



OfficeServ

WebMMC User Manual

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Samsung Telecommunications

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INTRODUCTION

Purpose

OfficeServ WebMMC is a web-based application used to configure the OfficeServ 7400 keyphone system. This document describes the installation method, the main features, and programming methodology of OfficeServ WebMMC.

Document Content and Organization

This guide is composed of three chapters and a listing of abbreviations, which can be summarized as follows:

CHAPTER 1. Introducing OfficeServ WebMMC

This chapter introduces the background and purpose of WebMMC along with pre-installation checks, and detailed steps to install the product.

CHAPTER 2. Getting Started With OfficeServ WebMMC

This chapter explains how to launch WebMMC and access the web application.

CHAPTER 3. Programming With OfficeServ WebMMC

This chapter details the web application's user interface and how to navigate the program.

ABBREVIATIONS

This section contains definitions for all abbreviations used in the manual.

Document Conventions

The following paragraph notices contain specialized information that should be carefully examined in order to more fully understand the product.



CAUTION

These sections outline critical information or instructions that must be observed to prevent damage or corruption.



CHECKPOINT

These sections outline specific items that can be checked to verify proper implementation and behavior of the program.



NOTE

These sections are not service affecting, but are informational tips and explanations to further assist in understanding the product.

References

OfficeServ 7400 General Description

OfficeServ 7400 System Manual introduces the OfficeServ 7400 keyphone system and describes system overview information such as hardware configurations, specifications, and functions.

OfficeServ 7400 Installation Manual

OfficeServ 7400 Installation Manual describes the processes involved in installation, configuration, verification, and operation of the OfficeServ 7400 keyphone system.

OfficeServ 7400 Programming Manual

OfficeServ 7400 Service Manual details the features and methodologies of the system software, along with detailed programming descriptions and troubleshooting information for the OfficeServ 7400 keyphone system.

Revision History

EDITION	DATE OF ISSUE	REMARKS
00	6. 2006	First Edition



CAUTION

Installing or Uninstalling OfficeServ WebMMC

When installing or uninstalling OfficeServ WebMMC the Operating System will be required to restart. As such, be sure to save all data and exit all programs before launching the installer or uninstaller. The installation program can overwrite old data, so in the case of reinstallation, be sure to back up existing data first.

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CHAPTER 1. Introducing OfficeServ WebMMC

OfficeServ WebMMC Introduction

OfficeServ WebMMC is a web based application used to configure programming options in the OfficeServ 7400 keyphone system.

In the past, Samsung keyphone systems were programmed using Keyset Man-Machine Code (KMMC) using a system keyset. Over time this style of programming was supplemented by personal computer-assisted programming, or PCMMC. The most recent Samsung keyphone systems have an even more evolved PCMC solution called the OfficeServ Manager, or OSM, which is a client-side Windows-based application. OfficeServ WebMMC improves upon OSM by allowing a technician to configure the system over the web using the Internet Explore browser.

OfficeServ WebMMC communicates via the Transmission Control Protocol/Internet Protocol(TCP/IP) with the keyphone system. The web application is delivered to technicians through Apache Tomcat, an industry standard open-source web server.

Technicians connect to OfficeServ WebMMC server and login by using a unique user ID and password, as controlled by the web server administrator. OfficeServ WebMMC has the ability to create, open, and modify an OfficeServ 7400 keyphone system database offline, with no active connection to a system. OfficeServ WebMMC can also connect to an OfficeServ 7400 keyphone system live in order to upload or download databases or make live programming changes.

System Requirements

Before installing or using OfficeServ WebMMC ensure that the computers to be used meet the minimum requirements specified below.

Server PC Requirements

Item	Specification
CPU	Intel Pentium IV 2 GHz or higher
Main Memory	1 GB RAM or higher
Operation System	Microsoft Widows 2000 Series (SP3 or higher), Microsoft Widows XP Professional (SP1 or higher), Microsoft Widows 2003
Network Interface Card	10/100 Base-T
Web Browser	Internet Explorer 6.0 or higher
HTTP Processor	Tomcat 5.5 or higher
Java Container	Java Runtime Environment 5.0 or higher
JSP Server	Tomcat 5.5 or higher

Client PC Requirements

Item	Specification
CPU	Intel Pentium IV 1 GHz or higher
Main Memory	256 MB RAM or higher
Operation System	Microsoft Widows 2000 Series (SP3 or higher), Microsoft Widows XP Home (SP1 or higher), Microsoft Widows XP Professional (SP1 or higher)
Network Interface Card	10/100 Base-T
Web Browser	Internet Explorer 6.0 or higher

OfficeServ Keyphone System Requirements

Cabinet	Software
OfficeServ 7400	3.31b or higher



Client / Server Configuration

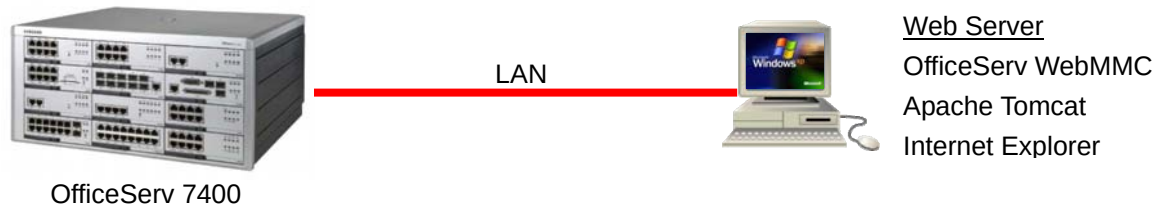
Although system specifications define both a server and a client PC, one PC can act as both server and client. In these cases the system must meet the server requirements listed above.

OfficeServ WebMMC Configuration

OfficeServ WebMMC can be configured as a standalone server, or as a web server to support multiple client logins. The following illustrations demonstrate the difference between the two.

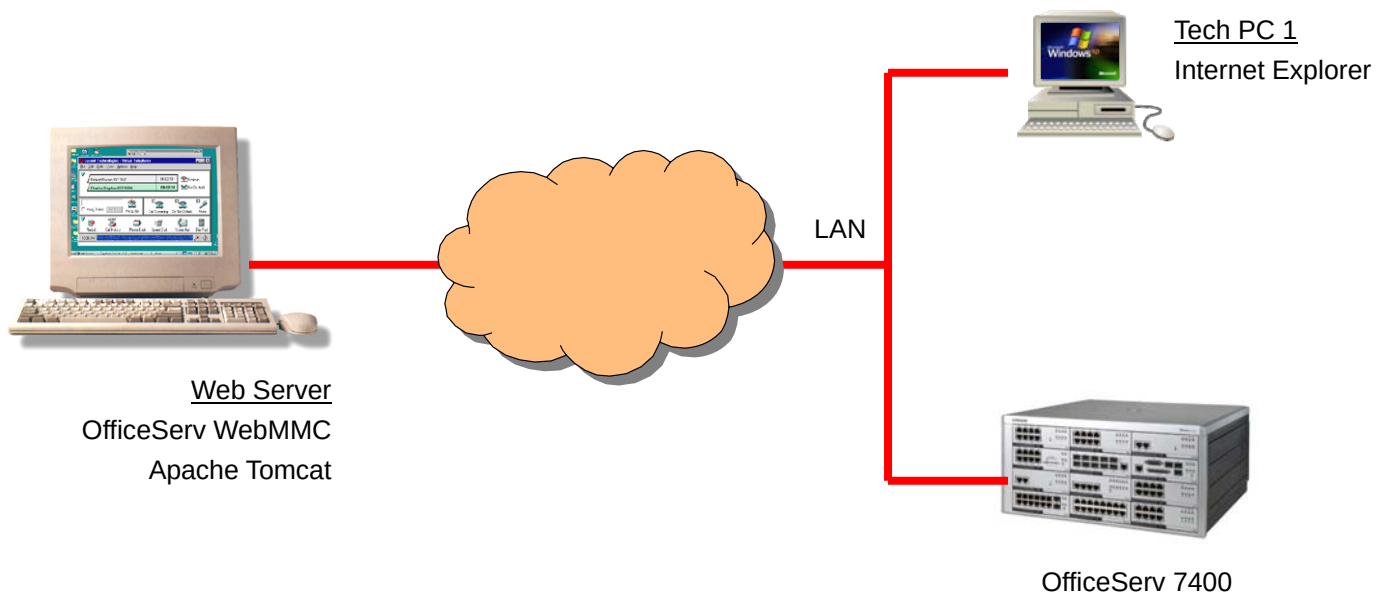
Standalone Server

When configured as a standalone server, OfficeServ WebMMC is installed on the technician's PC or laptop. In this setup the technicians is given maximum serviceability, as connection to the switch does not require interfacing to an outside webserver.



Web Server

When configured as a web server, OfficeServ WebMMC is installed on an internet accessible PC. In this configuration a technician does not even require a laptop. They can use a PC that has Internet Explorer installed to access the WebMMC server. In this configuration the customer site network firewall would have to allow the both the PC in question and the OfficeServ keyphone system to have internet access.



Installation Process Overview

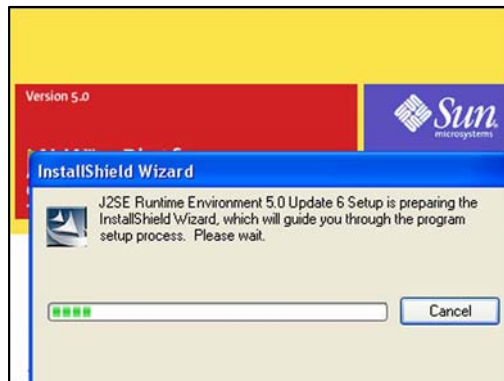
The steps to install OfficeServ WebMMC are as follows:

1. Install the Java Runtime Environment.
2. Install Apache Tomcat.
3. Install OfficeServ WebMMC.

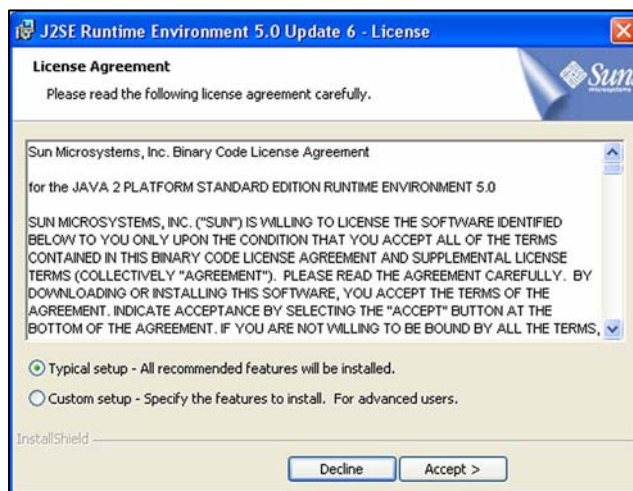
Installing the Java Runtime Environment

The Java Runtime Environment, or J2SE, is a standalone Java platform that allows Java applications to run on the server. The J2SE platform is required in order to install Apache Tomcat.

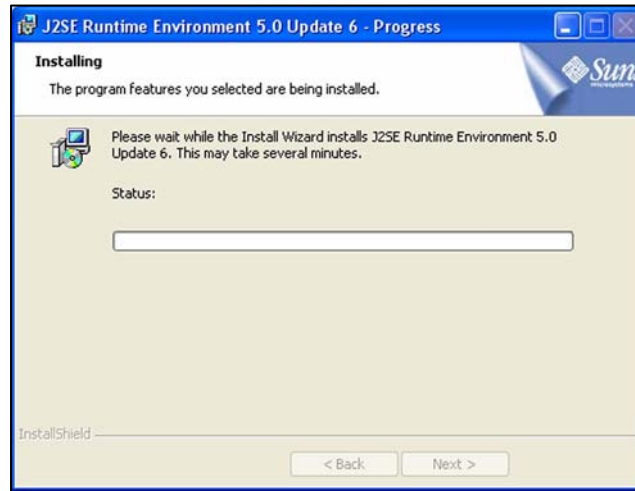
1. Locate the J2SE installation file included with OfficeServ WebMMC, '**jre-1_5_0_06-windows-i586-p.exe**', or download the most current J2SE installation package from '**<http://java.sun.com/javase/>**'.
2. Double-click the installation file to launch the installer.



3. Carefully read the license agreement and click **[Accept >]**.



4. The J2SE installation will begin.



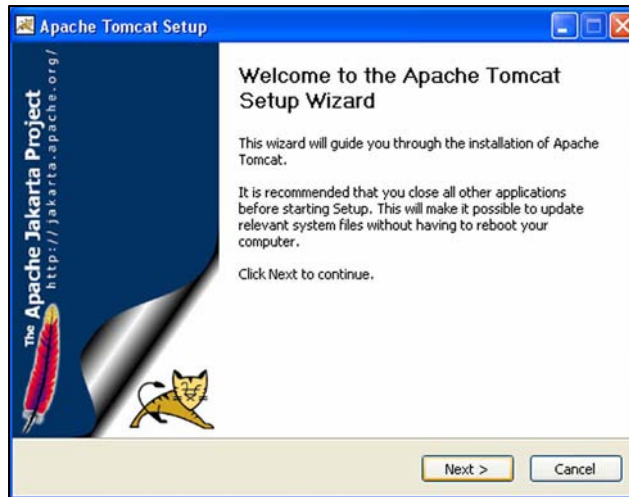
5. When the installation of the Java Runtime Environment is completed, click **[Finish]** to exit the installer.



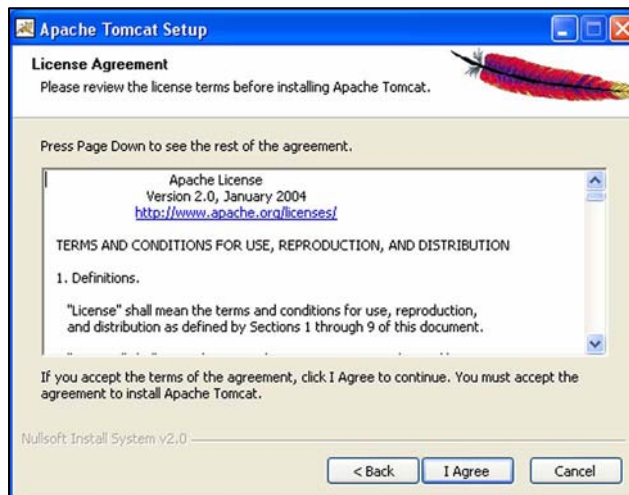
Installing the Tomcat

Apache Tomcat is a web container that runs on the J2SE platform. Tomcat includes an HTTP processor, a Java servlet, and a JavaServer Pages, or JSP, compiler. Tomcat acts as both server and interpreter for the OfficeServ WebMMC web application.

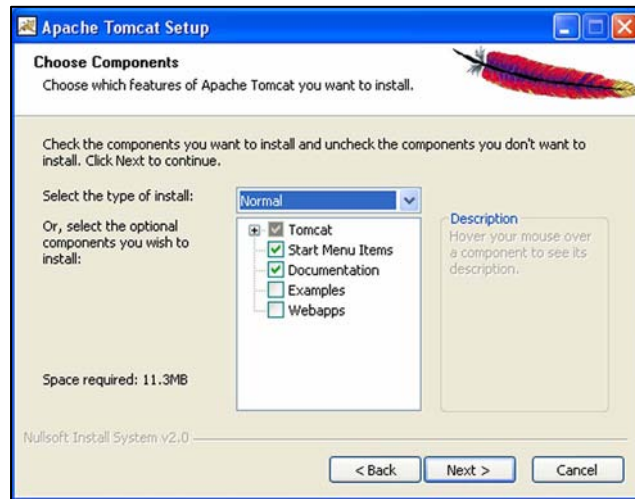
1. Locate the Tomcat installation file included with OfficeServ WebMMC, '**apache-tomcat-5.5.15.exe**', or download the most current Tomcat installation package from '**<http://tomcat.apache.org/>**'.
2. Double-click the installation file to launch the installer. Click [**Next >**].



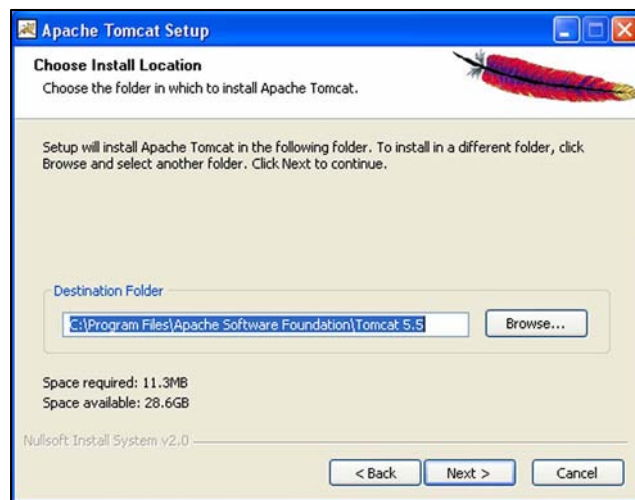
3. Carefully read the license agreement and click [**I Agree**].



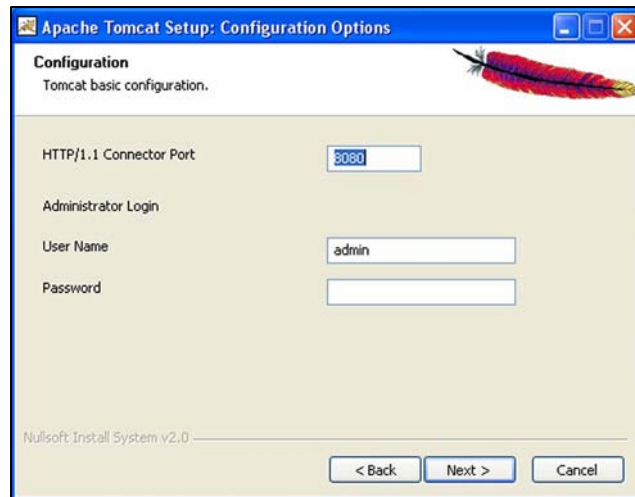
4. Choose the items to install, or accept the defaults, and click **[Next >]**.



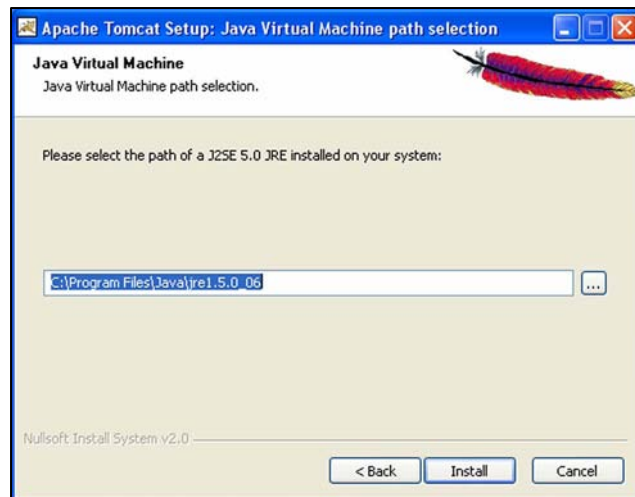
5. Choose the installation path, or accept the default, and click **[Next >]**.



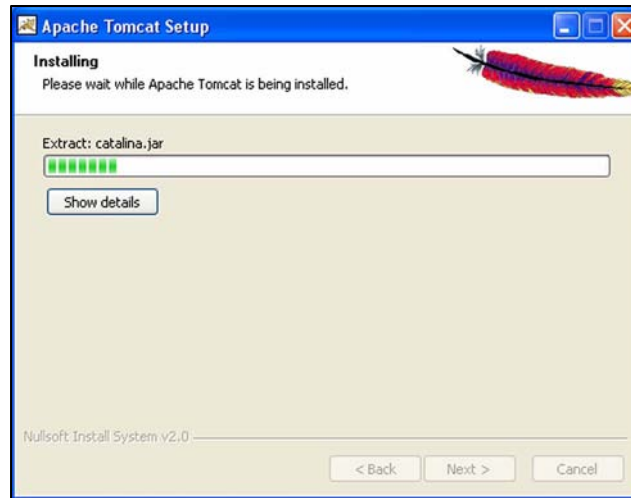
6. Set up the Tomcat connector port and the administrator login and click **[Next >]**. The connector port defines how a technician will connect to the web page, and defaults to 8080. The administrator login is only used for remote administration of Tomcat, and has no effect on OfficeServ WebMMC.



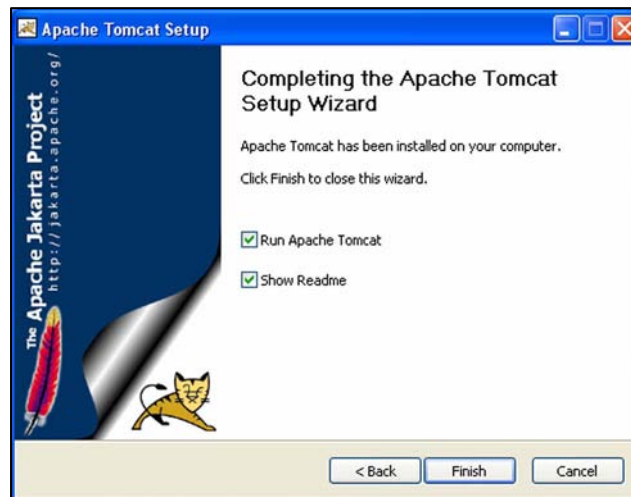
7. The installer will attempt to locate the J2SE path. If it cannot be found, or if multiple installations are found, the correct path will have to be set manually. When it is located, click **[Next >]**.



8. Installation will begin with the chosen options. Click Show Details to see a more in-depth file-by-file progress report.



9. Once installation has completed uncheck the **'Run Apache Tomcat'** checkbox and click **[Finish]** to exit the installer.



Note

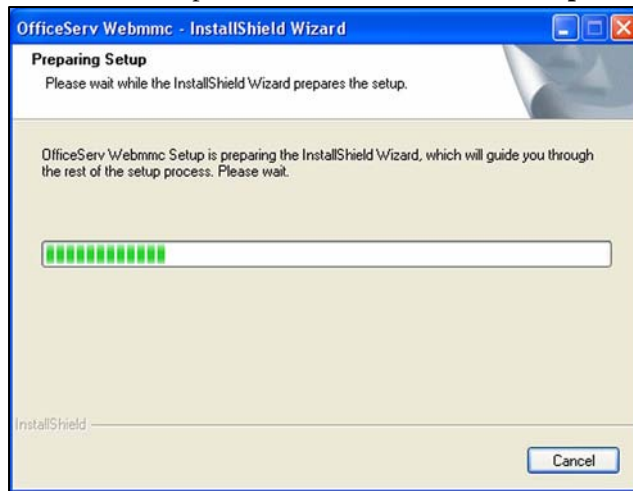
Run Apache Tomcat

By default, the Tomcat installer will be set to launch Tomcat after exiting. If Tomcat is running during the OfficeServ WebMMC installation, Tomcat will have to be restarted before WebMMC will function.

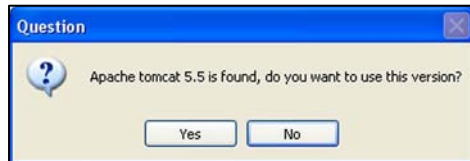
Installing OfficeServ WebMMC

After installing J2SE and Tomcat, OfficeServ WebMMC can be installed. The WebMMC installer will set up both the WebMMC COM object and the web application.

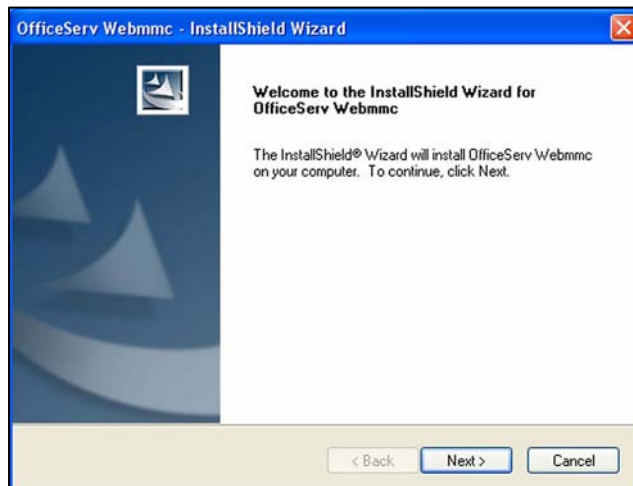
1. Locate the WebMMC installation file, '**OfficeServ WebMMC(20060504).zip**', or download the most current WebMMC installation package from '<http://www.samsungsbn.com/>'.
2. Extract the setup file and double-click the '**setup.exe**' file to launch the installer.



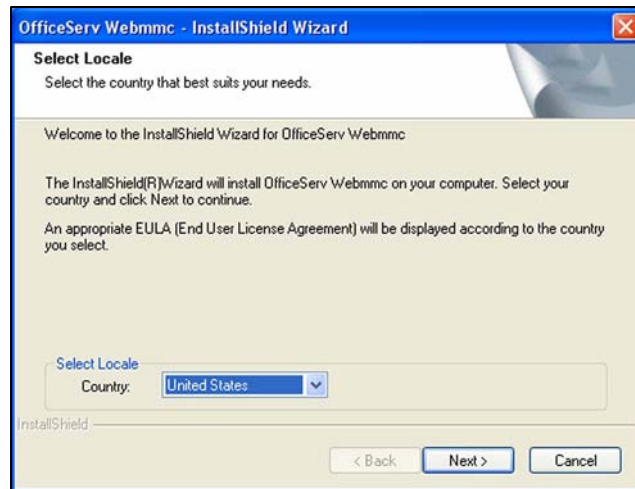
3. The installer will search for Apache Tomcat. When it is found, click [Yes].



4. When the welcome screen appears, click [Next >].



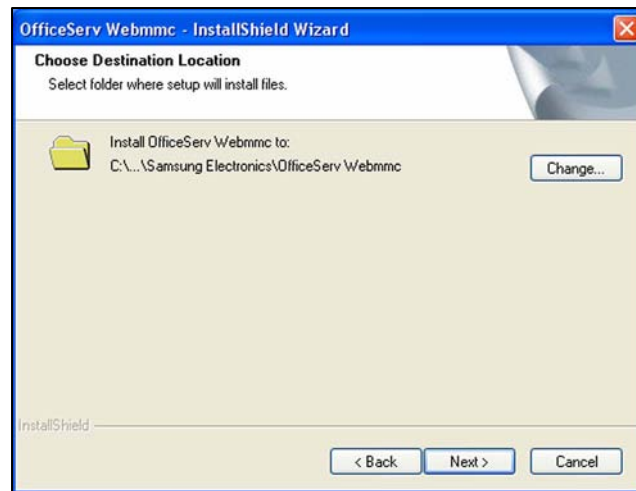
5. Select a country and click [Next >].



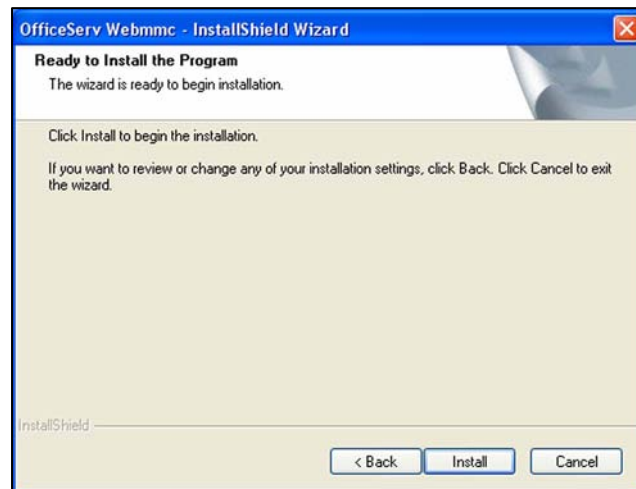
6. Carefully read the license agreement and click [Yes].



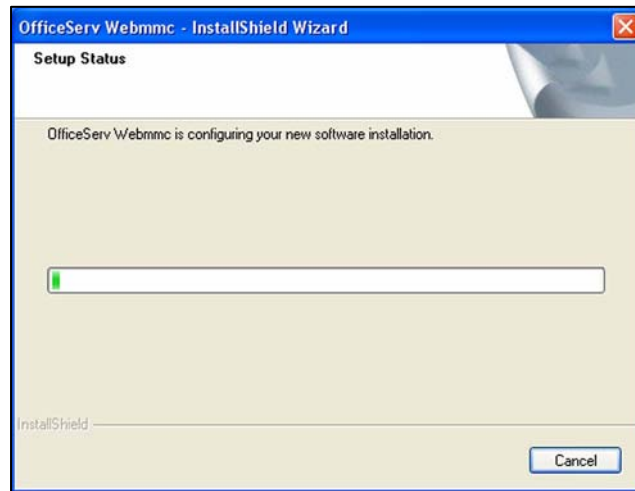
7. Set the destination folder and click **[Next >]**.



8. To begin installation click **[Install]**.



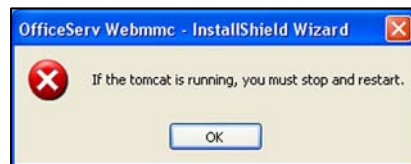
9. The progress screen will appear and begin copying files.



10. During installation the C Runtime Library 6.0 will also be installed.



11. Once all files are copied an alert will appear warning that Tomcat must be restarted if it is running.



12. Click **[Finish]** to complete OfficeServ WebMMC installation.



CHAPTER 2. Getting Started With OfficeServ WebMMC

Launching OfficeServ WebMMC Overview

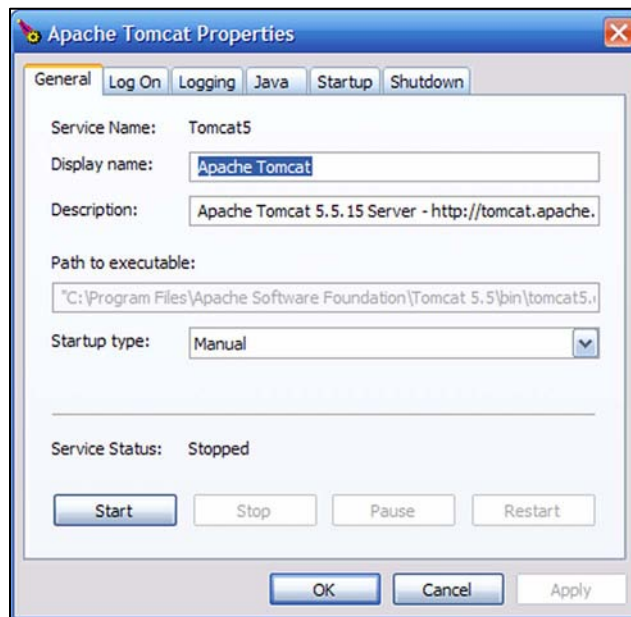
The steps to launch OfficeServ WebMMC are as follows:

1. Launch Apache Tomcat.
2. Launch OfficeServ WebMMC.
3. Log in to the WebMMC web application.

Launching Apache Tomcat

Because Tomcat acts as both web server and interpreter for OfficeServ WebMMC, it must be running before WebMMC can be started.

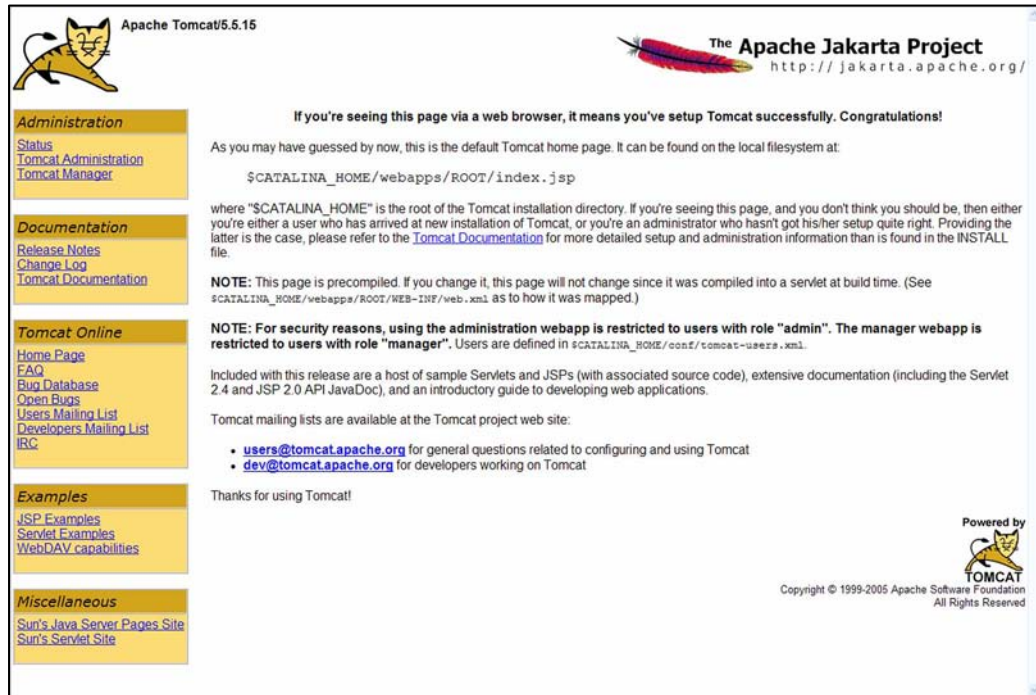
1. Click on [Start] → [Programs] → [Apache Tomcat x.x] → [Configure Tomcat]. When the dialog opens, click [Start]. To have Tomcat start automatically with Windows, set 'Startup Type' to 'Automatic'. Click [OK] to close the window.



2. To verify that Tomcat is running successfully, open Internet Explorer and in the 'Address' field type '**http://localhost:8080/**' and press [Enter].

Address   Go

3. The Tomcat default home page will be displayed.



Check

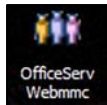
Starting Tomcat

If the Tomcat home page does not start, repeat step 1 to verify that the service is running. If the home page still fails to load, verify that the anonymous internet guest account, **IUSR_<computername>**, has read/write access to the Tomcat directory, '**C:\Program Files\Apache Software Foundation**'.

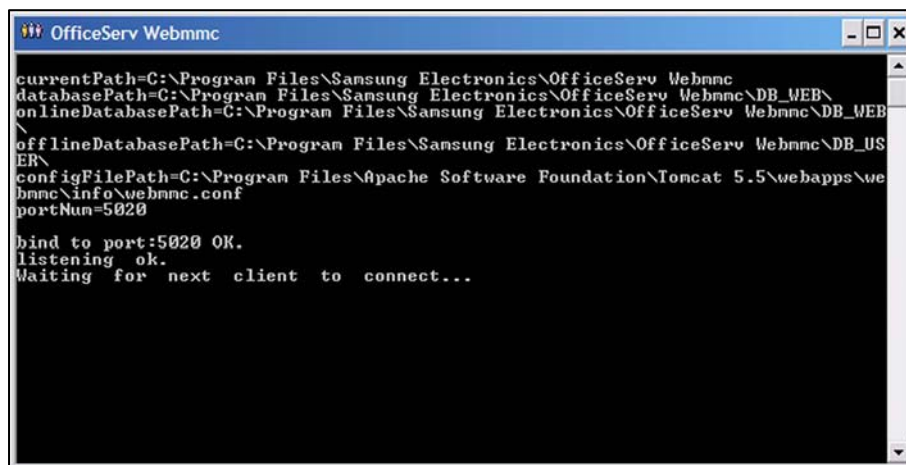
Launching OfficeServ WebMMC

Although the main programming interface for WebMMC is the web application, there is also a server-side program that must be running in order to log in to the web application.

1. On the Windows Desktop locate the OfficeServ WebMMC shortcut and double-click it.



2. The OfficeServ WebMMC command line tool will launch in a DOS window similar to the one below. Verify that the display shows **‘Waiting for next client to connect...’**.

A screenshot of a Windows command prompt window titled "OfficeServ Webmmc". The window contains the following text:

```
currentPath=C:\Program Files\Samsung Electronics\OfficeServ Webmmc
databasePath=C:\Program Files\Samsung Electronics\OfficeServ Webmmc\DB_WEB\
onlineDatabasePath=C:\Program Files\Samsung Electronics\OfficeServ Webmmc\DB_WEB\
offlineDatabasePath=C:\Program Files\Samsung Electronics\OfficeServ Webmmc\DB_US
ER\
configFilePath=C:\Program Files\Apache Software Foundation\Tomcat 5.5\webapps\we
bmnc\info\webmmc.conf
portNum=5020

bind to port:5020 OK.
listening ok.
Waiting for next client to connect...
```



Check

Starting OfficeServ WebMMC

If the WebMMC window does show **‘Waiting for next client to connect...’** it indicates a problem initializing the NIC interface. Analyze any error messages shown to diagnose the problem, and contact Samsung Technical Support if necessary.



Caution

OfficeServ WebMMC Communications Interface

The OfficeServ WebMMC program is a command line program, and must remain running in order to log in to the web interface. Closing the window will exit the program, so be sure to keep the window running at all times. The program can be minimized by clicking the _ button in the upper right.

Logging in to the WebMMC Web Application

The WebMMC web application is the interface for the program where all switch programming is done.

1. Open Internet Explorer and in the address field type '**http://localhost:8080/webmmc**' and press enter.



2. The WebMMC login screen should be displayed. The default login is '**admin**' with a password of '**4321**'.



3. The main OfficeServ WebMMC home page will be displayed.



Check

Logging in to WebMMC

If the WebMMC login screen does not display, or does not display properly, verify that the version of Internet Explorer is 6.0 or higher. Also verify that the current user account and the **IUSR_<computername>** account have read/write access to the Tomcat folder, '**C:\Program Files\Apache Software Foundation**'.



Caution

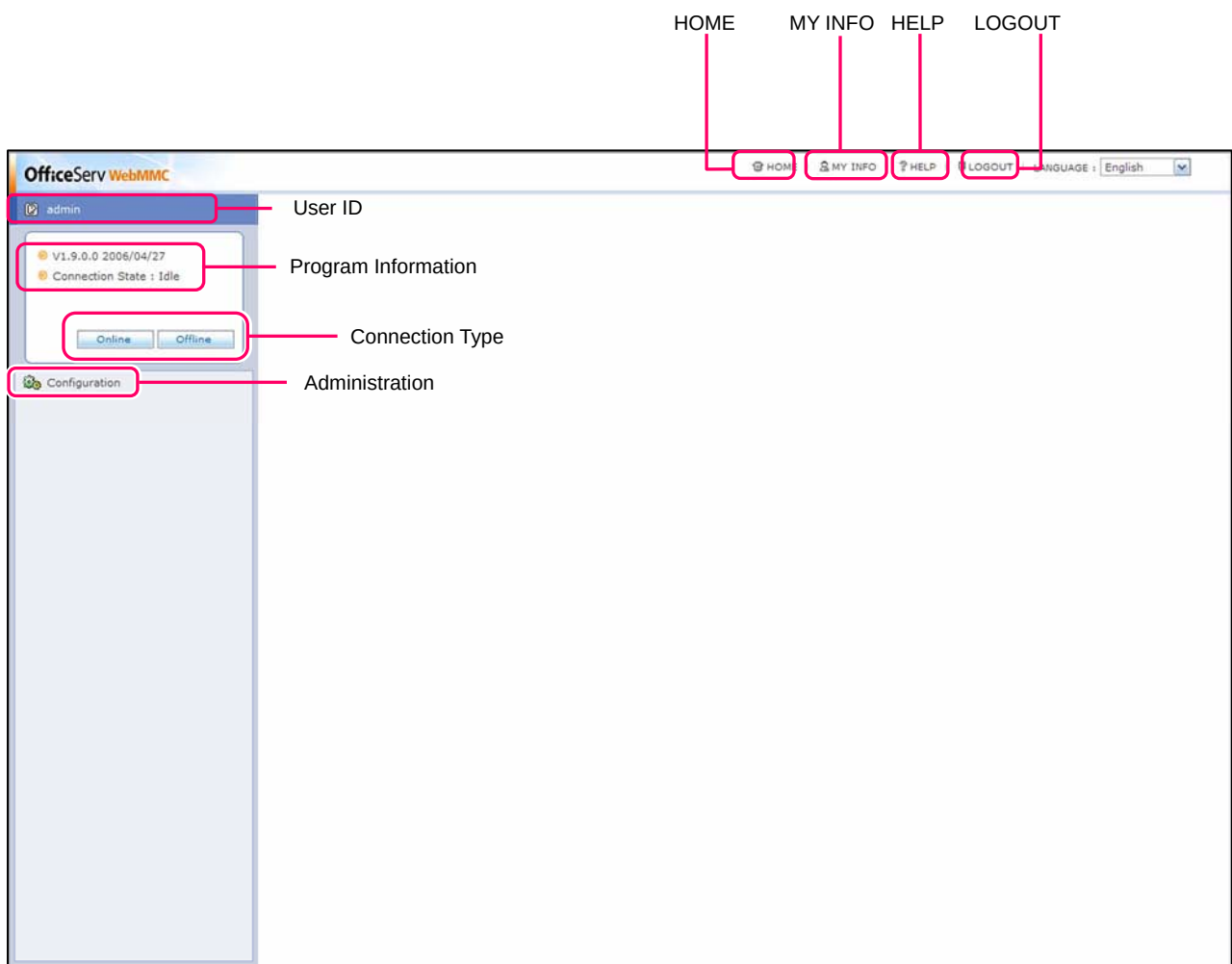
Logging in from another computer

The '**localhost**' designation can only be used from the PC that has WebMMC installed. To connect to this web page from another destination, enter the IP address or computer name in place of localhost. (e.g. – '**http://192.168.1.0:8080/webmmc**' or '**http://WebMMCSrvr:8080/webmmc**')

CHAPTER 3. Programming with OfficeServ WebMMC

Home Page Layout

The OfficeServ WebMMC web application home page provides access to all of the features of WebMMC.



Feature	Description
HOME	Loads the WebMMC home page.
MY INFO	Configure user account.
HELP	Displays the help page.
LOGOUT	Logs the user out of WebMMC.
User ID	Displays the ID of the currently log-in user.
Program Information	- Version: Displays WebMMC version information. - Connection Status: Displays the current connection status: • Idle: No systems connected and offline files open. • Offline: Currently viewing an offline database. • Online: Currently connected to a system. - File Name: Displays the filename of the open offline database. - System: Displays IP address of the system currently connected. - Switch: Displays switch type and country
Online / Offline / Disconnect	- Online: Loads switch connection page. - Offline: Loads saved database connection page. - Disconnect: Disconnect from system or closes database file.
Administration	Loads user management page.

Account Information

The MY INFO page is used to set up information about the current user account.

1. Click **[MY INFO]** to load the Change User Information page.

The screenshot shows a web browser window titled "Change User Information - Microsoft Internet Explorer". Inside the browser, there is a form titled "Change User Information" with an "OK" button at the top right. The form contains the following fields:

- User ID : admin
- User Level : Technician
- New Password : [text input]
- Confirm Password : [text input]
- Name : [text input]
- Phone : [text input]
- Mobile : [text input]
- Address : [text input]
- Job : [text input]
- E-Mail : [text input]

2. Enter the details that are to be changed and click **[OK]**.

Administration

The Administration page is used to manage OfficeServ WebMMC user accounts. This page can only be loaded when logged in as **'admin'**. The Administration page is accessed by clicking **[Configuration]** then **[User Information]**.

The screenshot shows the 'User Information' page. At the top, there are buttons: 'Initialize Password', 'Delete', 'Select All', and 'Cancel'. Below these is a table with columns: 'User ID', 'State', 'IP Address', and 'Connect URL'. The table contains two rows of user data. At the bottom, there is an 'Add' button and a form with 'User ID' and 'User Level' fields.

	User ID	State	IP Address	Connect URL
☐	admin (Technician)	Log-in	127.0.0.1	
		Idle		
☐	samsung (Technician)	Log-in	127.0.0.1	
		Idle		

Buttons: Initialize Password, Delete, Select All, Cancel

Add button

User ID : (Alphabet, Number)

User Level : Technician

Screen Items	Descriptions
User ID	The user ID and permissions level.
State / Connection	The current status of the user account.
IP Address	The IP address of the most recent login for the user account.
Connect URL	The IP address of the system the user is connected to, or the name of the offline database being viewed by the user.
Initialize Password	Resets the password for the selected account(s) to '4321'.
Delete	Delete the selected user account(s).
Select All	Select all user accounts.
Cancel	Clears current user account selection.
Add	Create user account from the entered user ID

Connecting to a Live System

The On-Line page is used to establish a connection to a live system. To access the page, click [\[Online\]](#).

The screenshot shows a web application window titled "On-Line". At the top, there are four buttons: "Connect", "Delete", "Select All", and "Cancel". Below these is a table with the following structure:

	Site Name	Link Type	Site Number			
		Baud Rate	Com Port	Tenant	Password	
☐	Default	IPv4			165.213.176.10	
					1	

At the bottom of the window, there is an "Add" button and a form with the following fields:

Site Name :	
Link Type :	IPv4
IP Address :	

Screen Items	Descriptions
Site Name	The name of the system site.
Link Type	System connection method (IPv4 / IPv6 / Modem)
Site Number	IP address of the system.
Tenant	Determines the tenant number to connect to.
Password	Sets the password used to log in to the system.
Connect	Attempt to log in to the selected system.
Delete	Delete the selected system.
Select All	Select all systems.
Cancel	Clears current system selection.
Add	Create a new system selection from the entered information.

Opening an Offline Database File

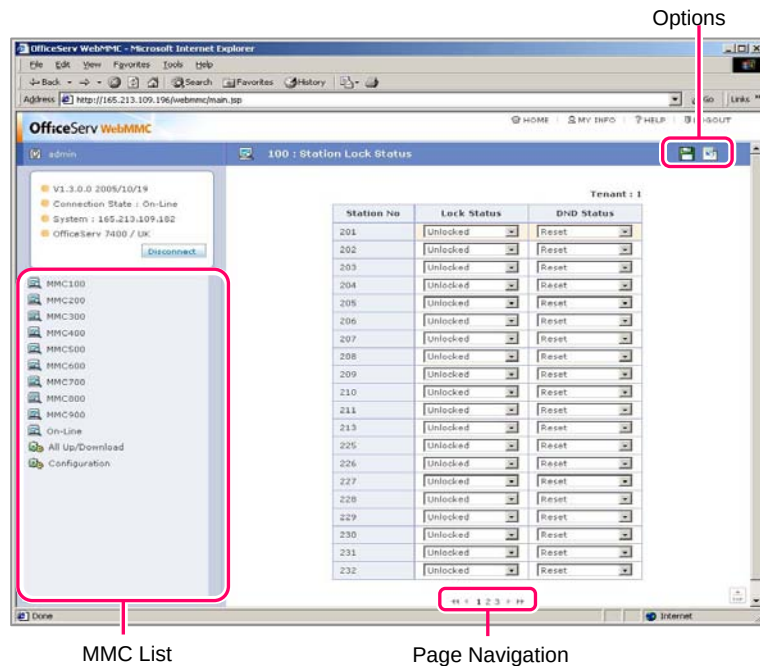
The Off-Line page is used to open a previously downloaded database. To access the page, click [\[Offline\]](#). Offline database files are Access mdb files, and are stored in 'C:\Program Files\Samsung Electronics\OfficeServ Webmmc\DB_USER'.

The screenshot shows a window titled "Off-Line". At the top, there are four buttons: "Open", "Delete", "Select All", and "Cancel". Below these is a table with two columns: "Database File Name" and "Password". The table contains one row with the file name "LabTest" and an empty password field. Below the table is a "Create" button. Underneath the "Create" button is a form with the following fields: "File Name" (with a hint "(Alphabet, Number, '-', '_')"), "System" (set to "OfficeServ 7400"), "Country" (set to "Africa"), "Tenant Number" (set to "1"), "Password" (with a hint "(Number, 4 digits)"), "Confirm Password", "Cabinet2 Kind" (set to "OfficeServ 7400"), and "Cabinet3 Kind" (set to "OfficeServ 7400").

Screen Items	Descriptions
Database File Name	The file name for this database
Password	The password used to log in to the database.
Open	Attempt to open and log in to the selected database.
Delete	Delete the selected database file.
Select All	Select all databases.
Cancel	Clears current database selection.
Create	Create a new system selection from the entered information
Country	For new database files. Select the installation country.
Cabinet 2/3 Kind	For new database files. Select the type of add-on cabinet.

Working with OfficeServ WebMMC

The system programming pages for OfficeServ WebMMC



Feature	Description
Icon	-Save: Saves the MMC to system or database file. -Reload: Refresh the current MMC from system / database file. -Copy: Copy the currently selected value for future use -Paste: Paste the previously copied selection. To paste to multiple cells, click the first cell, then click the last cell, and then click Paste. Paste can only copy vertically or horizontally, not both at the same time. -Repeat: Repeat is used to fill a series of cells with consecutive numbers (e.g. 2001, 2002, 2003...2095). To use the Repeat feature, click the first cell, then the last cell, and then click Repeat. Enter the starting number and choose to number forward (up) or backward (down).
MMC List	Lists all MMCs available to this system.
Page Navigation	Some large MMCs are broken down in to multiple pages. The Page Navigation links are used to move between pages.



Note

MMC Descriptions

For a list of MMCs and their functions refer to the 'OfficeServ 7400 Programming Manual'.

Downloading a System Database

This process is used to download a full or partial image of the system database to a file.

1. Click **[All Up/Download]** then **[All Download]**.

The 'All Download' window contains two main sections. The top section, titled 'Open', has a table with two columns: 'Database File Name' and 'Password'. The first row shows 'LabTest' in the file name field and an empty password field. Below this table is an 'Open' button. The bottom section, titled 'Create', has a 'Create' button and a form with the following fields: 'File Name' (empty), 'System' (OfficeServ 7400), 'Country' (U.S.A), 'Tenant Number' (1), 'Password' (empty), and 'Confirm Password' (empty).

2. Choose the existing database to save to and click **[Open]** or enter details to create a new file and click **[Create]**.
3. The MMC selection window will appear. Select the appropriate MMCs to download and click **[OK]**. By default all MMCs are downloaded.

The MMC selection window shows a list of MMCs to be downloaded. At the top, there is a dropdown menu for 'MMC Group' set to '100', and buttons for 'OK', 'Select All', and 'Cancel'. Below is a table with three columns: 'MMC', 'MMC Name', and a checkbox. All checkboxes are checked.

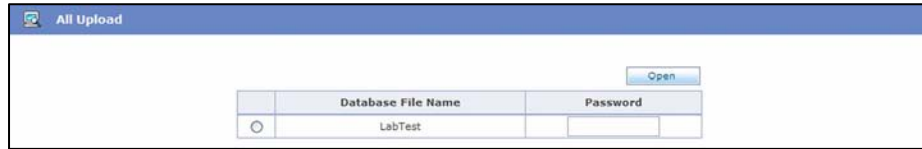
MMC	MMC Name	
100	100 : Station Lock Status	☒
101	101 : Change User Passcode	☒
102	102 : Station Call Forward	☒
103	103 : Set Answer Mode	☒
104	104 : Station Names	☒
105	105 : Station Speed Dial	☒
108	108 : Station Status	☒
109	109 : Date Display	☒
110	110 : Station On/Off	☒
111	111 : Keyset Ring Tone	☒
112	112 : Alarm Reminder	☒
114	114 : Keyset Volume	☒
115	115 : Programmed Message	☒
117	117 : Text Message	☒
118	118 : Conference Group	☒

4. A progress screen will be displayed. Once download has completed any errors will be displayed, or a success message will appear.

Uploading a System Database

This process is used to upload a full or partial database from a file to a live system.

1. Click **[All Up/Download]** then **[All Upload]**.



Database File Name	Password
LabTest	

2. Choose the existing database to save to, enter the password, and click **[Open]**.
3. The MMC selection window will appear. Select the appropriate MMCs to upload and click **[OK]**. By default all MMCs are uploaded.



MMC	MMC Name	
100	100 : Station Lock Status	☒
101	101 : Change User Passcode	☒
102	102 : Station Call Forward	☒
103	103 : Set Answer Mode	☒
104	104 : Station Names	☒
105	105 : Station Speed Dial	☒
109	109 : Date Display	☒
110	110 : Station On/Off	☒
111	111 : Keyset Ring Tone	☒
112	112 : Alarm Reminder	☒
114	114 : Keyset Volume	☒
115	115 : Programmed Message	☒
117	117 : Text Message	☒
118	118 : Conference Group	☒
119	119 : Caller ID/ANI Display	☒

4. A progress screen will be displayed. Once upload has completed any errors will be displayed, or a success message will appear.

ABBREVIATIONS

H

HTTP Hyper Text Transfer Protocol

I

IIS Internet Information Services

J

J2SE Java 2 Second Edition

JRE Java Runtime Environment

L

LAN Local Area Network

M

MMC Man-Machine Code

O

OS Operating System

T

TCP/IP Transmission Control Protocol/Internet Protocol