

1. Expand the Chat Communities folders. This will display the Chat Communities that currently exist in the system.
2. If you wish to use a new Chat Community, then select the Chat Communities folder, right click it & select New to create a new Chat Community. Proceed to Step 3.
3. Select a Chat Community, right click it & select Properties.
4. Under the General tab, make sure that the Accept New Connections check box is selected.
5. Under the Channels tab, make sure that the Allow Dynamic Channels check box is selected.
6. Under the Messages tab, a Message of the Day can be configured (if so desired).
7. Under the Security tab, make sure that User Account under which the IM iChat Service runs is listed and has permissions for Sysop & User selected.
8. Under the Authentication tab, make sure Anonymous access is selected.
9. Restart the Chat Service.

Configuring the IRCX Protocol

1. GoTo Exchange System Manager
2. Expand the Servers node
3. Expand the server that is hosting the Chat Service.
4. Expand the Protocols folder.
5. Right click the IRCX folder & select Properties
6. Make sure that the Chat Community that will hosting IM Chat sessions is listed in the dialog. If it's not displayed, select Add & add it in (You can use the Default Chat Community or you can create a new Chat Community)
7. Stop & Start the IRCX protocol.
System Planning Charts

The following charts must be completed. The data you enter here will be required during MMM installation. When completed, make copies and leave on-site for future use/software upgrades.

Notes: 1. Where you are requested to enter a password, do not write it on the following Charts but record it on a secure document.

2. Where an parameter is listed but is not being used on your system, then write 'not used' in the Data column.

CAUTION: Before attempting MMM installation, ensure that:-

- the environment is working
- you can send/receive emails
- you can access your SQL Server
- you can access your Web Server
- your TAPI installation is functional
- your INDeX/IP Office is configured

<table>
<thead>
<tr>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
</tr>
<tr>
<td>Domain Name/PDC Name</td>
</tr>
<tr>
<td>Name of iServer (MMM Server)</td>
</tr>
<tr>
<td>Exchange Server Name (Email Server with CDO)</td>
</tr>
<tr>
<td>Web Server Name (IS)</td>
</tr>
<tr>
<td>Web Server URL</td>
</tr>
<tr>
<td>Chat Server Name</td>
</tr>
<tr>
<td>Administrator* Account Name</td>
</tr>
<tr>
<td>Administrator* Account Password</td>
</tr>
<tr>
<td>SQL Server name</td>
</tr>
<tr>
<td>TAPI: IP Office IP Address</td>
</tr>
<tr>
<td>IP Office Switch Password</td>
</tr>
<tr>
<td>Location of shared directory for E-mail attachments</td>
</tr>
</tbody>
</table>

* You can run all services as a system account. However, when using Exchange as your email system you are recommended to use a specific account that has the appropriate rights to mailboxes used by the iServer.

<table>
<thead>
<tr>
<th>Networking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
</tr>
<tr>
<td>Multicast Address</td>
</tr>
<tr>
<td>User (Port)</td>
</tr>
<tr>
<td>Queue (Port)</td>
</tr>
<tr>
<td>Call (Port)</td>
</tr>
</tbody>
</table>

Note: These may need to be changed if you have other applications using these ports.
Back Office Server

**SQL**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account name for installation</td>
<td></td>
</tr>
<tr>
<td>Account password for installation</td>
<td></td>
</tr>
<tr>
<td>Name to be used for MMM Database</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The SQL Database name must not exceed 15 characters and must not contain any spaces.

**Web Chat**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat URL</td>
<td></td>
</tr>
</tbody>
</table>

**Exchange**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>wwwemail</td>
<td></td>
</tr>
<tr>
<td>wwwasp</td>
<td></td>
</tr>
<tr>
<td>Email Service Account</td>
<td></td>
</tr>
<tr>
<td>Email domain e.g. @avaya.com</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
1. For each queue (Sales, Tech, Accts, etc.) create one email address.
2. wwwasp is for email on the Web (input from web form).
3. wwwemail is for the receiving account on the Web (output from wwwasp).
4. Email service account. This is the NT account and Exchange mailbox account that the email service runs under. This account will be used to monitor and access the queue mail boxes, e.g. to enable you to act as the owner of the mailboxes. You will need to grant privileges to this account via Exchange Administrator.

**Switch**

<table>
<thead>
<tr>
<th>Media Queue</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Office HuntGroup name/number</td>
<td></td>
</tr>
<tr>
<td>Name of INDeX Telephony Server (where Access Manager and CTI reside)</td>
<td></td>
</tr>
<tr>
<td>Number of INDeX Analogue extension ports</td>
<td></td>
</tr>
<tr>
<td>IP Office IP Address</td>
<td></td>
</tr>
<tr>
<td>IP Office subnet mask</td>
<td></td>
</tr>
</tbody>
</table>
Configuring INDeX Switch

The following instructions provide all the necessary information for configuring the INDeX for working with MultiMedia Module.

For details on how to log on, program, backup and store databases on the INDeX, refer to the INDeX Installation and Programming Manuals.

Check that your network configuration meets the minimum specification shown earlier in this Installation manual.

Prior to installation ensure that you have at least CT Integrator Server version 2.06+ and Access Manager version 1.1a05 installed and running on your INDeX’s telephony server. For details refer to the INDeX CT Integrator Installation Manual and the INDeX Access Manager/Delta Server User Guide.

If neither Access Manager nor CT Integrator exist in your current configuration follow the installation instructions provided in "Installing Access Manager and CTI Components" on page 24. (These components are used by other INDeX applications such as INDeX Voice Manager and Call Center Manager).

All INDeX Manuals and User Guides are available from our web site http://gsspublishing@avaya.com.

For an overview of the application structure, refer to the architecture diagram in the Introduction section of this manual.

Required Network Data

Ensure that you have all of the following information from your Network Administrator before you commence installation (this data should be entered in the System Planning Charts on page 18):-

- NT Domain Name
- NT Administrator logon
- NT Administrator password
- Switch Server name
- MS Chat Server Name
- E-Mail Server Name
- IIS Server Name
- Net Domain
- Primary Domain Controller (PDC Name)
- iServer name
- SQL Server name
- (SQL) User ID
- (SQL User ID) password
- (SQL) Database Name
- Media queue 1 Extension No.
Overview of INDeX Installation Procedure

To install MMM successfully on INDeX, perform the following actions in sequence:

1. Initial Setup of INDeX. See page 22.
2. Install all the required application licences (see page 22).
3. Configuring (Switch) Telephony Server for INDeX & CTI. This is the NT Server where both the Access Manager and the CTI are resident
   a. Set up NT User accounts for CTI
   b. Install Access Manager and CTI components
   c. Run TCM application
   d. Starting CT Integrator Server
   e. Check Operation of Access Manager
   f. Check Operation of CT Server
   g. Installing the special CT Integrator TAPI Service Provider
   h. Add the INDeX specific TAPI driver.
   i. Adding analogue extension port to CT Integrator
4. Adding MS Users and Groups. See page 16
   a. Configure New User and Mailbox Setup. See page 16
5. Installing Server components & creating a database
   a. Check SQL
   b. Start Installation Wizard
   c. Setting up the MMM database.
6. Setup INDeX Specific TAPI.
7. iServer configuration
   a. Set up NT and E-mail accounts for Web Callback
   b. Set up Global Group for Web Callback
   c. Set up iServer
   d. Additional Settings.
8. Client (iContact) Setup
   a. Setup MS components, check E-mail and Intranet access
   b. Installing Client components
   c. Configure iContact.
Initial Setup of INDeX

The INDeX CT Integrator Server communicates with the INDeX switch through an INDeX application called INDeX Access Manager. For MMM to be installed it is necessary to have both INDeX CT Integrator Server and Access Manager installed and running. No INDeX licenses are required for use of CT Integrator. MMM has separate licensing arrangements. See Licensing Procedure on page 31.

INDeX CT Integrator Server and Access Manager may be already present in your PBX configuration (i.e. if any one of the IVM, CCM, NOCpro or INDeX Digital Recorder applications is in use). If these are not already present in your configuration a simplified installation procedure is outlined in "Installing Access Manager and CTI Components" on page 24. Please note that this procedure does not provide complete CT Integrator functionality; this is controlled by separate INDeX server licenses. For details on full CT Integrator installation please refer to the CT Integrator Installation Manual.

For detailed instructions on how to log on to the INDeX's Administration program, refer to the INDeX Programming Manual. For initial setup of INDeX, perform the following:

1. Check that the INDeX is at Level 9.02+ (minimum).
2. Connect to INDeX and log in to the INDeX Administration program with the User name & Password (consult your System Administrator for the password).
3. Go to Server Licences and ensure that the required MultiMedia Module Licences have been added.
4. Go to Linecard Information.
5. MMM requires analogue extension ports for it’s media queues. These ports must not be physically connected to any device nor configured in any groups in the INDeX. In Addition Analogue Extension Port must be added to the CT Integrator Permissions editor (see page 28). The number of these ports should be entered in the System Planning Charts on page 18.
6. Check that the analogue ports selected are not in ANY group (in default they would be in the ‘all extensions’ and ‘night service groups’).
7. Backup the database and exit from the INDeX Administration program.

Licensing Procedure

The MultiMedia Module applications are enabled by a license keys for Agents (in blocks of five dependant upon license type), Email and Echat.

MultiMedia Module applications licences are entered in the INDeX as Server Licences. Server licences are used to enable the INDeX’s interaction with CTI server devices. Each licence is based on a combination of the feature being enabled and the INDeX’s serial number and so is unique to the particular INDeX CPU cassette. For full details refer to the INDEX Installation & Maintenance and the INDeX Programming Reference Manuals.

1. From the INDeX’s Administration menu, select System and then Server Licences.
2. Copy and paste, as applicable, the following MMM License Keys.

<table>
<thead>
<tr>
<th>MMM License Keys</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC Agents</td>
<td>Enables various numbers of agents for MMM reporting.</td>
</tr>
<tr>
<td>CCC Email</td>
<td>Enables Email routing and reporting for agents.</td>
</tr>
<tr>
<td>CCC Chat</td>
<td>Enables Chat routing and reporting for agents.</td>
</tr>
</tbody>
</table>
Configuring the Telephony Server

INDeX CT Integrator is required for to communicate with INDeX. In order to run, CT Integrator must log on to a MS Server Group Domain with both a unique User name and Password (see System Planning Charts on page 18).

Setting up NT Users and Accounts for CTI

On the iServer (which is where Access Manager and CT Integrator will be loaded if not already present) it is necessary to enable the Guest account and create an NT user account with the following:

- Username: ctiservices
- Password: cti

The user "ctiservices" must belong to the Administrator for the Domains group and have advanced user right to "log on as a service" as detailed below.

See "Configuring " on page 16 for details and perform the following.

1. From the User Manager screen, double click on the Guest Username.
2. Ensure that ONLY the "User Cannot Change Password" and "Password Never Expire" boxes are ticked. Click OK.
3. Click User | New User and enter ctiservices in lowercase as Username.
4. Enter cti in lowercase as a Password and Confirm Password.
5. Ensure that ONLY the "User Cannot Change Password" and "Password Never Expire" boxes are ticked.
6. Click Groups, highlight Administrators, click Add and then OK.
7. Click Add, then Cancel on the properties tab and then click Close.
8. Click Policies | User Rights and then tick the Show Advanced User Rights box.
9. In the right hand roll down box select "Log on as a service".
10. Click Add, Show Users, ctiservices, Add and then click OK.
11. Click OK to close User Rights Policy Box. Close User Manager box.
Installing Access Manager and CTI Components

Both CT Integrator Server version 2.06 (min) and Access Manager version 1.1a05 (min) must be installed and running on your iServer (ideally, but could be on any PC on your network). To install these applications you will require an INDeX Application CD containing the versions (or higher) shown above. Perform the following instructions sequence:

INDeX > Access Manager > CT Integrator > iServer

1. Insert the CD in your CD ROM drive of your iServer. This should autostart an installation Wizard. If not go to the directory and run the INDeX Install program. Click Next.
2. Enter the drive letter (of CD ROM), followed by a colon and backslash i.e.(Z:\) (or select the networked drive from the browse button). Click Next.
3. Click on "Server Components". Click Next twice to choose Full Installation.
4. Click on Next to start without a backup.
5. Tick on "CT Integrator Server 2.06" to install CTIAPI.DLL.
6. Tick on "INDeX Access Manager 2.02+".
7. Ensure no other components are selected.
8. Click on Next and in the next box click on Install.
9. If requested, click "U.S. English" and then click OK.
10. Click Yes to the entire Pre-installation Checklist and then click OK.
11. Click Next at the Welcome screen.
12. Ensure only INDeX CT Integrator Server and Network Installer are ticked. Click Next four times to accept default destination folder, default archive folder and default Network Client folder.
13. Click "No" for Backup Replaced Files. Click Next twice to accept default Program folder.
14. Click Next again. At the NT Service Account box enter username "ctiservices" and password cti.
15. Click Next twice to commence installation.
16. If requested select English and click OK.
17. Please wait for the Access Manager Installation Screen.
18. At the INDeX Access Manager Installation Welcome Screen, click Next.
19. Click Cancel to return to Windows without restarting.
20. At the INDeX Install Wizard screen, click Back until the ‘Please choose the component type’ screen appears.
21. Click Client components and then click Next.
22. Enter the server name (name of PC that you are installing software on) and then click Next.
23. Select INDeX CT Integrator Client 2.06 from the option box and click Install.
24. If required, select U. S. English and click OK.
25. Click next and in the next box click Next for default destination folder.
26. Tick no to backup files and then click Next four times to accept default components, default program folder and to install files.
27. Click OK on any error messages.
28. At the Installation completed screen click Finish.
29. At the INDeX Install Wizard click Finish.
30. Please restart the PC (be patient whilst the PC shuts down) and log in as local Administrator.
31. Once the PC has restarted from the INDeX Applications CD, perform Start Run Setup from the root directory.
32. This will install TSP synchronizer (a service required for TAPI).
33. On completion, remove CD.
Starting CT Integrator Server

To avoid accidental closure, it is advisable to clean up the desk top by minimizing the Access Manager. Perform the following:

1. Go to the Control Panel and open the INDeX CT Integrator Server Option.

2. If the INDeX (es) Connected to CT Integrator Server box is empty, then go to the next step. If the INDeX (es) Connected box contains an entry, highlight it, click Edit and proceed to step 7. In both cases, the IP networking box must be ticked.

3. Click Add and type in xxxxx (name for Access Manager) in the Name Box (this is the alias).

4. Type in the Host Machine name (this is the computer name of the PC where Access Manager is located) and click Connect.

5. Click Find, highlight the computer name and click Connect.

6. If you cannot find the computer consult your network administrator.

7. Click Test and then click OK.

8. The PC should return a “test was successful” message within a couple of minutes.

   (If this does not happen consult your network administrator.) Click OK.

9. Set the logging threshold to 20.

10. Click OK and then, on the Add Access Manager box, click OK.

11. Click OK on the CT Integrator Server Configuration box followed by Yes to restart the CT Integrator Server.
Checking Operation of Access Manager
1. Maximize Access Manager from the taskbar.
2. Click on the Settings tab and then on the displayed Event Viewer tab.
3. Tick cti msg and then click on the Main Event Viewer Tab.
4. Some message activity will be present if there is some activity on the INDeX. If not consult your network administrator.
5. Untick the cti msg option in Event Viewer tab (this is for diagnostic purposes only and will affect performance if left selected).
6. Minimize (DO NOT CLOSE) the Access Manager Window.

Checking Operation of CT Server
1. Click Start | Programs | INDeX CT Integrator | Select INDeX CT Integrator Server.
2. The INDeX CT Integrator Server box should contain the name you assigned to Access Manager.
3. Click Permissions. The screen should refresh. (If this does not happen consult your network administrator.) Click OK.
4. Click Start | Programs | INDeX CT Integrator | Activity Viewer.
5. Click Settings | Logging Threshold, and set the level to 20. Click OK.
6. Click Activity and ensure Live View is ticked. Messages should be displayed when there is activity on a handset. (If this does not happen consult your network administrator.)
7. Click Settings | Logging Threshold and return the level to 5. Click OK.
8. Close the Activity Viewer.
Adding NT Users and Groups

MS users are required for:

• E-mail accounts
• exchange/outlook
• users to log-on the network
• to use the iContact (client interface).

These users are unlikely to exist already, except for specific ones, i.e. www.email.

Add New Users/Agents

See page 16 for details. Repeat the procedure for each new user. Enter specific names and passwords for each new user.

Setting up NT and E-mail accounts for Web Callback

1. On the Windows NT PDC, login as the NT Administrator (if not already done).
2. Click Start | Programs | Administrative Tools (common) | User Manager for Domains.
3. Click User and then New User.
4. Enter the name wwwemail and enter a password.
5. Confirm the password and ensure that both the “User cannot change password” and “Password never expires” options are ticked. Click Add.
6. The MS Exchange ‘add an E-mail account box’ should appear.
7. Enter wwwemail as a first name, click Apply and then click OK.
8. Repeat the above steps with a name of wwwasp (password set to password).

Set up Global User Groups

See page 16. Give each group a name and select, from the New Users/Agents defined above, the users to be added to the new group. Delete any others listed in this new group. Repeat the procedure for each new group.

Setting up Global Group for Web Callback

1. Close the 'new user' dialog box.
2. Click User and click New Global Group.
3. Enter Web Callback for the Group Name.
4. Select wwwemail and wwwasp and add them to the group (remove any others).
5. Click OK and close User Manager for Domains.

When you have finished with the last step, restart the computer and log on with Administrator rights.
Creating a database
With the INDeX Telephony Server and CT Integrator configured, it is necessary for the Server components to be installed (see page 34) and a database to be created (see page 37).

Checking SQL database
Before creating a database, make sure that the SQL server and SQL server Agent are running.
1. Click Start | Programs | Microsoft SQL Server 7.0 | Service Manager.
2. SQL Server and SQL Server Agent should both be running, if not start them.
3. Close Service Manager.

Adding Analogue Extension Port To CT Integrator
Each MMM Telephony queue uses a unique Analogue Extension port. Each port must be identified to CT Integrator via the CT Integrator Permissions Editor as shown.

1. Start CT Integrator Permissions Editor.
2. From Edit menu, select Add User/Computer.
3. From the Add User/Computer dialog
4. Select the Computer radio button
5. Set Default DN as the Analogue Extension Port & press OK
6. The new entry will be added to the main List View
7. Select the new entry and change the Default Access to Monitor (from the dropdown combo).
Setting up INDeX Specific TAPI

To make the TAPI/Telephony interface operate correctly, is necessary to setup INDeX specific TAPI.

1. On the NT4 Telephony Server (where both the Access Manager and CTI are resident), click Start | Run, enter TCMAPP and then click OK. This will open the ‘TAPI Administration Application’.
2. From the User menu select ‘Add User to this Telephony Service’.
3. From the ‘Add Users and Groups’ dialogue select and add users or groups to be associated with lines/extensions and click on the OK button.
4. The Domain or Computer names, dependent on the types of Users or Groups selected, will be listed. If necessary click on the ‘+’ symbol to expand the tree.
5. Select the previously added user or group in the tree and then select ‘Change Selected User’s Line Access’ from the User menu.
6. The ‘Change Line Device Access for Selected User’ dialogue will be displayed. This will list all the extensions (referred to as ‘Lines’ by TAPI) registered in the switch.
7. If the dialogue is blank, close and save TCMAPP, open Services from the Control Panel and select the Telephony Service. Stop it and then restart it. Once the Telephony Service has started, close Services and Control Panel. Run TCMAPP, select the user or group in the tree and then select ‘Change Selected User’s Line Access’ from the User menu. The dialogue should now be populated.
8. From the list select only the lines/extensions to be associated with the user and MMM queues i.e. all extensions which the TAPI Server will be required to control, this must include all of the dummy extensions set-up to be the targets of incoming calls for MultiMedia module queues.
9. Once selected click on the OK button.
10. The selected extensions will be shown associated with their user or group. If required set-up in the same way for other Users or Groups.
11. From the User menu select ‘Add User to this Telephony Service’. From the ‘Add Users and Groups’ dialogue select and add Domain Users. Click OK.
12. Click on the ‘+’ symbol to expand the tree.
13. Select Domain Users and then select ‘Change Selected User’s Line Access’ from the User menu.
14. From the list select both analogue ports and dn of agents by clicking on them whilst holding down the Ctrl key.
15. Once selected click on the OK button.
16. The selected extensions will be shown associated with their user or group (you may need to expand the tree to see this).
17. When finished exit TCMAPP and click on Yes to save changes.

Note: It may be necessary to reconfigure TCMAPP whenever the TAPI Service Provider (TSP) file is reinstalled or upgraded.
Client (iContact) Setup

The following instructions ensure that telephony/E-mail/web is working before configuring Components/iContact.

Installing Client components
1. Start Installation Wizard (from the CD) and click Next.
2. Accept the License Agreement, click next.
3. Click next at the Setup Screen.
4. Click Next to accept the default Destination Folder.
5. Click Typical and then click Next twice to accept the default program folder.
6. Click Next to start copying.
7. At iContact Client Interface Screen enter the iServer name and click Next.
8. Once the InstallShield Wizard Complete dialog box appears, click Finish to reboot the client.
9. Once the PC has rebooted, login as Administrator on your domain.
10. Click OK against the System Notification that “Change System Time” rights have been granted (NT systems only).
   (If this does not happen consult your network administrator.)
11. Click Finish to complete setup.
12. Click Start, Shut Down Windows, Close all programs and log on as a different user.
13. Logon as a user to your domain, close the Welcome Screen and close all open windows.

Configure iContact
1. Click Start, Programs, MultiMedia Module, iContact client interface, iConfig.
2. Click on the iServer tab and enter the name of the iServer.
3. Click Save and the click on the Telephony tab.
5. Enter the associated extension or user number in the PID box.
6. Enter 9 in the Outbound Dial Prefix box (if that is the PSTN access code).
7. Click Save and Close.
Configuring IP Office

Overview of the IP Office installation

1. Obtain the IP address of the switch using the IP Office Manager application (refer to the IP Office Licence & Feature Keys manual for details).
2. Add the MMM licenses to the IP Office using the IP Office Manager application (see page 31).
3. Create a new HuntGroup on the switch. This HuntGroup must be empty, do not add any users to this group.
4. After MMM installation, configure the User profiles on the switch (see page 39).
5. Install TAPI.

Licensing Procedure

The MultiMedia Module applications are enabled by a license keys for Agents (in blocks of five dependant upon license type), Email and Echat.

You can view, add, delete and edit License keys through the IP Office Manager application. License keys can be copied and pasted into the Manager application. This will help prevent errors arising from manual entry of the 32-character strings. For full details refer to the separate IP Office License & Feature Keys manual.

1. Start IP Office Manager and load the system configuration.
2. Select System in the left hand panel. In the right hand panel, right click on the system icon and select Edit. Enter the License Server IP Address. E.g. the IP Address of the PC that has the Feature Key plugged into it's serial port (ideally the Server PC that will be running the CCC applications).
3. Select License in the left-hand panel. The right hand panel will now show details of the License Keys entered on the system.
4. By right-clicking in the blank space of the right-hand panel or onto an existing license you can select to add, delete or modify License Keys. The MMM License Keys available are:-

<table>
<thead>
<tr>
<th>MMM License Keys</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC Agents</td>
<td>Enables various numbers of agents for MMM reporting.</td>
</tr>
<tr>
<td>CCC Email</td>
<td>Enables Email routing and reporting for agents.</td>
</tr>
<tr>
<td>CCC Chat</td>
<td>Enables Chat routing and reporting for agents.</td>
</tr>
<tr>
<td>CTI Link Pro</td>
<td>Enables TAPI functionality.</td>
</tr>
</tbody>
</table>

5. After altering or adding any license keys, upload the new configuration to the system and allow the system to reboot.
6. Load the system configuration again and check the Status of the License Keys. If any keys are listed as Invalid check that the correct key has been entered. Repeat the previous steps if necessary to correct any errors.

Important: Save a Copy of the Configuration Once the License Keys have been correctly entered, it is very important that you save a copy of the configuration. Select File | Save as to save a copy of the configuration onto the PC from which you are programming.
New HuntGroup

1. Use the Manager application to create a new HuntGroup.
2. Give the new group a unique name and extension number, make a note of these for your reference as the extension number will be required later, when you add a new Telephony media queue via Resource Manager. Record on page 19.
3. The HuntGroup does not require any users as the distribution of calls is handled by the MultiMedia Module. You should configure Queueing on the Group, ensure that Queueing is On and set any limits or timeouts as required.

Install TAPI

Install the TAPI driver for the IP Office (from the IP Office Administration CD) onto the server where MultiMedia Module (Server) is installed. You will need to supply the IP Address of the switch. Check that the configuration is set to Third Party and that the ACD Queues box is ticked.
MultiMedia Module Installation

Before commencing MultiMedia Module (MMM) installation, ensure that all the System Planning Charts (see page 18) have been completed. You will the data from these charts at various stages throughout the installation procedure.

The MMM software is a client/server application. Prior to installing the server components (see page 34), it is necessary to have the telephony platform fully installed and configured. There are modifications to the sequence in which installation steps are performed that are switch dependent. Before undertaking the installation of the server and client systems, verify which implementation matches your own. Further assistance can be obtained from your telephony platform provider and maintainer.

Getting Started

Prior to installing and configuring the software it is recommended that you develop a plan for how you want your interactions handled. Elements including expected traffic volume, human and technical resources, hours of operation, and integration with legacy systems should be considered before provisioning the system:

1. Divide the organization into logical groups.
2. Decide what members should be assigned to each group.
3. Decide what media each group will handle.
4. Determine which pages on the Web will be activated. Make them available to the application.
5. Create Global Groups in NT User Manager.
6. Create users using NT manager and assign them to groups.

Installation Process Overview

The MMM software installation process is an automatic install. At various stages you input information that the system requires about your installation. Follow these steps for installation:

**Server**
1. Select location, install and configure iServer components.
2. Set up the MMM Database.
3. Configure iServer Settings for Multicast, Telephony, iEmail and iPhone.
4. Create MMM Database.
5. Set up account names and passwords for the following services:
   - iM iService for MTS)
   - iEmail Service
   - iChat Service
   - iPhone Service.

**Client**
1. Select location, install and configure iContact Client components.
2. Configure iContact for iServer and Telephony.
3. Save and close.
You can install all of the appropriate modules at once or individually. Setup for all components is contained within the CCC installation folder. After installing the component(s) there is a requirement for configuration of module. Detailed instructions for configuring each module are provided in latter sections.

Use the following procedure to install all Server components and to create a database. The data you require to complete the following menus is obtained from the System Planning Charts you completed earlier (see page 18). Proceed as follows:

1. Log on to the Domain as Administrator. Exit all applications/programs.
2. IF MMM is being installed at the same time as CCC applications (detailed in the separate CCC Installation Manual), then once the CCC applications have been installed and on reboot, the MMM installation wizard will automatically run.
   Alternatively
   With Windows running, insert the CCC Application CD into the CD Drive. Use the My Computer facility to view the CD drive. Double click on Setup.exe.
3. Choose the appropriate setup language and click OK.
4. The InstallShield Wizard will run. At the Welcome screen click on Next to continue.
   The Select Components menu is displayed:
   Default settings.
   **Caution:** Clearing previously installed components will delete them. If you are adding a new component, ensure that all the existing components remain ticked a simply tick the box for the new component, e.g. MultiMedia Module.
5. Tick the MultiMedia Module box and click Next.
6. The MultiMedia Module Wizard will run. Choose the required set up language and click OK. The following table shows the screens that appear during installation and indicates the action to be taken for each.

<table>
<thead>
<tr>
<th>Screen</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>MultiMedia Module Setup</td>
<td>Click Next.</td>
</tr>
<tr>
<td>Information</td>
<td>Click Next.</td>
</tr>
<tr>
<td>Select Installation Folder location</td>
<td>We recommended that you accept the default folder by clicking Next.</td>
</tr>
</tbody>
</table>
Screen | Action
--- | ---
Database Setup Type | You have a choice of:
**Typical - Server Components**: Normally used for initial installations. Searches for an existing database and where one does not exist, it will create one.
**Typical - Client Components**: see page 41.
**Custom**: If you only want to create a database (see page 37) or install/modify specific components during this installation.

The following table shows the options available to you:

<table>
<thead>
<tr>
<th>Components</th>
<th>Typical Components</th>
<th>Custom Components</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Server</td>
<td>Client</td>
</tr>
<tr>
<td>Create MMM Database</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Resource Manager</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>MMM Server</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>MMM iEmail Service</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>MMM iChat Service</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Rules Wizard</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>iContact Client</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Proactive List Manager</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Interaction Rules Wizard</td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>

**Note**: A Server can have the option to install additional Client components with the exception of iContact, which must be on a Client PC.

Select the required installation type/components and click **Next** to proceed.

Select Program Folder | You can accept the default, choose a folder from the list, or type in a folder name. Then click **Next**.

Start Copying Files | Displays settings selected before copying files. Click **Next** to accept and start copying files or click **Back** to change.
<table>
<thead>
<tr>
<th>Screen</th>
<th>Action</th>
</tr>
</thead>
</table>
| DSN Database Commissioning                  | Enter the name of an ODBC connection (for simplicity enter the name of the SQL Server). Enter your **Database Name**, **Account Name*** and the **Password***.  
*When MSDE is installed, both the Account Name and the password are always sa and NMYSBH respectively (case sensitive). Click Next. |
| DSN Database Connection Setup               | Enter the name of an ODBC connection (for simplicity enter the name of the SQL Server). Enter your **Database Name**, **Account Name*** and the **Password***.  
*When MSDE is installed, both the Account Name and the password are always sa and NMYSBH respectively (case sensitive). Click Next. |
| iServer Multicast Setup                     | Enter the **Multicast IP Address**. You can choose from the TCP/IP class range (224.0.01 to 239.255.255.255). Enter the values for **User Port**, **Queue Port** and **Call Port** (that comply with the Server details) or accept the default values. |
| iEmail Service Setup                        | Under Client Type, select: **POP3/SMTP** if Microsoft or any SMTP mail server is installed or if the E-mail ACD address is an external Email account on a SMTP mail server. **CDO** if you are using Exchange as the Email ACD mailbox. The exchange server will also support pOP3. Select **Save Attachments** to allow attachments to incoming E-mail messages to be transferred to the E-mail message queue. Select **Auto Reply** to provide an acknowledgement to the sender that the E-mail message has been received. Select **Log Debug Trace** Information to activate logging of the trace information in a log file (for maintenance purposes). |
| Install Shield Wizard Complete              | Select **Yes, I want to restart my computer now.** Click **Reboot**.                                                                                                                                 |

After your system reboots, the installation continues with the MultiMedia Module Services Set up menus (continue from page 38).
Creating an MMM Database

MMM is a database-dependent application. It uses the database for storing the interaction data and for queuing incoming interactions. Select Custom installation and then select only Create MMM database (see page 34).

Note: If do not select the default data directory structure (MSSQL Data), you must either create a data directory or manually create a database.

Creating a Database as Part of the MMM Component

The following table shows the screens that appear when you set up a database as part of an MMM installation. The data you are required to enter is listed in System Planning Charts on page 18.

<table>
<thead>
<tr>
<th>Screen</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create/Upgrade MMM</td>
<td>Tick box and click Next.</td>
</tr>
<tr>
<td>Database</td>
<td></td>
</tr>
<tr>
<td>Create MMM Database</td>
<td>Confirm the SQL Server name, User Name, Password and Database name.</td>
</tr>
<tr>
<td></td>
<td>You can also amend the Data/Log Device entries.</td>
</tr>
<tr>
<td></td>
<td>Verify that the settings on the screen are correct, then click Create.</td>
</tr>
<tr>
<td></td>
<td>A status bar indicates the status of the database creation.</td>
</tr>
<tr>
<td>Login</td>
<td>This screen appears if the database was created successfully.</td>
</tr>
<tr>
<td></td>
<td>Enter your User name and Password.</td>
</tr>
<tr>
<td></td>
<td>Click OK.</td>
</tr>
<tr>
<td></td>
<td>Installation continues with setting up the Start-up Services (see &quot;Setting Up the Startup of Services&quot; on page 38).</td>
</tr>
</tbody>
</table>

Creating only an MMM Database

If you installed the MMM components without creating a database and you now want to create a database, proceed as follows:

1. Complete the initial steps detailed in "Server Components Installation and Configuration" on page 34.
2. At the Setup Type screen, select Custom and then Only Create MMM Database.

The rest of the procedure is the same as the procedure used in "Creating a Database as Part of the MMM Component" on page 37.
Setting Up the Startup of Services

This section provides procedures for setting up the startup of services, and includes:

- iEmail Service
- iChat Service

Each procedure uses the same screen for setup, only the screen name is changed. The following figure shows the iService screen. The instructions for each vary slightly, so each is given separately.

Caution: If you are going to run the service as a non-System Account do not prefix the Account Name with the domain name. This also applies to iChat Services set up.

- Under Run Mode, select:
  - Manual if you want to start services manually after windows startup. Or
  - Auto if you want to start services automatically after windows startup.
  - Click OK.

Note: When a database is created and configured during a first-time installation, it is recommended that all services are selected with Manual startup. This can be changed later to “auto” startup from Control Panel -> Services.

iEmail ACD Service
iEmail service may be set to run as an Administrator account or any other account that has proper rights to open the application specific mailboxes (such as the account upon which the Exchange Server was installed).

iChat ACD Service
iChat can run as Administrator or System Account. We recommend that you run as System Account.
iServer Configuration - General

iServer is responsible for directly accessing the database to monitor all events, both telephony and Internet-generated, and to pass information back and forth between the switch and the client workstations. The screen consists of four tabs:

- Licensing
- Database
- Telephony Server
- Networking

MultiMedia Module – Licencing

Access the iServer configuration setup screen, by selecting Start | Programs | CCC | MultiMedia Module | iServer | iServer Config. Configure the licensing provider information (refer to the IP Office Licence & Feature Keys manual for details on how to obtain a licence for IP Office) as follows.

- Select the “Licensing Provider” tab

  ![Image of Licensing Provider tab]

  - Check the “INDeX” or “IP Office” radio button as required
  - Press the “Manage License Information” button
  - The application will now display the “IP Office Licensing” tab.

  ![Image of IP Office Licensing tab]

  - Enter the IP Address of the switch.
  - Click on the “Test License Provider” button to check the licensing information.

Check the configuration of the iServer Database, Telephony Server and Networking (see page 40).
iServer Configuration Database

Either accept the default Connection Values or change the DSN by clicking **New DSN**:

If the DSN or the Database is changed, you must ensure that the configurations for iEmail, iChat, iPhone and Resource Manager are set to the same values (see pages 38 and 46).

iServer Configuration Telephony

Check that the Telephony Server is set to TAPI.

iServer Configuration Networking

Either accept the default setting for **Multicast Info** (set during initial installation) or change to new settings. If you change these settings you must reboot the Server.
Client Components Installation

In a Typical Installation you install only iContact on your system. If you want to install other components, select Custom Installation and follow the on-screen explanation.

Use the following procedure to install all Client components. The data you require to complete the following menus is obtained from the System Planning Charts you completed earlier (see page 18). Proceed as follows:

1. Log on to the Domain as Administrator. Exit all applications/programs.
2. IF MMM is being installed at the same time as CCC applications (detailed in the separate CCC Installation Manual), then once the CCC applications have been installed and on reboot, the MMM installation wizard will automatically run.
   Alternatively
   With Windows running, insert the CCC Application CD into the CD Drive. Use the My Computer facility to view the CD drive. Double click on Setup.exe.
3. Choose the appropriate setup language and click OK.
4. The InstallShield Wizard will run. At the Welcome screen click on Next to continue.
   The Select Components menu is displayed:
   Default settings.
   Caution: Clearing previously installed components will delete them. If you are adding a new component, ensure that all the existing components remain ticked and simply tick the box for the new component, e.g. MultiMedia Module.

7. Tick the MultiMedia Module box and click Next. You will be asked if you wish to restart your PC; click Reboot.
8. The MultiMedia Module Wizard will run. Choose the required set up language and click OK. The following table shows the screens that appear during installation and indicates the action to be taken for each.

<table>
<thead>
<tr>
<th>Screen</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>MultiMedia Module Setup</td>
<td>Click Next.</td>
</tr>
<tr>
<td>Information</td>
<td>Click Next.</td>
</tr>
<tr>
<td>Select Installation Folder location</td>
<td>We recommended that you accept the default folder by clicking Next.</td>
</tr>
</tbody>
</table>
You have a choice of:

**Typical - Client Components**: iContact only

**Custom**: If you want install/modify specific components during this installation.

The following table shows the options available to you:

<table>
<thead>
<tr>
<th>Database Setup Type</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create MMM Database</td>
<td></td>
</tr>
<tr>
<td>Resource Manager</td>
<td></td>
</tr>
<tr>
<td>MMM Server</td>
<td></td>
</tr>
<tr>
<td>MMM iEmail Service</td>
<td></td>
</tr>
<tr>
<td>MMM iChat Service</td>
<td></td>
</tr>
<tr>
<td>Rules Wizard</td>
<td></td>
</tr>
<tr>
<td>iContact Client</td>
<td></td>
</tr>
<tr>
<td>Proactive List Manager</td>
<td></td>
</tr>
<tr>
<td>Interaction Rules Wizard</td>
<td></td>
</tr>
</tbody>
</table>

Select the required installation type/components and click **Next** to proceed.

**Select Program Folder**

You can accept the default, choose a folder from the list, or type in a folder name. Then click **Next**.

**Start Copying Files**

Displays settings selected before copying files. Click **Next** to accept and start copying files or click **Back** to change.

**Select Program Folder**

You may:
- accept the default folder
- select a folder from the list
- type in the name of a new folder.

Click **Next**.

**Start Copying Files**

This screen summarizes the selections you have made. Click **Next**.

**iContact Client Interface Setup**

1. Enter the **Name of the Server** on which iServer is installed.
2. Click **Next**.

**InstallShield Wizard Complete**

Select **Yes, I want to restart my computer now**. Click **Reboot**. Procedure continues with iContact Configuration (see page 43).
**iContact Configuration**

iContact converts the PC to an all-in-one communications and data tool by allowing enterprise knowledge workers to prioritize and manage all interactions from one interface. A user can see queued E-mail messages, Web calls, and live voice calls and communicate with group members from one centralized view.

iContact configuration must be done after you log on as a Domain user. If more than one person is going to use iContact on the same system each must log on to the Domain and run the iContact configuration.

If not continuing from the previous procedure open iContact from:
Start | Programs | CCC | MMM | iContact | iConfig

The following table lists the screens that appear for configuring iContact and indicate the action to be taken for each.

<table>
<thead>
<tr>
<th>Tab</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>iContact Configuration, iServer tab</td>
<td>1. Enter <strong>the Name of the iServer</strong>. 2. Click <strong>Save</strong>. 3. Click <strong>Close</strong>.</td>
</tr>
<tr>
<td>iContact Configuration, Telephony tab</td>
<td>1. Enter the <strong>Position ID</strong> for the ACD (extension number). 2. If the switch supports Support Directory Number (SDN), select it and enter the <strong>DN number</strong>. 3. Enter the <strong>Outbound Dial Prefix</strong> (for example 9). 4. Click <strong>Save</strong> and <strong>Close</strong>.</td>
</tr>
</tbody>
</table>

**Checking MS components (E-mail and Web access)**

1. Log in at a client machine with the user name for local Administrator and connect to the NT domain.
2. Close the Welcome to Windows box. Please wait whilst Internet Explorer sets up personalized settings.
3. Click Start, Programs, Microsoft Outlook.
4. You should be able to send a message to the Administrator or any previously set up users and close Outlook.
5. Open Internet Explorer.
6. Click OK on the error message.
7. Change the address field to http://<IIS SERVER> (IIS Server name).
8. You should see the web page setup on your web server.
Diagnostics

Check iContact is Functional
1. Double click on the iContact icon on the desktop.
2. Tick Microsoft Exchange Server and click Next.
3. Enter the name of your Exchange Server (E-mail server).
4. Click Next (three times) for defaults.
5. Click Finish.
6. Close iContact.
7. Open iContact again and click OK against the default Outlook profile.
8. If the No-Entry icon is shown at the top left of the screen, click it so it changes to a green tick.
9. Check the associated phone is not in a “No Calls” state.

Check CT Integration
1. Enter a number in the iContact dial box.
2. Press dial to call the number.

Other clients
For the other users you must perform the steps detailed in Client (see page 30).

Proactive List Manager Configuration
The Proactive List Manager module facilitates the importing and assignment of outbound calling lists to Proactive Campaigns. It provides the administrator with the ability to manage outbound Proactive Campaign Lists. It also furnishes the tools to create draft-calling lists, attach them to campaigns and run the campaigns.

To configure Proactive List Manager proceed as follows:
1. Start Proactive List Manager by going to Start Menu | Programs | MMM | Proactive List Manager
2. When Proactive List Manager has started, from the menu bar Select files/db properties
3. In the Proactive Database Configuration Screen enter:
   a. SQL Server Name
   b. User ID
   c. Password
   d. Database Name
   e. Click Save and then Close

See System Planning Charts on page 18 for details.
To Upgrade/Modify MultiMedia Module

It is not necessary to re-install the entire MultiMedia Module application when you need to make modifications to your setup. To do this, run the setup program from the CCC CD and install/repair the required components (see page 34 and 41).

To remove MultiMedia Module, use Start | Settings | Control Panel | Add/Remove Programs facility. The MultiMedia Module will remove all the modules but preserve the database.

To upgrade/modify your MMM configuration perform the following:

1. Open Start | Settings | Control Panel | Add/Remove Programs facility.
2. Select any MMM component and select **Remove**.
3. The MMM installation Wizard will launch in **Maintenance** mode.
4. On the Setup window, click **Remove** and then choose to reboot your PC.
5. Insert the CCC Applications CD and use the My computer facility to view the CD drive. Double click on Setup.exe to run the CCC Installation Wizard.
6. Choose the appropriate setup language and click **OK**.
7. At the Welcome screen click on **Next** to continue. The Select Components menu is displayed:

   - **Default settings.**
   - **Caution:** Clearing previously installed components will **delete** them. If you are adding a new component, ensure that all the **existing** components remain ticked and simply tick the box for the new component, e.g. MultiMedia Module.

8. Tick the MultiMedia Module box and click **Next**.
9. Follow the installation procedures detailed on pages 34 and 41. Install all 'existing' MMM components plus any new components and reboot your PC.
10. If CCC components have been previously installed, open the CCC Applications CD again. Double click on Setup.exe to run the CCC Installation Wizard.
11. At the Setup window, click **Repair** to upgrade the existing CCC components.

**Note:** When upgrading/modifying MMM components, the original MMM database and settings remain untouched when MMM is removed. When re-installing /adding new components to MMM, the existing database and settings are automatically incorporated into the new configuration.
Begin Using MultiMedia Module

Introduction

Prior to using MMM, the following steps must be performed in sequence:

1. Run Resource Manager
2. Configure the iServer Settings
3. Synchronize the active domain
4. Create multimedia groups and map them to the groups
   (refer to the MMM Resource Manager Manual for details)
5. Set up the startup of the services (Auto or Manual)
6. Stop services
7. Set up the current domain for the Reporting Application
8. Edit web site pages for Chat and Web Callback

The data required in the following paragraphs, you should have entered in the relevant parts of “System Planning” on page 16.

Running Resource Manager

After completing installation of the server side components you must open the Resource Manager module (refer to separate Interaction Administrator’s Manual for details). The first time you open Resource Manager, iServer Settings will automatically appear. It is necessary to supply all the information before proceeding with the rest of the installation.

Resource Manager Configuration

To open the Resource Manager Configuration menu, use Start | Programs | CCC | Avaya MMM | Resource Manager | Resource Manager Conf. From the SQL Configuration tab, the SQL connection can be tested.

If the iServer Configuration settings have been changed from their default settings (see page 39) these new settings must be entered in the SQL Configuration and iServer tabs of the Resource Manager Configuration menu.
iServer Settings
You must create two E-mail addresses (to be able to receive Web CallBack requests) as follows:

- wwwemail
- wwwasp

If the MS Exchange is on the same server you will receive a popup screen that automatically creates a mailbox for each user. If MS Exchange is located on another server it is necessary to create a mailbox for that user.

When entering these addresses in iServer Settings, the information should be identical to information created in MS Exchange.

1. Double click the Resource Manager shortcut from your desktop.
2. Click OK to set up the iServer and display the following menu:

![Image of iServer Settings interface]

2. At the iServer Settings menu, enter the required data (see pages 18 and 19 for details) as per the following table:

<table>
<thead>
<tr>
<th>Chat Server Configuration</th>
<th>Chat Server</th>
<th>&lt;Name of the Microsoft Chat Server&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail Configuration</td>
<td>E-mail Server</td>
<td>&lt;Name of the E-mail Server&gt;</td>
</tr>
<tr>
<td>Switch/PBX Configuration</td>
<td>Name</td>
<td>Select your telephone switch &lt;Name&gt;</td>
</tr>
<tr>
<td></td>
<td>Server Name</td>
<td>&lt;Switch Server Name&gt;</td>
</tr>
<tr>
<td></td>
<td>Logical ID</td>
<td>TAPI</td>
</tr>
<tr>
<td></td>
<td>Internal extension digits</td>
<td>1-6 (dependant on site configuration)</td>
</tr>
<tr>
<td>Web Call Back Configuration</td>
<td>E-mail Route Point</td>
<td>wwwemail@&lt;Net Domain Name&gt;</td>
</tr>
<tr>
<td></td>
<td>E-mail Login ID</td>
<td>wwwemail</td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td>wwwemail</td>
</tr>
<tr>
<td></td>
<td>E-mail Domain</td>
<td>&lt;NT Domain Name&gt;</td>
</tr>
<tr>
<td></td>
<td>E-mail ASP URL</td>
<td>http://&lt;IISServer&gt;/WebCallBack/CDOmail.asp</td>
</tr>
<tr>
<td></td>
<td>ASP E-mail Profile</td>
<td>wwwasp@&lt;Domain Name&gt;</td>
</tr>
</tbody>
</table>

4. Once the settings have been entered click OK.
5. At the Resource Manager dialog box click OK.
6. At the Resource Manager screen click Preferences and then Synchronize.
7. Select your DOMAIN (NT Domain Name) and click synchronize, click Yes.
8. Once the ‘Synchronizing was completed successfully’ message appears, click Close.
Synchronize Active Domain

After Resource Manager has opened, go to the menu and click **Preferences**. Select Synchronize, choose your **Domain** and click **Synchronize**. On successful synchronization, click **Close**.

Startup of Services

When the installation of MultiMedia Module is complete the MMM services, on the Server PC, should be started. These services are called MMM **iChat Service**, **MMM iEmail Service** and **MMM iService for MTS** and can be accessed from Start | Programs | Administrative Tools | Component Services. To Start a service, highlight it and double click to display the menu. Click on the Start button. Each service can be configured to start **Automatic or Manual** as appropriate in the Startup Type.

**Caution**: If manual is selected, then if the Server PC is rebooted, then the services must be restarted. Hence, it is recommended that **Automatic** is selected.

Stopping Services

There may be times when you need to **Stop** the MTS packages. Before stopping the packages, it is necessary to stop all services.

To stop the packages perform the following:

**NT 4.0 Server**
1. From Control Panel | Services, stop all of the following: **iChat Service**, **MMM iEmail Service** and **MMM iService for MTS**.
2. Click on Start -> Programs -> Windows NT 4.0 Option Pack -> Microsoft Transaction Server -> Transaction Server Explorer and then expand the Microsoft Transaction Server folder.

**Win 2000 Server**
1. From Control Panel | Administrative Tools, stop all of the following services: **iChat Service**, **MMM iEmail Service** and **MMM iService for MTS**.
2. Click on Start -> Programs -> Administrative tools -> Component Services.

**Either Server**
Click on Computers -> My Computer -> Packages Installed then right click on package and select the Shutdown option. It is not necessary to Start the MTS package and the first Client connection attempt will start the package.
Create Web Site Pages for Chat and Web Callback

This section provides information about creating web site pages for Chat and Web Callback.

Creating a Web Site Page for Chat

You might already have one or more web (HTML) pages on your web site that you want to activate with text chat. You should take the HTML file and pass it through the Interaction Rules Wizard (Chat Wizard) and deploy the output files back into your web server.

If you want to activate several pages on your web site with chat, and you want to forward these chat pages to different queues, you should initially create one chat queue per page.

This is a sample of an HTML page before applying to the Chat Wizard:

```html
<HTML>
<HEAD>
<TITLE>FlyAway Inc.</TITLE>
<BODY BGCOLOR="#99CCCC">
<CENTER>
<H1>FlyAway Inc.</H1>
<P><IMG SRC="sas.jpg" WIDTH="186" HEIGHT="75"></P>
<P ALIGN="LEFT">&nbsp;</P>
<TABLE BORDER="0" WIDTH="500">
<tr VALIGN="TOP">
<td><SPAN CLASS="fly"><A HREF="#">Frequent FlyAway</A></SPAN><BR>
Earn free travel with FlyAway Miles. Sign up today!</td>
<td>&nbsp;</td>
<td><SPAN CLASS="fly"><A HREF="#">Vacation Packages</A></SPAN><BR>
Great prices to Scandinavia, Germany and England!</td>
</tr>
</table>
</CENTER>
</BODY>
</HTML>
```
After you run your web page through the Chat Wizard, the contents of the web page will look as follows:

```html
<HTML>
<HEAD>
<TITLE>FlyAway Inc.</TITLE>
</HEAD>
<META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=iso-8859-1">
<SCRIPT Language="VBScript">
Sub Window_OnLoad().
objTimer=window.settimeout("ChatWizardTimer()",10000)
End Sub
Sub ChatWizardTimer()
End Sub
<SCRIPT>
</SCRIPT>
</HTML>
```
In addition to your file, the Chat Wizard asks you to type in a name for the pop up window file. The name that you provide will be added to the original HTML file. In the above example, the name of the file is "chatpopup.htm". After you finish the Chat Wizard, you need to deploy two files back to your web server: Your original HTML file (now is changed by Chat Wizard but still has the same name) and your pop-up window file (chatpopup.htm in the above example). Both files should co-exist of the same folder on your web server.

The contents of the chatpopup.htm file:

```html
<html>
<head>
<title> Chat Window </title>
<SCRIPT Language="JavaScript" src="chatPopup.js">
</SCRIPT>
</head>
<body background="blue.gif" onload="loadWindow()">
</body>
</html>
```

```javascript
function enterChat()
{
    window.name = "ChatWindow";
    var aliasName = userName.value;
    if (isValidName(aliasName)) {
        var url = "http://server214/icosmchat/chat.htm?server=server214&chatroom=chatroom&username=" + aliasName;
        window.open(url,"ChatWindow","width=280,height=320");
    }
}
-->
</SCRIPT>
</head>
<body background="blue.gif" onload="loadWindow()">
</body>
</html>
```
<table border=0 width=281 height=51 cellpadding=6>
<tr><td align="middle" valign="center">
<h3><font face="arial,helvetica,general" color="white" > Welcome </font></h3>
</td></tr></table>
</center>

If you would like to chat with a member of our organization now, please enter your name and click the link to start. <br>

<font color="black" size="3pt">
If you would like to chat with a member of our organization now, please enter your name and click the link to start. </font>

<font color="black" size="3pt">
Powered by Avaya.com <br> <img align=right height=15 src="avaya.gif" width=50>
</font>

<body>
</body>
Creating a Web Site Page for Web Callback

You might already have one or more web (HTML) pages on your web site that you want to activate with Web Callback. You should take the HTML file and pass it through the Interaction Rules Wizard (Web Callback Wizard) and deploy the output files back into your web server.

If you want to activate several pages on your web site with Web Callback, and you want to forward these Web Callback pages to different queues, you should initially create one Web Callback queue per page.

This is a sample of an original HTML page before processing via the Web Callback Wizard:

**Note:** Throughout, always use / not \.

```html
<HTML>
<HEAD>
<TITLE>FlyAway Form</TITLE>
<META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=iso-8859-1"/>
</HEAD>

<BODY BGCOLOR="#99CCCC">
<H1 ALIGN="CENTER">FlyAway Inc.</H1>
<P ALIGN="CENTER"><IMG SRC="sas.jpg" WIDTH="186" HEIGHT="75"></P>
<blockquote>
<p>&nbsp;</p>
<H2>Get the best price!</H2>
<p><FONT SIZE="3">Fill out this form and we will send you the best prices available for your dream vacation.</FONT></p>
<FORM METHOD="post" ACTION="Thanks.HTM">
<TABLE WIDTH="500" BORDER="0">
<TR>
<TD WIDTH="129">Name:</TD>
<TD WIDTH="361">
<INPUT TYPE="text" NAME="name">
</TD>
</TR>
<TR>
<TD WIDTH="129">Phone:</TD>
<TD WIDTH="361">
<INPUT TYPE="text" NAME="phone">
</TD>
</TR>
<TR>
<TD WIDTH="129">Account #:</TD>
<TD WIDTH="361">
<INPUT TYPE="text" NAME="account">
</TD>
</TR>
<TR>
<TD WIDTH="129">E-mail:</TD>
<TD WIDTH="361">
<INPUT TYPE="text" NAME="email">
</TD>
</TR>
</TABLE>
</FORM>
</blockquote>
</BODY>
</HTML>
```
After you run your web page through the WWW Wizard, the contents of the web page will look as follows:

```
<HTML>
<HEAD>
<TITLE>FlyAway Form</TITLE>
<META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=iso-8859-1">
</HEAD>

<BODY BGCOLOR="#99CCCC">
<H1 ALIGN="CENTER">FlyAway Inc. </H1>
<P ALIGN="CENTER"><IMG SRC="sas.jpg" WIDTH="186" HEIGHT="75"></P>
<blockquote>
<p>&nbsp;</p>
<H2>Get the best price!</H2>
<p><FONT SIZE="3">Fill out this form and we will send you the best prices available for your dream vacation.</FONT></p>
</blockquote>
</BODY>
</HTML>
```
After you finish using the WWW Wizard, you need to deploy the file back to your web server; either by overwriting the original source file or by creating a new target file.

```
<TABLE WIDTH="500" BORDER="0">
  <TR>
    <TD WIDTH="129">Name:</TD>
    <TD WIDTH="361">
      <INPUT TYPE="text" NAME="name">
    </TD>
  </TR>
  <TR>
    <TD WIDTH="129">Phone:</TD>
    <TD WIDTH="361">
      <INPUT TYPE="text" NAME="phone">
    </TD>
  </TR>
  <TR>
    <TD WIDTH="129">Account #:</TD>
    <TD WIDTH="361">
      <INPUT TYPE="text" NAME="account">
    </TD>
  </TR>
  <TR>
    <TD WIDTH="129">E-mail:</TD>
    <TD WIDTH="361">
      <INPUT TYPE="text" NAME="email">
    </TD>
  </TR>
  <TR>
    <TD WIDTH="129">General:</TD>
    <TD WIDTH="361">
      <INPUT TYPE="text" NAME="general">
    </TD>
  </TR>
  <TR>
    <TD WIDTH="129">&nbsp;</TD>
    <TD WIDTH="361">&nbsp;</TD>
  </TR>
  <TR>
    <TD WIDTH="129">&nbsp;</TD>
    <TD WIDTH="361">
      <INPUT TYPE="submit" NAME="Submit" VALUE="Get Price!">
      <INPUT TYPE="RESET" NAME="Submit2" VALUE="Clear">
    </TD>
  </TR>
</TABLE>

<P>&nbsp;</P>
</FORM>
</blockquote>
</BODY>
</HTML>
```
Glossary

BDC
Backup Domain Controller is a server in a network domain that keeps and uses a copy by a computer without interrupting its current or primary task. For Windows NT Server domains, BDC refers to a computer that receives a copy of the domain’s security policy and domain database and authenticates logons. Also see Domain and PDC.

CTI
Computer Telephony Integration, a technology that acts as an electronic bridge connecting telephones or switches with computers. CTI controls or coordinates business processes and related applications through the exchange of commands and messages between computers and telephone systems.

Domain
The part of the computer network in which the data processing resources are under common control. See PDC and BDC.

DHCP
Dynamic Host Configuration Protocol, a standards-based protocol for dynamically allocating and managing IP addresses. DHCP runs between individual computers and a DHCP server to allocate and assign IP addresses to the computers and also limits the time computers can use the address. When time expires on the use of the IP address, the computers contact the DHCP server again to obtain an address.

GUI
Graphical User Interface.

HTML
HyperText Markup Language, the authoring language used to create hypertext documents for the World Wide Web.

HTTP
HyperText Transfer Protocol, the application protocol for moving hypertext files across the Internet. The protocol requires an HTTP client program on one end of a connection and an HTTP server program on the other.

iChat
iChat is a service that forwards chat requests to the chat queues. iContact converts the PC to an all-in-one communications and data tool by allowing enterprise knowledge workers to prioritize and manage all interactions from one interface. An agent can see queued Telephone calls, E-mails, Web calls, chats, and can communicate with group members from one centralized view.

iEmail
iEmail is a service that is responsible for forwarding incoming E-mail messages to the E-mail queue or to the agent. iEmail also forwards web callback requests to the web callback queue.

IMAP
Internet Mail Access Protocol, an essential Internet protocol for E-mail communication. IMAP4, which is both a client and server protocol, can enable voice and fax message access and storage through a PC interface. IMAP4 also complements SMTP for retrieval/access of messages.

Interaction Rules Wizard (client side)
With the simplicity of an Outlook Wizard look and feel, the Interaction Rules Wizard defines the rules for incoming contact treatment for telephone, chat and Web Callbacks contact.

Interaction Rules Wizard (server side)
This module includes necessary folders and files for web callback and chat requests on the web server.

IP
Internet Protocol. The network layer of TCP/IP, containing the network address.
iPhone

iPhone is a service that applies telephony rules.

iServer

iServer consists of two parts. One is WT service, and the other is a combination of different server components, that run on the Microsoft transaction server.

LAN

Local Area Network.

LDAP

Lightweight Directory Access Protocol, a protocol used to access a directory listing. LDAP support is being implemented in Web-enabled and E-mail programs, which can query an LDAP-compliant directory. LDAP has become the Internet standard for directory infrastructure and is expected to provide a common method for searching E-mail addresses on the Internet.

MAC address

The address of a device identified at the media access control (MAC) layer of the network architecture.

PDC

Primary Domain Controller. For a Windows NT Server domain, the computer that authenticates domain logons and maintains the security policy and the master database for a domain. See BDC and domain.

Proactive List Manager

The Proactive List Manager module facilitates the importing and assignment of outbound calling lists to Proactive Campaigns. It provides the administrator with the ability to manage outbound Proactive Campaign Lists. It furnishes the tools to create draft calling lists, attach them to campaigns and run the campaigns.

Reporting

The browser-based Reporting module provides complete enterprise management reporting through textual and graphical reports. These reports provide enterprise managers with a record of every step in the customer interaction process, and allow them to view and analyze how effectively interactions are being handled and how resources are being deployed. The reports can also provide a better understanding of how their operation and performance affects your networks, resources and people.

Resource Manager

The Resource Manager administration module consists of components that enable you to add queues, define interaction results, and assign human resources to all from a single, unified console. Resource Manager has a user-friendly Microsoft Explorer look and feel interface.

ITAPI

Telephone Application Programming Interface. Allows Windows applications to program telephone line based devices.

TCP/IP

Transmission Control Protocol/Internet Protocol is a networking protocol that provides communication across interconnected networks, between computers with diverse hardware architecture and various operating systems.

SQL

Structured Query Language is a database language used for creating, maintaining and viewing database data.

URL

Universal Resource Locator is an address that can lead you to a file on any computer connected to the Internet.
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