



IP Office Release 6.1

**IP Office Application Appliance Server
Installation and Maintenance**

Notices

While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Avaya assumes no liability for any errors. Avaya reserves the right to make changes and corrections to the information in this document without the obligation to notify any person or organization of such changes.

Documentation disclaimer

Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of this documentation unless such modifications, additions, or deletions were performed by Avaya.

End User agree to indemnify and hold harmless Avaya, Avaya's agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation, to the extent made by End User.

Link disclaimer

Avaya is not responsible for the contents or reliability of any linked Web sites referenced within this site or documentation(s) provided by Avaya. Avaya is not responsible for the accuracy of any information, statement or content provided on these sites and does not necessarily endorse the products, services, or information described or offered within them. Avaya does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

Warranty

Avaya provides a limited warranty on this product. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language, as well as information regarding support for this product, while under warranty, is available to Avaya customers and other parties through the Avaya Support Web site: <http://www.avaya.com/support>. Please note that if you acquired the product from an authorized Avaya reseller outside of the United States and Canada, the warranty is provided to you by said Avaya reseller and not by Avaya.

Licenses

THE SOFTWARE LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE, [HTTP://SUPPORT.AVAYA.COM/LICENSEINFO/](http://support.avaya.com/licenseinfo/) ARE APPLICABLE TO ANYONE WHO DOWNLOADS, USES AND/OR INSTALLS AVAYA SOFTWARE, PURCHASED FROM AVAYA INC., ANY AVAYA AFFILIATE, OR AN AUTHORIZED AVAYA RESELLER (AS APPLICABLE) UNDER A COMMERCIAL AGREEMENT WITH AVAYA OR AN AUTHORIZED AVAYA RESELLER. UNLESS OTHERWISE AGREED TO BY AVAYA IN WRITING, AVAYA DOES NOT EXTEND THIS LICENSE IF THE SOFTWARE WAS OBTAINED FROM ANYONE OTHER THAN AVAYA, AN AVAYA AFFILIATE OR AN AVAYA AUTHORIZED RESELLER, AND AVAYA RESERVES THE RIGHT TO TAKE LEGAL ACTION AGAINST YOU AND ANYONE ELSE USING OR SELLING THE SOFTWARE WITHOUT A LICENSE. BY INSTALLING, DOWNLOADING OR USING THE SOFTWARE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE INSTALLING, DOWNLOADING OR USING THE SOFTWARE (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THESE TERMS AND CONDITIONS AND CREATE A BINDING CONTRACT BETWEEN YOU AND AVAYA INC. OR THE APPLICABLE AVAYA AFFILIATE ("AVAYA").

Avaya grants End User a license within the scope of the license types described below. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the Documentation or other materials available to End User. "Designated Processor" means a single stand-alone computing device. "Server" means a Designated Processor that hosts a software application to be accessed by multiple users. "Software" means the computer programs in object code, originally licensed by Avaya and ultimately utilized by End User, whether as stand-alone products or pre-installed on Hardware. "Hardware" means the standard hardware originally sold by Avaya and ultimately utilized by End User.

License types

Designated System(s) License (DS). End User may install and use each copy of the Software on only one Designated Processor, unless a different number of Designated Processors is indicated in the Documentation or other materials available to End User. Avaya may require the Designated Processor(s) to be identified by type, serial number, feature key, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

Copyright

Except where expressly stated otherwise, no use should be made of materials on this site, the Documentation(s) and Product(s) provided by Avaya. All content on this site, the documentation(s) and the product(s) provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Avaya can be a criminal, as well as a civil, offense under the applicable law.

Third Party Components

Certain software programs or portions thereof included in the Product may contain software distributed under third party agreements ("Third Party Components"), which may contain terms that expand or limit rights to use certain portions of the Product ("Third Party Terms"). Information regarding distributed Linux OS source code (for those Products that have distributed the Linux OS source code), and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply to them is available on the Avaya Support Web site: <http://support.avaya.com/Copyright>.

Preventing toll fraud

"Toll fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there can be a risk of toll fraud associated with your system and that, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

Avaya fraud intervention

If you suspect that you are being victimized by toll fraud and you need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada. For additional support telephone numbers, see the Avaya Support Web site: <http://support.avaya.com>. Suspected security vulnerabilities with Avaya products should be reported to Avaya by sending mail to: securityalerts@avaya.com.

Trademarks

Avaya and Aura are trademarks of Avaya, Inc. The trademarks, logos and service marks ("Marks") displayed in this site, the documentation(s) and product(s) provided by Avaya are the registered or unregistered Marks of Avaya, its affiliates, or other third parties. Users are not permitted to use such Marks without prior written consent from Avaya or such third party which may own the Mark. Nothing contained in this site, the documentation(s) and product(s) should be construed as granting, by implication, estoppel, or otherwise, any license or right in and to the Marks without the express written permission of Avaya or the applicable third party. Avaya is a registered trademark of Avaya Inc. All non-Avaya trademarks are the property of their respective owners.

Downloading documents

For the most current versions of documentation, see the Avaya Support Web site: <http://www.avaya.com/support>

Contact Avaya Support

Avaya provides a telephone number for you to use to report problems or to ask questions about your product. The support telephone number is 1-800-242-2121 in the United States. For additional support telephone numbers, see the Avaya Web site: <http://www.avaya.com/support>

Contents

1. The IP Office Application Appliance Server

1.1 Using Linux	8
1.2 Server PC Requirements	8
1.3 Installation Requirements.....	9
1.4 Software	10
1.5 Licenses	10
1.6 Installation.....	11
1.7 Logging In	18
1.8 Checking the Services.....	19
1.9 one-X Portal for IP Office Configuration.....	20
1.10 Voicemail Pro Configuration.....	23

2. Server Configuration

2.1 Logging In	27
2.2 Change the Web Password.....	28
2.3 Starting/Stopping Application Services.....	29
2.4 Server Shutdown.....	30
2.5 Rebooting the Server.....	30
2.6 Changing the IP Address Settings.....	31
2.7 Checking the DHCP Address.....	32
2.8 Date and Time Settings.....	33
2.9 Upgrading Application.....	34
2.10 Uninstalling an Application	35
2.11 File Repositories.....	36
2.11.1 Source Files	36
2.11.2 Setting the Repository Locations.....	36
2.11.3 Uploading Local Files.....	37
2.11.4 Creating Remote Software Repositories.....	38
2.12 Changing the Root Password.....	39
2.13 Download the Install Log File.....	40

3. Server Menus

3.1 Home	43
3.2 Logs	44
3.2.1 View.....	44
3.2.2 Download.....	45
3.3 Updates	46
3.3.1 Services.....	47
3.3.2 System.....	48
3.4 Settings	49
3.4.1 General.....	49
3.4.2 System.....	52
3.5 Windows Clients.....	54
Index	55

Chapter 1.

The IP Office Application Appliance Server

1. The IP Office Application Appliance Server

The IP Office Application Appliance Server DVD is a single server installation for IP Office server applications. Currently those applications are Voicemail Pro and one-X Portal for IP Office.

The IP Office Application Appliance Server installation installs the base operating system, the IP Office server applications and web pages for managing the server.

- The base operating system installed is CentOS, a Linux operating system. However, no knowledge of Linux is required.
- The server is configured and managed remotely using web browser access.
- The one-X Portal for IP Office application is configured and managed remotely using web browser access.
- The Voicemail Pro application is configured and managed remotely using the Windows Voicemail Pro client. A copy of the Voicemail Pro client can be [downloaded](#) and installed from the IP Office Application Appliance Server.

Voicemail Pro Features

For Voicemail Pro server running on the IP Office Application Appliance Server, the following Voicemail Pro features are not supported:

- VB Scripting.
- TTS Text to Speech.
- MAPI Email.
- UMS Exchange Integration.
- 3rd Party Database Integration.
- VPNM.
- UMS Web Voicemail
However access via IMAP and one-X Portal for IP Office are available as alternatives.

When logged into the voicemail server using the Voicemail Pro client, those features not supported are grayed out or hidden. If those features are present in an imported call flow, they will not function and calls attempting to use those features will be disconnected.

The Voicemail Pro client's backup and restore functions can be used to move voicemail data between a Linux based server and a Windows based server and vice versa.

For Small Community Network scenarios where multiple voicemail servers are present, for example distributed and backup server, a mix of Linux based and Windows based servers are allowed.

1.1 Using Linux

Despite using a Linux based operating system, knowledge or experience of Linux by the installer and maintainer is not required. The IP Office Application Appliance Server is designed to be configured and maintained remotely using its web browser interface.

No access to the Linux command line is used except for changing the [root user password](#)^[39]. Using the Linux command line to perform any other actions may cause unexpected operation of the IP Office Application Appliance Server and is not supported by Avaya except when specifically instructed by Avaya.

1.2 Server PC Requirements

The following are the minimum server PC requirements.

- **IMPORTANT: Compatible Servers**
The compatibility of any particular server PC for the operating system cannot be guaranteed. A list of known suitable servers is available at <https://hardware.redhat.com/>.

	Minimum Specification	Recommended Specification
Processor	Intel Dual Core 2.4GHz	Intel Pentium Quad Core 2.4GHz or AMD Athlon 64 4000 or equivalent.
RAM Memory	2GB	4GB
Hard Disk Space	30GB	30GB

- **Operating System**
The IP Office Application Appliance Server installation installs its own operating system (CentOS Linux), replacing any existing operating system on the PC. If an OS free PC cannot be obtained, Linux based PCs are typically cheaper than equivalent Windows based PCs.
- **Drives**
DVD Drive or other bootable source for operating system installation.
- **Other Requirements:**
 - The server PC must be configurable to boot from DVD or another external source in order to overwrite any existing OS. This may require access to the BIOS in order to change the boot order if the PC is supplied with an operating system already installed.
 - The IP Office Application Appliance Server is intended to operate as a headless server, i.e without requiring any keyboard, video and mouse (KVM) connections after initial installation. All configuration and user access is done remotely from other PCs.

The servers used by Avaya for product testing are:

- HP ProLiant DL160
- Dell Optiplex 780MT

1.3 Installation Requirements

The following information and material is required during the installation process:

- **Server Applications**
 During the installation process, you can select which IP Office server applications are installed. Note that for each application selected, the normal IP Office license requirements still apply. Refer to the separate installation manual for each application for details.
 - **Voicemail Pro**
 If selected, the same information is required as for a Windows based installation of the Voicemail Pro server. Refer to the IP Office Voicemail Pro Installation and Maintenance manual.
 - **one-X Portal for IP Office**
 If selected, the same information is required as for a Windows based installation of the one-X Portal for IP Office application. For example, IP address of IP Office system, LDAP server information and voicemail server address (if other than the IP Office Application Appliance Server address). Refer to the one-X Portal for IP Office Installation manual.
- **Server IP Address Settings**
 The IP Office Application Appliance Server supports IPv4 addressing obtain through either DHCP or static addressing.

	IPv4 Support
Use DHCP	<input type="checkbox"/>
IP Address	<input type="checkbox"/> _____
Prefix (Netmask)	<input type="checkbox"/> _____
Gateway	<input type="checkbox"/> _____
Primary DNS	<input type="checkbox"/> _____
Secondary DNS	<input type="checkbox"/> _____

- **Hostname**
 A hostname helps simplify access to the server and the applications it provides rather than requiring users to use the IP address.
- **Timezone**
 The timezone in which the server is located and whether the server should use UTC or local time.
- **Root Password**
 This password is used for configuration access to the server.
- **Client PC**
 The IP Office Application Appliance Server is designed and intended for remote configuration and management. It is not managed directly from the server. Therefore a client PC with a web browser on the same network as the server PC is required for configuration. If Voicemail Pro server is one of the selected server applications, then the client PC must be a Windows based PC.

1.4 Software

The IP Office Application Appliance Server software is provided as a DVD or as a downloadable .iso file image of the DVD. The download is available from the Avaya support website: <http://support.avaya.com>.

For installers and maintainers, access to a program that supports SFTP/SSH, for example SSH Secure Shell, is useful but not obligatory.

1.5 Licenses

The IP Office Application Appliance Server software is installed subject to agreement with the Avaya software license terms.

The links below connect to copies of the licenses on the Avaya support web site (<http://support.avaya.com/licenseinfo>).

- [Avaya Global Software License Terms - English](#)
- [Avaya Global Software License Terms - Portuguese](#)
- [Avaya Global Software License Terms - Spanish](#)
- [Avaya Global Software License Terms - French](#)
- [Avaya Global Software License Terms - German](#)
- [Avaya Global Software License Terms - Russian](#)

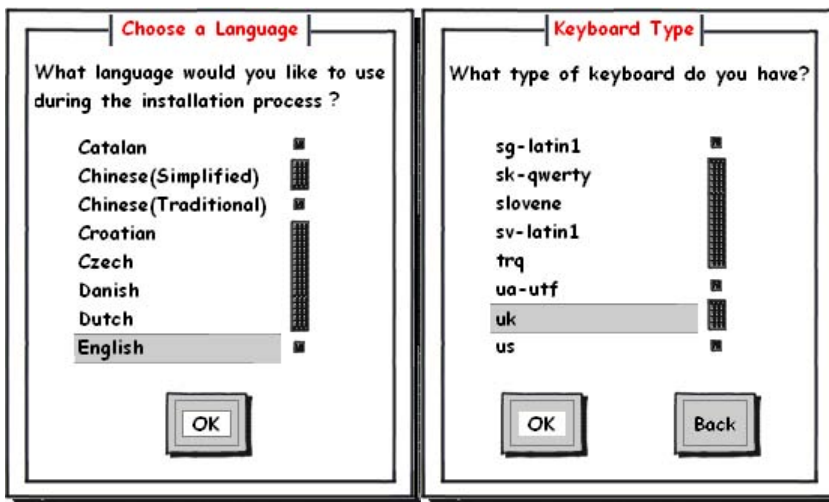
1.6 Installation

Before attempting to install the IP Office Application Appliance Server software, ensure that you have met the following requirements:

- [Server PC Requirements](#) ⁸
- [Installation Information Requirements](#) ⁹
- [Software Requirements](#) ¹⁰

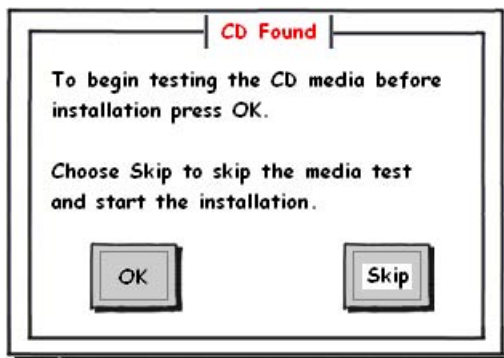
The installation process requires approximately 15 minutes (longer if Test CD/DVD is selected).

1. Insert the DVD into the PC's DVD drive and reboot the PC.
2. The PC should boot from the DVD and the display the IP Office Application Appliance Server installation screen.
 - If the PC does not boot from the DVD and instead starts an existing operating system, that indicates that the boot order of the server PC needs to be changed. Follow the PC manufacturer's instructions for accessing the PC's BIOS and setting it to boot from DVD before booting from hard disk.
 - If the server PC already has IP Office Application Appliance Server installed, options for upgrade, downgrade, reinstall or new install are presented. Note that a new install will reformat the hard disk, removing all existing files.
3. After loading installation software from the DVD, the installation menus will be displayed as follows:



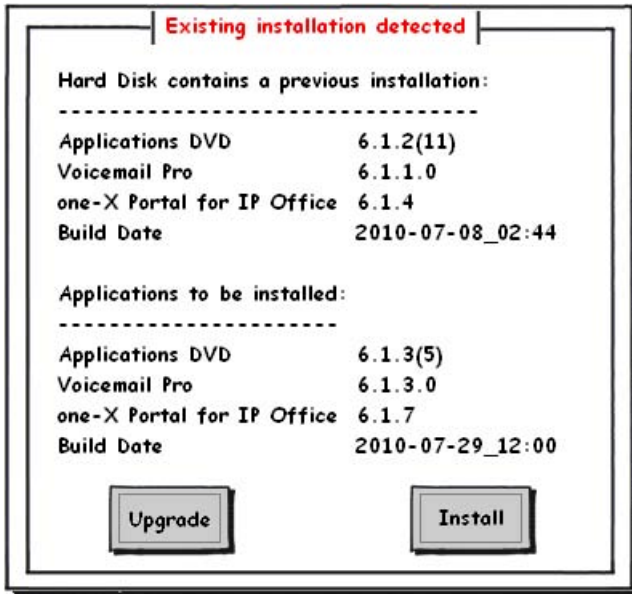
A: Language/Keyboard
These initial steps apply just to the installation process, they do not affect the installed applications. However, they also allow you to familiarize yourself with how the text menus operate.

- Use Tab to move the selector forwards, use Alt-Tab to move it backward. Press Space to select the currently highlighted item.



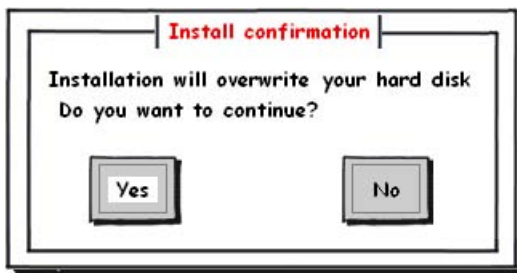
B: Test CD/DVD
If this is the first time that the DVD onto which the IP Office Application Appliance Server software has been used, it may be useful to check that the DVD has been written correctly before any changes to the server PC are made. The check process can take up to 30 minutes. If the DVD has already been used successfully for other installations, select Skip to continue.

C. End User License Agreement
Read through the end user license agreement. It is available in several languages, use the Change Language to select the one required. On the last page select I Accept if you want to continue with the installation.



D1: Previous Installation Detected
 If IP Office Application Appliance Server is already installed on the server, a upgrade menu is displayed, detailing the existing installed options and the new options.

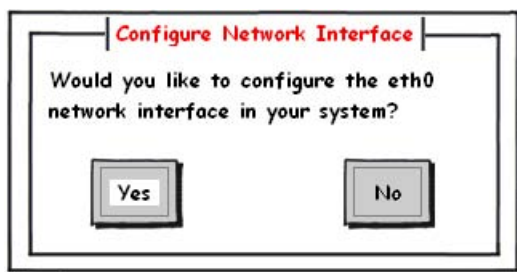
- If Upgrade is selected, the process continues from step J. Preparing to Install.
- If Install is selected, the existing installation is overwritten, continuing as below.



D2: Confirm Installation
 If you select No, you will be prompt to remove the DVD from the drive and then reboot the server. Use this option if you do not want to overwrite the existing data on the server.

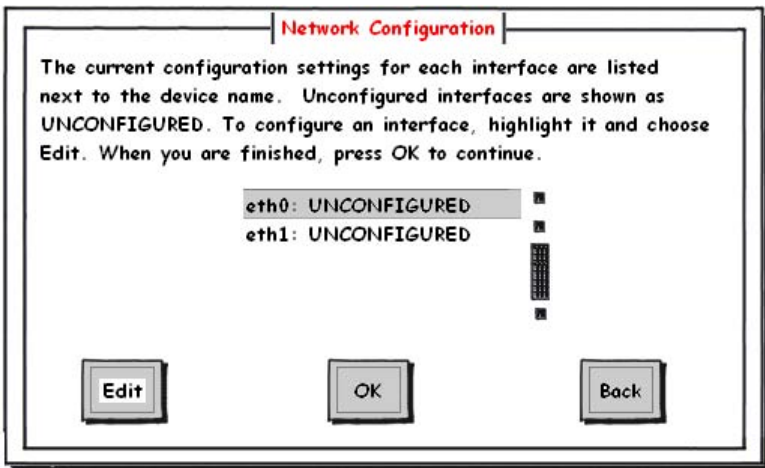


E: IP Office Applications
 The IP Office applications available for installation and the version of each are indicated. Select the applications required and then select OK.

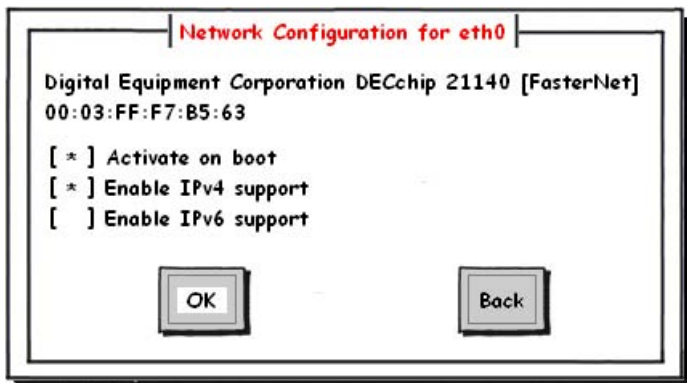


F: Ethernet Address Configuration
 The next stages will vary slightly depending on whether the server PC has a single network interface or multiple network interfaces.

F1. Single Network Interface
 Select Yes. Select No if you like but it will make it hard for you or users to access the server and any of the applications. If you do select No, the installer will go to the Miscellaneous Network Settings menu.

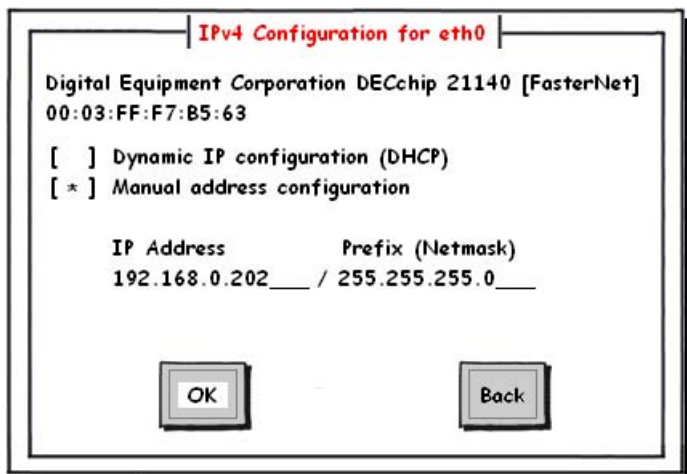


F2. Multiple Network Interfaces
 If the server PC has multiple network interfaces, this menu will list them and shows whether they have been configured or not. Select the interface you want to configure and then select Edit.



G: Network Configuration
 You must select at least Activate on boot and Enable IPv4 support.

- Currently IPv6 is not used for any of the IP Office Application Appliance Server services.
- The address settings entered can be changed after installation but must be valid for initial browser access to the server's web configuration pages.



G1: IPv4 Address Settings
 If Enable IPv4 support was selected, this menu is displayed to allow entry of the address settings.

- It is recommended that you use manual address configuration rather than DHCP.
- Do not use a restricted address such as 127.0.0.1.

IPv6 Configuration for eth0

Digital Equipment Corporation DECchip 21140 [FasterNet]
00:03:FF:F7:B5:63

[] Automatic neighbor discovery
[] Dynamic IP configuration (DHCPv6)
[*] Manual address configuration

IP Address _____ Prefix _____ / _____

G2: IPv6 Address Settings
If Enable IPv6 support was selected, this menu is displayed to allow entry of the address settings.

Miscellaneous Network Settings

Gateway: _____
Primary DNS: _____
Secondary DNS: _____

G3: Network Settings
The following general settings apply to the server if not using DHCP.

- The Gateway address must be set.
- The Primary DNS and Secondary DNS addresses can be left blank if not known. However, they should be set if possible.

Network Configuration

The current configuration settings for each interface are listed next to the device name. Unconfigured interfaces are shown as UNCONFIGURED. To configure an interface, highlight it and choose Edit. When you are finished, press OK to continue.

eth0: Active on boot, DHCP
eth1: UNCONFIGURED

G4. Multiple Network Interfaces (Again)
If the server PC has multiple network interfaces, the menu listing them is shown again and shows which have been configured or not. To configure another interface select it and then select Edit. When at least one of the interface has been configured, select OK.

Hostname Configuration

If your system is part of a larger network where hostnames are assigned by DHCP, select automatically via DHCP. Otherwise select manually and enter a hostname for your system. If you do not, your system will be known as 'localhost'.

[] automatically via DHCP
[*] manually IOffice_____

H: Hostname Configuration
Having a hostname makes the server easier to access than using its IP address. You can select to obtain a hostname by DHCP, however not all DHCP servers support the issuing of hostnames.

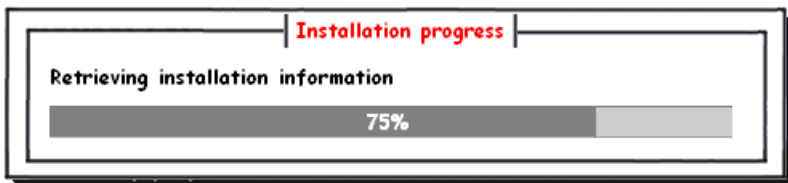
- If expecting to use the Voicemail Pro service in a network of Voicemail Pro servers for functions like distributed voicemail or backup voicemail, a valid hostname is important. Do not use *localhost*.



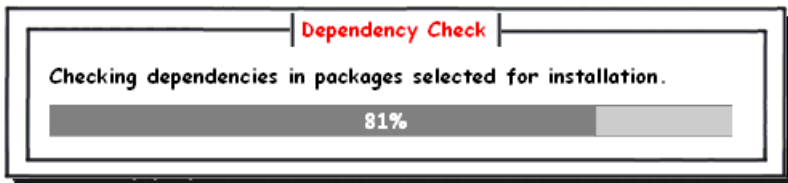
I: Select Timezone
 Select the timezone to match the customer location. This timezone setting is important as it is used to apply time offsets to the UTC time value. The time and date settings can be altered after installation using the server's web configuration pages.



J: Root Password
 This is the default administrator password for access to the operating system. It is not normally used during IP Office Application Appliance Server configuration and maintenance. However ensure that you note the password set.



K: Preparing to Install
 Based on the selections made in the previous menus, the installation software now prepares the files for installation.

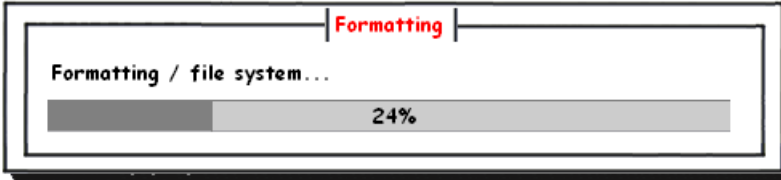


L: Dependency Checks
 The installer checks that there are no conflicts or omissions within the installation selections.



M: WARNING !
 This is the last stage at which you can select Back to amend selections or to exit the installation process. If you select OK, the installer will start formatting the hard disk, erasing any existing data and applications.

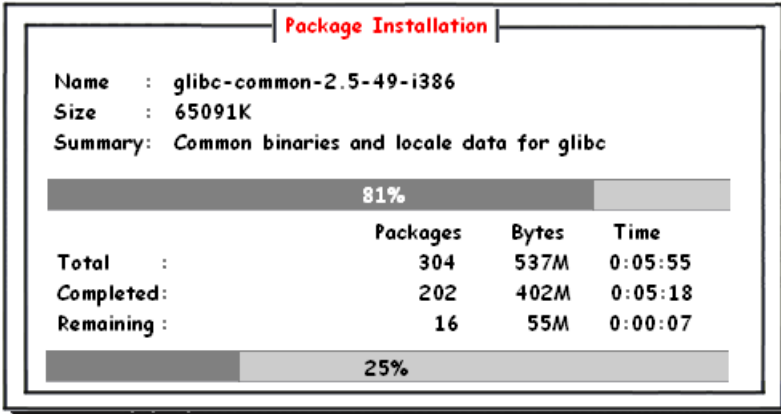
- The log file can be downloaded after installation using an [SFTP/SSH application](#) ^[40].



N: Formatting the Hard Disk
The server hard disk is now formatted.



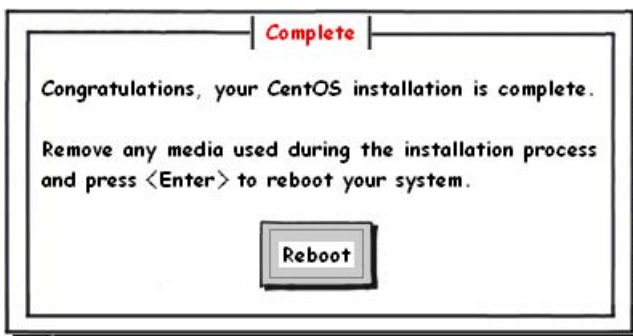
O: Copying the Installation File
The install image containing files to be installed is now copied to the formatted hard disk.



P: Installing the Operating System Files
The various files relating to the operating system are not copied to their correct locations on the hard disk.



Q: Installing the IP Office Applications
The installer will now copy and install the files for the previously selected IP Office applications plus some standard applications it uses for its own management.



R: Installation Complete
The installation of the operating system and IP Office applications is now complete. Remove the IP Office Application Appliance Server DVD from the server PC. Then select the Reboot option.


```
#####  
#       Applications Appliance DVD       #  
#####  
  
Running.  
Config page: http://192.168.0.220:7070  
  
Commands:  
- "login" - Log In  
  
Command: _
```

S: IP Office Application Appliance Server Booted

The adjacent screen is shown after successful start of the IP Office Application Appliance Server. The address shown is that for IP Office Application Appliance Server configuration access using a web browser.

- It is not necessary to login at this menu. All configuration of the IP Office Application Appliance Server is done through [remote web browser](#) access. The important detail on this display is the IP address, especially if the server is configured to obtain its address by DHCP.

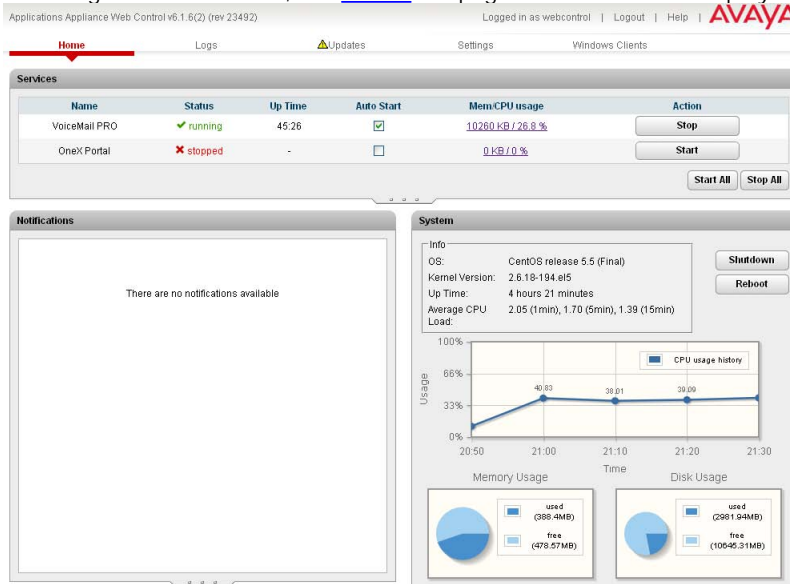
1.7 Logging In

Administration of the IP Office Application Appliance Server is done using a web browser on a client PC with network access to the IP Office Application Appliance Server.

1. From a client PC, start the browser and enter `http://` followed by the address of the IP Office Application Appliance Server and `:7070`. The port number used can be changed through the [Settings | General](#) page after logging in.
2. The IP Office Application Appliance Server login page should be displayed.



3. Select the Language required.
4. Enter the name and password configured for IP Office Application Appliance Server administration.
 - The default name and password are `webcontrol` and `web`. The password can be changed by selecting the [Change Password](#) option.
5. If the login was successful, the [Home](#) page for the server is displayed.



1.8 Checking the Services

After [logging in](#)^[18] to the IP Office Application Appliance Server, the Home page provides an immediate summary of the services that the server can provide and the status (started or stopped) of those services.

1. Login and select the Home menu.

Name	Status	Up Time	Auto Start	Mem/CPU usage	Action
VoiceMail PRO	✓ running	45:26	<input checked="" type="checkbox"/>	10260 KB / 26.8 %	Stop
OneX Portal	✗ stopped	-	<input type="checkbox"/>	0 KB / 0 %	Start

Start All Stop All

2. Check that the expected services have been started. If not, each can be individually started using the Start/Stop buttons on the right.
3. Check the Notifications panel is not listing any errors that would indicate a problem with the installation.
4. If all the services are started as expected, each can be individually configured. See [one-X Portal for IP Office Configuration](#)^[20] and [Voicemail Pro Configuration](#)^[23].
5. If the sever is running correctly, logout and then log in again using the [Change Password](#)^[28] option.

1.9 one-X Portal for IP Office Configuration

At this stage, the one-X Portal for IP Office server software has been installed and the service started. However the one-X Portal for IP Office server still requires initial configuration. During this configuration it will connect to the IP Office systems.

1. Open a web browser and enter the address of the IP Office Application Appliance Server followed by `:8080/inyama/inyama.html?admin=true`. This is the login path for the administrator access to the one-X Portal for IP Office application.



2. The message *System is currently unavailable - please wait* may be displayed with the one-X Portal for IP Office application starts. When the message disappears, approximately 15 minutes after the one-X Portal for IP Office service was started, you can login.
3. Enter the default administrator name (*Administrator*) and password (*Administrator*) and click Login.
4. The License Agreement page is displayed.

STEP 1: License Agreement

You must read and accept this agreement.

AVAYA END USER LICENSE AND WARRANTY

For Customer Purchases from a Reseller

THIS END USER LICENSE AND WARRANTY AGREEMENT ("AGREEMENT") GOVERNS THE WARRANTY OF AVAYA'S PRODUCTS AND THE USE OF AVAYA'S PROPRIETARY SOFTWARE. READ THIS AGREEMENT CAREFULLY, IN ITS ENTIRETY, BEFORE INSTALLING OR USING THE AVAYA PRODUCT (S) (AS DEFINED BELOW). BY INSTALLING OR USING THE AVAYA PRODUCT(S), OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE INSTALLING OR USING THE PRODUCT(S) (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THE TERMS AND CONDITIONS OF THIS AGREEMENT AND CREATE A BINDING CONTRACT BETWEEN YOU AND AVAYA INC. ("AVAYA"). ANY USE OF THE PRODUCT(S) WILL CONSTITUTE YOUR ASSENT TO THE TERMS OF THIS AGREEMENT (OR RATIFICATION OF ANY PREVIOUS CONSENT).

Have Read & Agree

Next-> **Cancel**

5. When you have read the license, select Have Read & Agree and then click on Next.

6. The menu now allows entry of the IP addresses of the IP Office systems to which you want the one-X Portal for IP Office server to connect.

STEP 2: Setting the IP Office IP Addresses

Description

Now you need to specify sources of user lists, directories & telephony services. Enter a comma separated list of the IP Address(es) of the IP Office Units which will be used.

For example enter: 192.168.42.1,192.168.42.2

In 'Advanced Provider Options' you may override default provider configuration values and specify an optional LDAP Directory Source common to all users.

IP Office Unit IP Address(es)

192.168.42.1

IP Office(s) not yet checked.

Simple Installation Advanced Installation

▶ Status

- In the following menus, the ▶ Status icon can be used to show/hide status messages about the actions being performed by the installation process.

7. Enter the addresses in the form and select Check IP Office(s). The one-X Portal for IP Office server will attempt to connect to each of the indicated IP Offices. The orange background will change to green if this is successful.

IP Office Unit IP Address(es)

192.168.42.1

All IP Office(s) have acceptable firmware version & licensing

Simple Installation Advanced Installation

▶ Status

8. If the customer has a Voicemail Pro voicemail server, click on Advanced Installation.

- Click on the Voicemail Provider tab and enter the IP address of the Voicemail Pro voicemail server. For IP Offices in a Small Community this should be the address of the centralized voicemail server (not that of the backup or any distributed voicemail servers).

Provider's Mid-Layer Username

Provider's Mid-Layer Password

Provider runs on Port

Assign New Voicemail Server Unit

ID	VoiceMailServer IP Address	
<input type="text" value="0"/>	<input type="text" value="EnterValidIPAddress"/>	<input type="button" value="Delete"/>

9. If the customer has provided details of an LDAP directory source, click on Advanced Installation if not already selected.

- Click on the Directory (LDAP) tab. Enter the LDAP server information into the fields labeled LDAP.

Mid-Layer	Telephony (CSTA)	Directory (IP-Office)	Directory (LDAP)	VoiceMail-Provider
Provider's Mid-Layer Username	<input type="text" value="indoda_user"/>			
Provider's Mid-Layer Password	<input type="password" value="●●●●●●●●"/>			
Provider runs on Port	<input type="text" value="8080"/>			
LDAP Server Address	<input type="text" value="ldap://ldap-server-ip-addre"/>			
LDAP Server Username	<input type="text" value="global/your-username"/>			
LDAP Server Password	<input type="password" value="●●●●●●●●"/>			
LDAP Server Base DN	<input type="text" value="OU=myregion,OU=mybus"/>			

- Click on Configure for IP Office(s). The one-X Portal for IP Office server will connect with each IP Office and automatically extract details of the IP Office users. If Simple Installation was selected, the installer will go through this and the following steps automatically. If Advanced Installation was selected, the installer will require you to select Next after each step.

STEP 3: Extract User Lists from IP Office Unit(s)

Description

Extraction of lists of users from the IP Office Unit(s) can start. A cached internal representation of these users will be maintained in synchronisation with the master records on the IP Office(s). Adds, moves and changes of users must be done with the IP Office Manager.

► Status

Automatic User List Extraction Progress

■ | | | | | | | | | |

- Having extracted user details, the one-X Portal for IP Office server will extract directory details from the IP Office systems.

STEP 4: Synchronise System & Personal Directories

Description

You are now ready to import the System & Personal Directories from the IP Office Unit(s).

► Status

- The one-X Portal for IP Office server will now prompt you to change the password used for administrator access.

Administrator Default Password Check

You must change the password from its default value.

New Password

New Password(Typed Again)

Passwords match

Password strength not enforced

- Enter a new password and click Change Password.
- The initial configuration is complete. Note that it will still be at least another 5 minutes before the one-X Portal for IP Office is usable by end users.

1.10 Voicemail Pro Configuration

The Voicemail Pro server provided installed on the IP Office Application Appliance Server uses the same Windows based Voicemail Pro client as used for Windows based Voicemail Pro servers. A copy of the Voicemail Pro client software can be downloaded for installation from the IP Office Application Appliance Server's [Windows Client](#) ^[54] page.

Using the Voicemail Pro client from a client PC, the IP Office Application Appliance Server can be accessed using the default name and password pair *Admin* and *MMYSBH*. It is strongly recommended that the first configuration action is to select File | Change password.

Voicemail Pro Features

For Voicemail Pro server running on the IP Office Application Appliance Server, the following Voicemail Pro features are not supported:

- VB Scripting.
- TTS Text to Speech.
- MAPI Email.
- UMS Exchange Integration.
- 3rd Party Database Integration.
- VPNM.
- UMS Web Voicemail
However access via IMAP and one-X Portal for IP Office are available as alternatives.

When logged into the voicemail server using the Voicemail Pro client, those features not supported are grayed out or hidden. If those features are present in an imported call flow, they will not function and calls attempting to use those features will be disconnected.

The Voicemail Pro client's backup and restore functions can be used to move voicemail data between a Linux based server and a Windows based server and vice versa.

For Small Community Network scenarios where multiple voicemail servers are present, for example distributed and backup server, a mix of Linux based and Windows based servers are allowed.

Chapter 2.

Server Configuration

2. Server Configuration

The main configuration and control of the IP Office Application Appliance Server is done via web browser access. After logging in using the administrator name and password, you are able to view the status of the services provided by the server and to perform actions such as stopping or starting those services.

- [Logging In](#) ^[27]
- [Changing the Web Password](#) ^[28]
- [Starting/Stopping Application Services](#) ^[29]
- [Server Shutdown](#) ^[30]
- [Rebooting the Server](#) ^[30]
- [Changing the IP Address Settings](#) ^[31]
- [Checking the DHCP Address](#) ^[32]
- [Date and Time Settings](#) ^[33]
- [Upgrading an Application](#) ^[34]
- [Uninstalling an Application](#) ^[35]
- [Setting Update Repositories](#) ^[36]
- [Changing the Root Password](#) ^[39]

2.1 Logging In

- From a client PC, start the browser and enter `http://` followed by the address of the IP Office Application Appliance Server and `:7070`. The port number used can be changed through the [Settings | General](#) page after logging in.
- The IP Office Application Appliance Server login page should be displayed.

- Select the Language required.
- Enter the name and password configured for IP Office Application Appliance Server administration.
 - The default name and password are `webcontrol` and `web`. The password can be changed by selecting the [Change Password](#) option.
- If the login was successful, the [Home](#) page for the server is displayed.

Name	Status	Up Time	Auto Start	Mem-CPU usage	Action
VoiceMail PRO	running	45:26	<input checked="" type="checkbox"/>	10260 kB / 26.8 %	Stop
OneX Portal	stopped	-	<input type="checkbox"/>	0 kB / 0 %	Start

2.2 Change the Web Password

From the [Login](#)^[18] menu you can select the Change Password option to perform a password change. When selected, fields are displayed to enter the current password and for entry and confirmation of the new password.

1. From a client PC, start the browser and enter `http://` followed by the address of the IP Office Application Appliance Server and `:7070`. The port number used can be changed through the [Settings | General](#)^[49] page after logging in.
2. The IP Office Application Appliance Server login page should be displayed.



The screenshot shows the Avaya Applications Appliance Web Control v6.1.8-6 login page. At the top is the Avaya logo. Below it is a red header bar with the text "Applications Appliance Web Control v6.1.8-6". The main content area has the heading "Please log on." and three input fields: "Logon:", "Password:", and "Language:" (with a dropdown menu set to "English"). A "Login" button is positioned to the right of the Language field. Below the input fields is a red link labeled "Change password". At the bottom, there is a copyright notice "© 2010 Avaya Inc. All rights reserved" and a blue link "View EULA".

3. Select the Language required.
4. Click on the Change password link. The change password menu is displayed.



The screenshot shows the Avaya Applications Appliance Web Control v6.1.7(1) (rev 24215) change password menu. At the top is the Avaya logo. Below it is a red header bar with the text "Applications Appliance Web Control v6.1.7(1) (rev 24215)". The main content area has the heading "Please type the old and the new password." and three input fields: "Old Password:", "New Password:", and "Confirm Password:". Below the input fields are two buttons: "Ok" and "Cancel". At the bottom, there is a copyright notice "© 2010 Avaya Inc. All rights reserved".

5. Enter the current password and the new password.
6. Click OK. The menu will confirm whether the change was successful or not.
7. If the new password is accepted, click Cancel to return to the Login menu and then [login](#)^[27] with the new password.

2.3 Starting/Stopping Application Services

The IP Office application services installed on the IP Office Application Appliance Server can be started and stopped individual. This may be necessary for maintenance or if a particular service is not currently required, for example if one-X Portal for IP Office has been installed but is not currently licensed.

The services can be set to automatically start after a server reboot. By default no IP Office services are automatically started.

Starting a Service

1. [Login](#) to the IP Office Application Appliance Server's web configuration pages.
2. Select Home (this is normally selected by default after logging in). The services and their current status (running or stopped) are listed.
3. To start a particular service click on the Start button next to the service. To start all the services that are not currently running, click on the Start All button.

Stopping a Service

2. [Login](#) to the IP Office Application Appliance Server's web configuration pages.
3. Select Home (this is normally selected by default after logging in). The services and their current status (running or stopped) are listed.
3. To start a particular service click on the Stop button next to the service. To stop all the services that are currently running, click on the Stop All button.
4. The service's status changes to stopping while it is being stopped. If it remains in this state too long, the service can be forced to stop by clicking on Force Stop.

Setting a Service to Auto Start

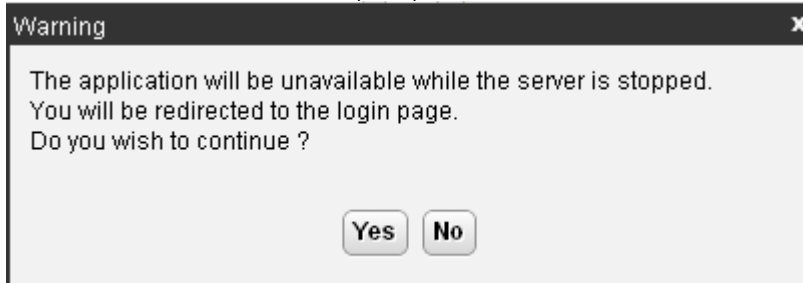
By default, no service is set to start automatically when the IP Office Application Appliance Server starts.

3. [Login](#) to the IP Office Application Appliance Server's web configuration pages.
4. Select Home (this is normally selected by default after logging in). The services and their current status (running or stopped) are listed.
3. Use the Auto Start check box to indicate whether a service should automatically start when the IP Office Application Appliance Server is started.

2.4 Server Shutdown

This process should be used when it is necessary to switch off the IP Office Application Appliance Server for any period. Once the process has been completed, power to the server can be switched off. To restart the server, switch the server power back on.

1. [Login](#) to the IP Office Application Appliance Server's web configuration pages.
2. After logging in the default page displayed is the [Home](#) page. This page includes a server Shutdown button.
3. Click on Shutdown. You will be prompted to confirm the action.

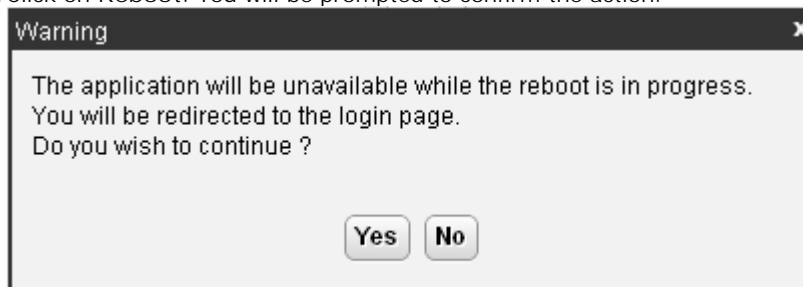


4. Click Yes to confirm that you want to proceed with the shutdown.
5. The login page will be displayed again. Do not login again as the IP Office Application Appliance Server will still be in the process of stopping services.
6. After a few minutes, typically no more than 2 minutes though this will vary depending on the hardware specification of the server, the server will shutdown.
7. Switch off power to the server.

2.5 Rebooting the Server

Rebooting the server will stop all currently running services and then stop and restart the server. Only those IP Office application services which are set to [Auto Start](#) will be automatically restarted after the reboot.

1. [Login](#) to the IP Office Application Appliance Server's web configuration pages.
2. After logging in the default page displayed is the [Home](#) page. This page includes a server Reboot button.
3. Click on Reboot. You will be prompted to confirm the action.



4. Click Yes to confirm that you want to proceed with the reboot.
5. The login page will be displayed again. Do not login again immediately as the IP Office Application Appliance Server will still be in the process of stopping services prior to a reboot of the server.
6. After a few minutes, typically no more than 5 minutes though this will vary depending on the hardware specification of the server, you should be able to login again.
7. Once logged in you can manually restart any services required if not set to Auto Start.

2.6 Changing the IP Address Settings

The IP address and other network settings used by the server PC can be changed through the server's web configuration pages.

- **Warning**

Changing IP address and other network settings of the server PC will require you to login again. If the server is using DHCP or is switched to DHCP, the address obtained for the server is displayed on the server's [command line display](#).

1. [Login](#) to the IP Office Application Appliance Server's web configuration pages.

2. Select Settings.

3. Select System.

4. The IP address settings are shown in the Network section.

- **Network Interface**

If the server PC has multiple ethernet interfaces, this drop down allows selection of which of the interfaces is currently being configured by the web form.

- **Host Name**

Sets the host name that the IP Office Application Appliance Server should use. This setting requires the local network to support a DNS server.

- **Use DHCP**

If selected, the IP address, subnet mask and default gateway information is obtained by the server making DHCP requests. The related fields are greyed out and cannot be set manually.

- **IP Address**

Displays the IP address set for the server. If DHCP is not being used, the field can be edited to change the setting.

- **Subnet Mask**

Displays the subnet mask applied to the IP address. If DHCP is not being used, the field can be edited to change the setting.

- **Default Gateway**

Displays the default gateway settings for routing. If DHCP is not being used, the field can be edited to change the setting.

- **DNS**

Enter the address of the primary DNS server. This option is greyed out if the address of the DNS server is set to be obtained from the DHCP server (see below).

- **Automatically obtain DNS from provider**

Obtain the DNS server details from the DHCP server.

5. Click Save. The server PC is restarted.

2.7 Checking the DHCP Address

If the server is [configured to use DHCP](#) to obtain its IP address, the details of the address are shown on the server's own command line display. This requires direct access to the server.

```
#####  
#           Applications Appliance DVD           #  
#####  
  
Running.  
Config page: http://192.168.0.220:7070  
  
Commands:  
- "login" - Log In  
  
Command: _
```


2.8 Date and Time Settings

The date and time settings used by the server PC can be changed through the server's web configuration pages.

1. [Login](#) to the IP Office Application Appliance Server's web configuration pages.
2. Select Settings.
3. Select System.
4. The IP address settings are shown in the Network section.
 - **Date**
Shows the current UTC date being used by the server. If Enable Network Time Protocol is selected, this is the date obtained from the NTP server and cannot be manually changed.
 - **Time**
Shows the current UTC time being used by the server. If Enable Network Time Protocol is selected, this is the time obtained from the NTP server and cannot be manually changed.
 - **Timezone**
In some instances the time displayed or used by a function needs to be the local time rather than UTC time. The Timezone field is used to determine the appropriate offset that should be applied to the UTC time above.
 - **Enable Network Time Protocol**
If this option is selected, the IP Office Application Appliance Server will attempt to obtain the current UTC time from the NTP servers listed in the NTP Servers list below. It will then use that time and make regular NTP requests to update the date and time. The following options are only used if Enable Network Time Protocol is selected.
 - **NTP Servers**
This field is used to enter the IP address of an NTP server or servers which should be used when Enable Network Time Protocol is selected. Enter each address as a separate line. The network administrator or ISP may have an NTP server for this purpose. A list of publicly accessible NTP servers is available at <http://support.ntp.org/bin/view/Servers/WebHome>, however it is your responsibility to make sure you are aware of the usage policy for any servers you choose. Choosing several unrelated NTP servers is recommended in case one of the servers you are using becomes unreachable or its clock is unreliable. The operating system uses the responses it receives from the servers to determine which are reliable.
 - An IP Office Release 6.1+ systems can also use NTP to obtain its system time. Using the same servers for the IP Office Application Appliance Server and IP Office system is recommended.
 - **Synchronize system clock before starting service**
When using NTP, the time obtained by the operating system is used to gradually change the server PCs hardware clock time. If this option is selected, an immediate update of the server PC clock to match the NTP obtained time is forced.
 - **Use local time source**
When using NTP, the time obtained by the operating system is used to gradually change the server PCs hardware clock time. If this option is selected, the PCs hardware clock time is used as the current time rather than the NTP time.
5. Click Save.

2.9 Upgrading Application

The IP Office application services hosted by the IP Office Application Appliance Server can be upgraded without having to reinstall or upgrade the whole server. This is done using files either uploaded to the server (local) or downloaded by the server from an HTTP folder (remote repository), see [File Repositories](#)^[36].

Once an .rpm file or files are available, the IP Office Application Appliance Server web configuration pages will list the available versions and allow switching between versions or simple upgrading to the latest version.

- **Warning**
Before upgrading or changing the version of any installed application or operating system components, you must ensure that you have read the Avaya Technical Bulletins for the IP Office Application Appliance Server. The Technical Bulletins will detail supported versions of software and known issues or additional actions required for upgrading.

Loading Application Files onto the Server

This method uploads the .rpm file for an application onto the server PC. The files can then be used to update the IP Office applications. The alternative is to use files loaded into a [remote software repository](#)^[38].

1. [Login](#)^[27] to the IP Office Application Appliance Server's web configuration pages.
2. Select the Settings menu and then the General sub-menu.
3. Check that the Local checkbox for Applications is selected.
4. Click on the Browse button and browse to the [location of the file](#)^[36] that you want to load and select the file. The file name should now be listed in the File field.
5. Click Add. The server will now start uploading the file. The progress of the upload is displayed at the bottom of the browser window.
6. Repeat the process for any other files required.
 - **Voicemail Pro**
Each version of the Voicemail Pro server application is split into separate .rpm files for the server and each of the prompt languages it supports. Unless advised otherwise you should copy or upload the full set of files to the file repository.

Upgrading/Changing Application Versions

2. [Login](#)^[27] to the IP Office Application Appliance Server's web configuration pages.
2. Select the Updates page.



Application	Current Version	Latest Available	Status	Actions
VoiceMail PRO	6.1-10.0	6.1-10.0	out of date	Change Version Update Uninstall
oneX Portal	6.1.9-52	6.1.12-69	up to date	Change Version Update Uninstall

Check Now Update All

3. The Services section displays the current version and latest available version of each IP Office application service.
 - Some applications (for example one-X Portal for IP Office) do not support upgrading or downgrading whilst currently installed. For those applications the Change Version and Update buttons remain greyed out even if there are updates available in the application file repository. These applications must first be uninstalled using the Uninstall button before the Change Version and Update buttons become useable.
4. Select one of the following actions:
 - To update an application to the latest version available, click on Update.
 - To update all applications to the latest version available, click on Update All.
 - To change the current version of an application, click on Change Version. Select the version required and click Apply.

2.10 Uninstalling an Application

The Updates menu can also be used to uninstall an IP Office application service. When uninstalled the application is removed from the list of available service unless files for reinstallation are present in the configured file repository.

1. [Login](#) ^[27] to the IP Office Application Appliance Server's web configuration pages.
2. Select the Updates page.


Application	Current Version	Latest Available	Status	Actions
VoiceMail PRO	6.1-10.0	6.1-10.0	out of date	Change Version Update Uninstall
oneX Portal	6.1.9-52	6.1.12-69	up to date	Change Version Update Uninstall

Check Now Update All

3. The Services section displays the current version and latest available version of each IP Office application service.
4. To uninstall a service, click on Uninstall.
 - If there are installation files for the application available in the application [file repository](#) ^[36], the button will change to become an Install button.
 - If there are no installation files for the application available in the file repository, the application is no longer listed.

2.11 File Repositories

The [Updates](#) ^[46] and [Web Client](#) ^[54] menus use files stored in the configured file repositories. Each repository can be either a set of files uploaded to the sever or the URL of a remote folder on an HTTP server.

You can add files to these repositories without affecting the existing operation of the server. However when the application or operating system repositories contain later versions of the files than those currently installed, a  icon is displayed on the Updates menu.

2.11.1 Source Files

Update files may be made available individually in response to particular issues or to support new IP Office releases. The files are also included on the IP Office Application Appliance Server DVD. Files can be extracted from a DVD .iso image using an application such as WinZip.

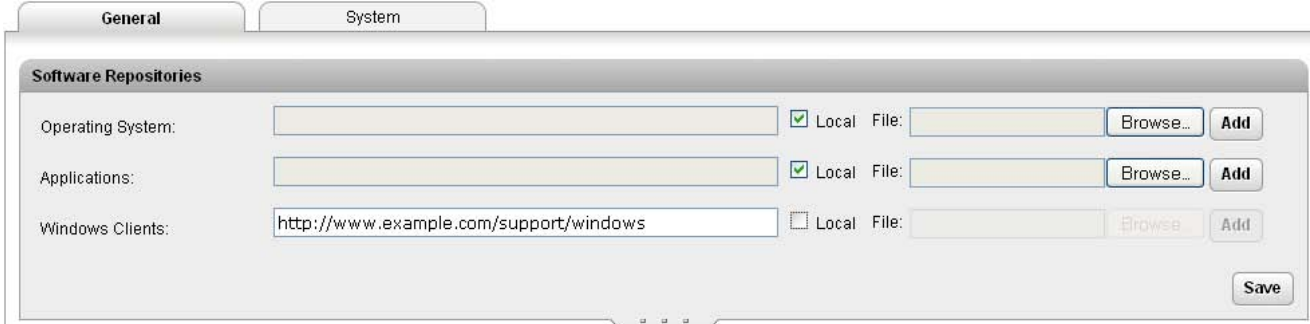
- **Warning**
Before upgrading or changing the version of any installed application or operating system components, you must ensure that you have read the Avaya Technical Bulletins for the IP Office Application Appliance Server. The Technical Bulletins will detail supported versions of software and known issues or additional actions required for upgrading.

	File Type	DVD/.iso Folder	
IP Office Application Files	Voicemail Pro	.rpm	\AVAYA\VMPro
	one-X Portal for IP Office	.rpm	\AVAYA\ONEX
Windows Client Files	.exe	\AVAYA\THICK_CL	
Operation System Files	.rpm	\CENTOS	

- **Voicemail Pro**
Each version of the Voicemail Pro server application is split into separate .rpm files for the server and each of the prompt languages it supports. Unless advised otherwise you should copy or upload the full set of files to the file repository.

2.11.2 Setting the Repository Locations

The IP Office Application Appliance Server can use either remote or local software repositories to store software update files. Separate repositories are configured for operating system updates, IP Office application installation files and Windows client files.



The files uploaded or present in the file repositories are used by the [Updates](#) ^[46] and [Windows Clients](#) ^[54] menus.

- **Repository**
If the Local option is not selected, this field is used to set the URL of a [remote HTTP file repository](#) ^[38]. Note that each repository must be different, the same URL must not be used for multiple repositories.
- **Local**
This checkbox is used to set whether the file repository used is local (files stored on the IP Office Application Appliance Server or remote (a folder on a HTTP web server specified in the Repository field).
- **File / Browse / Add**
If the Local option is selected, this field and adjacent buttons can be used to browse to a specific update file. When the file is located and selected, click Add to upload the file to the file store on the IP Office Application Appliance Server.

2.11.3 Uploading Local Files

The processes below can be used to upload files to the server if it is being used as a repository for that type of file.

Uploading Application Files

This method uploads the .rpm file for an application onto the server PC. The files can then be used to update the IP Office applications. The alternative is to use files loaded into a [remote software repository](#).

1. [Login](#) to the IP Office Application Appliance Server's web configuration pages.
2. Select the Settings menu and then the General sub-menu.
3. Check that the Local checkbox for Applications is selected.
4. Click on the Browse button and browse to the [location of the file](#) that you want to load and select the file. The file name should now be listed in the File field.
5. Click Add. The server will now start uploading the file. The progress of the upload is displayed at the bottom of the browser window.
6. Repeat the process for any other files required.
 - Voicemail Pro
Each version of the Voicemail Pro server application is split into separate .rpm files for the server and each of the prompt languages it supports. Unless advised otherwise you should copy or upload the full set of files to the file repository.

Uploading Operating System Files

This method uploads the .rpm file for an application onto the server PC. The files can then be used to update the IP Office applications. The alternative is to use files loaded into a [remote software repository](#).

2. [Login](#) to the IP Office Application Appliance Server's web configuration pages.
3. Select the Settings menu and then the General sub-menu.
3. Check that the Local checkbox for Operating System is selected.
7. Click on the Browse button and browse to the [location of the file](#) that you want to load and select the file. The file name should now be listed in the File field.
8. Click Add. The server will now start uploading the file. The progress of the upload is displayed at the bottom of the browser window.
9. Repeat the process for any other files required.

Uploading Windows Client Files

This method uploads the .rpm file for an application onto the server PC. The files can then be used to update the IP Office applications. The alternative is to use files loaded into a [remote software repository](#).

3. [Login](#) to the IP Office Application Appliance Server's web configuration pages.
4. Select the Settings menu and then the General sub-menu.
3. Check that the Local checkbox for Windows Clients is selected.
10. Click on the Browse button and browse to the [location of the file](#) that you want to load and select the file. The file name should now be listed in the File field.
11. Click Add. The server will now start uploading the file. The progress of the upload is displayed at the bottom of the browser window.
12. Repeat the process for any other files required.

2.11.4 Creating Remote Software Repositories

Alternatively to using [local files uploaded to the server](#)^[34] for updates, the server can be configured to display the versions of files available for use in remote file folders hosted on an HTTP server.

Creating an Application Update Repository

As an alternative to uploading individual .rpm files to the IP Office Application Appliance Server, sets of .rpm files can be stored in folders on an HTTP server. The IP Office Application Appliance Server is then given the URL of the folders and checks that location for possible updates.

1. Create a folder on the web server for the remote file repository. For example a folder called *Applications*.
2. If the folder is a sub-folder of the existing web site it will be browseable as part of that website's URL, ie. if the folder is a sub-folder of *wwwroot*. If the folder is on a separate path, then it must be mapped to the web server URL path, the process for this will depend on the HTTP server being used.
3. The folder directory must be browseable. For example, in IIS right -click on the folder, select Properties and ensure that Directory Browse option is selected.
4. Copy the .rpm files from their [source](#)^[36] into the folder.
5. From another PC, test that you can browse to the URL of the folder and that the list of files in the folder is displayed.
6. Login to the IP Office Application Appliance Server web configuration pages.
7. Select Settings and then General.
8. Uncheck the Local checkbox for Applications. Enter the URL of the HTTP server folder into the preceding field.
9. Click Save.
10. Select Updates.
11. If the IP Office Application Appliance Server is able to access the HTTP folder, the details of versions available will now reflect this available in that folder. The message *repository error* indicates that the IP Office Application Appliance Server was not able to connect to the folder or not able to list the files in the folder.

Creating an Windows Client Repository

The process is the similar to that shown above for application .rpm files. However a separate folder on the HTTP server must be used and the files placed in it are the .exe files used for installing the Windows applications.

Creating an Operating System Repository

The repository for operating system updates is different from those used for application updates and Windows clients. It must be a YUM repository, details of how to setup and configure a YUM repository will depend on the version of Linux being used on the HTTP server. Each time an .rpm file is added, deleted or changed, the directory must be updated using the `createrepo <folder_path>` command.

In order to host the repository on a Windows web server, the folder must be setup and maintained on a Linux server where the `createrepo` command can be used and the folder then copied to the Windows server.

2.12 Changing the Root Password

The password for the Linux root user account is specified during the IP Office Application Appliance Server software installation and currently not used again for any functions. However it may be a requirement to change the root user password occasionally.

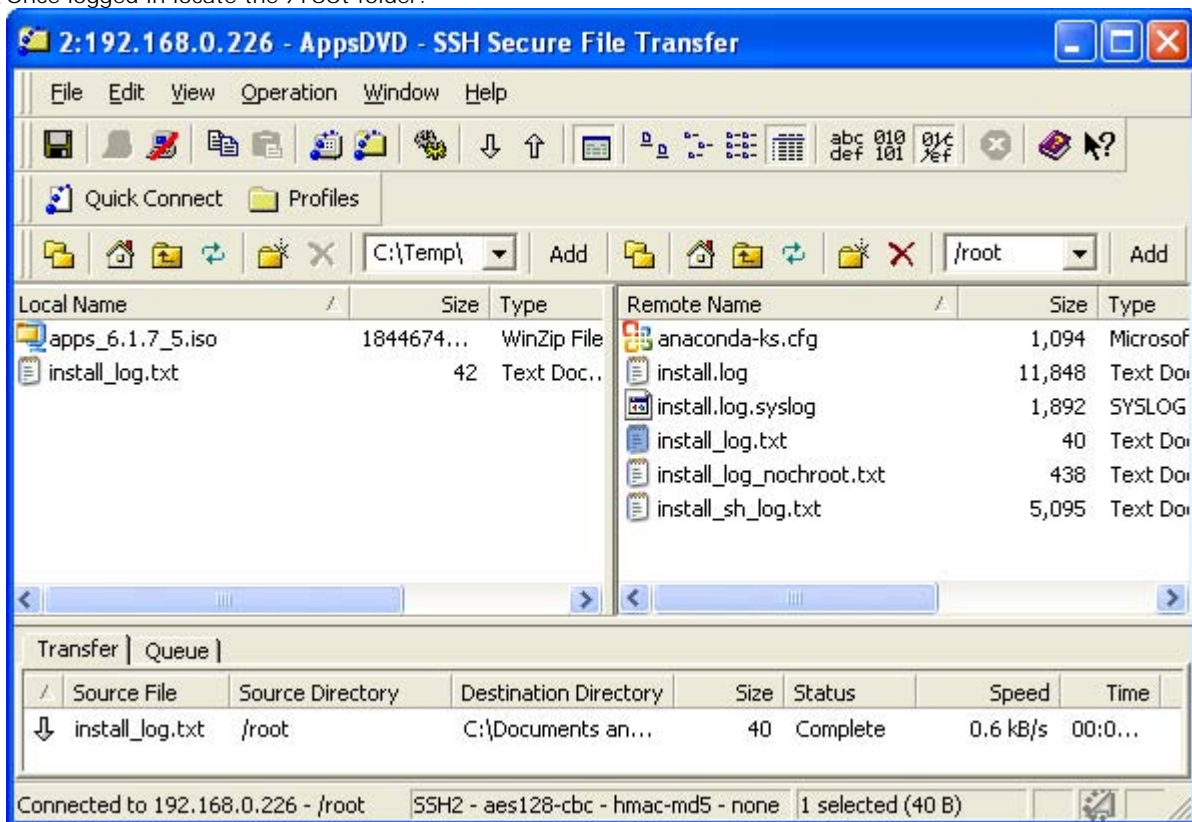
1. Login to the system's command line interface using the existing root user password. This can be done either directly on the server or remotely using an SSH client shell application.
 - Logging In at the Server
The Command: prompt should already be displayed (unless you were so silly as to not log off properly last time).
 - a. At the Command: prompt enter *login*.
 - b. At the login: prompt enter *root*.
 - c. At the Password: prompt enter the root user password.
 - Logging in Remotely Using an SSH Client Shell
The exact process will depend on the SSH client shell application being used.
 - a. The Host Name is the IP address of the IP Office Application Appliance Server.
 - b. The User Name is *root*.
 - c. The Port is *22*.
 - d. Set the Authentication Method to *Password*.
 - e. Start the connection process. When prompted, enter the existing root user password.
2. Once logged in as the root user you will see the *#* prompt. You can now change the password used for the root user.
 - a. Enter *passwd*.
 - b. When prompted enter the new password.
 - c. When prompted reenter the new password.
 - d. The command line will indicate if the password has been successfully changed.
3. Enter *logout*.

2.13 Download the Install Log File

The directory structure of files on the server can be accessed using any file transfer tool that supports SFTP/SSH. For example WS_FTP or SSH Secure Shell.

This method can be used to upload and download files from an IP Office Application Appliance Server server. This process is currently only supported for the downloading of the *install_log.txt* file created during installation of the IP Office Application Appliance Server software.

1. Start your SFTP or SSH file application and connection to the IP Office Application Appliance Server PC. The exact method will depend on the application being used.
 - a. The Host Name is the IP address of the IP Office Application Appliance Server.
 - b. The User Name is *root*.
 - c. The Protocol is *SFTP/SSH*.
 - d. The Port is *22*.
 - e. Start the connection process. When prompted, enter the root user password.
2. Once logged in locate the */root* folder.



3. Locate and download the *install_log.txt* file.

Chapter 3.

Server Menus

3. Server Menus

The IP Office Application Appliance Server web configuration pages are as follows:

- [Home](#) ^[43]
This menu gives an overview of the current status of the server and the IP Office application services it is hosting.
- [Logs](#) ^[44]
This menu has sub-menus for viewing and managing log records and log files.
 - [View](#) ^[44]
View the current log files for the server and the IP Office application services hosted by the server.
 - [Download](#) ^[45]
Create and download archive files of existing log records.
- [Updates](#) ^[46]
Display the versions of applications and components installed and the alternate versions available.
- [Settings](#) ^[49]
This menu has sub-menus for various areas of server configuration and operation.
 - [General](#) ^[49]
General server settings such as the locations of software update repositories.
 - [System](#) ^[52]
View and manage the server setting for date, time and IP address details.
- [Windows Clients](#) ^[54]
This page can be used to download the installation packages for Windows applications such as the Voicemail Pro client application.

3.1 Home

The Home menu provides an overview of the server status including the status of the IP Office services running on the server.

Applications Appliance Web Control v6.1.6(2) (rev 23492) Logged in as webcontrol | Logout | Help | **AVAYA**

Home | Logs | Updates | Settings | Windows Clients

Services

Name	Status	Up Time	Auto Start	Mem/CPU usage	Action
VoiceMail PRO	✓ running	45:26	<input checked="" type="checkbox"/>	10260 KB / 26.8 %	Stop
OneX Portal	✗ stopped	-	<input type="checkbox"/>	0 KB / 0 %	Start

Start All Stop All

Notifications

There are no notifications available

System

Info

OS: CentOS release 5.5 (Final) Shutdown

Kernel Version: 2.6.18-194.el5 Reboot

Up Time: 4 hours 21 minutes

Average CPU Load: 2.05 (1min), 1.70 (5min), 1.39 (15min)

Memory Usage Time Disk Usage

used (388.4MB)
free (478.57MB)

used (2981.94MB)
free (10646.31MB)

- Services**
 This table lists the services being supported by the server. In addition to showing the status, it also contains buttons to start/stop each service and to select whether the service should be automatically started whenever the server is started. Clicking on the link for Mem/CPU usage will display a summary graph of CPU and memory usage by the application.
- Notifications**
 This table gives a summary of the most recent log messages generated by the services running on the IP Office Application Appliance Server. More detailed information is available through the [Logs](#) page.
- System**
 This table gives a general overview of the sever status. This section also provides controls to shutdown or reboot the server.
 - Shutdown**
 Selecting this button will start a process that will stop all the IP Office services and then shutdown IP Office Application Appliance Server. This process should be used when it is necessary to switch off the IP Office Application Appliance Server for any period. Once the process has been completed, power to the server can be switched off. To restart the server, switch the server power back on.
 - Reboot**
 Selecting this button will start a process that will stop all the IP Office services and then stop and restart the IP Office Application Appliance Server and services. Note that this stops all services. To stop and restart individual IP Office application services, use the buttons shown for each service in the Services panel above.

3.2 Logs

The logs menu is divided into two sub-menus:

- [View](#)^[44]
View the current log files for the server and the IP Office application services hosted by the server.
- [Download](#)^[45]
Create and download archive files of existing log records.

3.2.1 View

This page of the web browser interface can be used to view application logs and audit log records.

The screenshot shows the AVAYA Applications Appliance Web Control interface. The top navigation bar includes 'Home', 'Logs' (highlighted), 'Updates', 'Settings', and 'Windows Clients'. The 'AVAYA' logo is on the right. Below the navigation bar, there are two tabs: 'View' and 'Download'. The 'View' tab is active, showing two log tables.

Application Log

Application	Message
VoiceMail PRO	Sep 16 17:33:03 APPSDVD vmpro [2700]: b7efe700: bool TFileHandler::Open(const TCHAR*, OpenFileMode, NewLine_Mode, bool, bool) - Error 2 (No such file or directory) opening file "etc/vmpro_user_variables.ini".
VoiceMail PRO	Sep 16 17:33:03 APPSDVD vmpro [2700]: b7efe700: bool TFileHandler::Open(const TCHAR*, OpenFileMode, NewLine_Mode, bool, bool) - Error 2 (No such file or directory) opening file "/opt/vmpro/Accounts/SMTPMAPPINGS.INI".
VoiceMail PRO	Sep 16 17:33:03 APPSDVD vmpro [2700]: b7efe700: Validating directory "/opt/vmpro/Greetings"
VoiceMail PRO	Sep 16 17:33:03 APPSDVD vmpro [2700]: b7efe700: VMRegistry - created directory "/opt/vmpro/Greetings"
VoiceMail PRO	Sep 16 17:33:03 APPSDVD vmpro [2700]: b7efe700: Validating directory "/opt/vmpro/Accounts"
VoiceMail PRO	Sep 16 17:33:03 APPSDVD vmpro [2700]: b7efe700: VMRegistry - created directory "/opt/vmpro/Accounts"
VoiceMail PRO	Sep 16 17:33:03 APPSDVD vmpro [2700]: b7efe700: Validating directory "/opt/vmpro/Wavs/Modules"
VoiceMail PRO	Sep 16 17:33:08 APPSDVD vmpro [2700]: b7efe700: VMRegistry - created directory "/opt/vmpro/Wavs/Modules"
VoiceMail PRO	Sep 16 17:33:08 APPSDVD vmpro [2700]: b7efe700: Validating directory "/opt/vmpro/Wavs/Custom"

Audit Log

Timestamp	User	Action
2010-09-16 20:50:30	webcontrol	change autostart state for VoiceMail PRO to on
2010-09-16 20:50:27	webcontrol	start VoiceMail PRO service
2010-09-16 20:43:27	webcontrol	logged in
2010-09-16 18:11:42	webcontrol	uninstall OneX Portal
2010-09-16 17:57:03	webcontrol	start OneX Portal service
2010-09-16 17:56:59	webcontrol	force stop VoiceMail PRO service
2010-09-16 17:56:53	webcontrol	change autostart state for VoiceMail PRO to off
2010-09-16 17:56:35	webcontrol	stop VoiceMail PRO service
2010-09-16 17:51:39	webcontrol	start OneX Portal service
2010-09-16 17:51:35	webcontrol	start OneX Portal service

- **Application Log**
This table lists the log records for a selected server application supported by the IP Office Application Appliance Server. The Application drop-down is used to select which records are shown. Clicking on a column header sorts the records using that column. The records shown are all those generated since the last time the log files were archived using the Create Archive command on the [Logs | Download](#)^[45] page. The level of log information output by each service is set through the individual service's administration menus, not through the IP Office Application Appliance Server menus.
- **Audit Log**
This table lists the actions performed by users logged in through the IP Office Application Appliance Server's web browser interface. Clicking on a column header sorts the records using that column.

3.2.2 Download

This page is used to create, manage and download archives of previous log files. The log files are compressed into an archive file which can then be downloaded by clicking on the link.

The archive files are in `.tar.gz` format. The log files within this type of archive file can be extracted by a range of utility applications including WinZip.

Applications Appliance Web Control v6.1.7(1) (rev 24215) Logged in as webcontrol | Logout | Help | **AVAYA**

Home **Logs** Updates Settings Windows Clients

View **Download**

Debug Files

Name	Last Modified	Size	Delete
arc_core.vmprow.15906.tar.gz	2010-09-29 10:41:35	1.0M	<input type="checkbox"/>

Logs

Name	Last Modified	Size	Delete
system_logs_2010-09-30-15-59.tar.gz	2010-09-30 15:59:47	11.6K	<input type="checkbox"/>
install_logs_2010-09-30-15-59.tar.gz	2010-09-30 15:59:47	6.2K	<input type="checkbox"/>
webcontrol_logs_2010-09-30-15-59.tar.gz	2010-09-30 15:59:47	3.5K	<input type="checkbox"/>
vmprow_logs_2010-09-30-15-59.tar.gz	2010-09-30 15:59:47	8.1K	<input type="checkbox"/>

To Create Archive Files

1. Click on the Create Archive button. Any log records recorded since the last creation of an archive are placed into archive files for each service.
2. The new archive files are listed in the web page.

To Download Archive Files

1. Any archive file can be downloaded by clicking on the file name of the archive file.
2. The process for the download and the location to which the file is downloaded will depend on the browser being used.

To Delete Archive Files

1. To delete an archive, select the Delete checkbox next to the archive file in the list. To select all the archive files click on Select All.
2. To delete the selected files, click on Delete Selected.

3.3 Updates

This page displays the different versions of IP Office Application Appliance Server operating system files and application files available in the file repository. The file repository locations are configured through the [Settings | General](#) page.

- **Warning**
Before upgrading or changing the version of any installed application or operating system components, you must ensure that you have read the Avaya Technical Bulletins for the IP Office Application Appliance Server. The Technical Bulletins will detail supported versions of software and known issues or additional actions required for upgrading.

Applications Appliance Web Control v6.1.7(1) (rev 24215) | Logged in as webcontrol | Logout | Help | AVAYA

Home | Logs | **Updates** | Settings | Windows Clients

Services

Application	Current Version	Latest Available	Status	Actions
VoiceMail PRO	6.1-10.0	6.1-10.0	out of date	<input type="button" value="Change Version"/> <input type="button" value="Update"/> <input type="button" value="Uninstall"/>
oneX Portal	6.1.9-52	6.1.12-69	up to date	<input type="button" value="Change Version"/> <input type="button" value="Update"/> <input type="button" value="Uninstall"/>

System

OS	CentOS
Version	release 5.5 (Final)
Kernel Version	2.6.18-194.el5
Last Update	-
Status	updates available

The menu is divided into 2 sections:

- [Services](#) ⁴⁷
This section displays the current version of IP Office application service files and whether update files are available.
- [System](#) ⁴⁸
This section displays the current version of the operating system and whether update files are available.

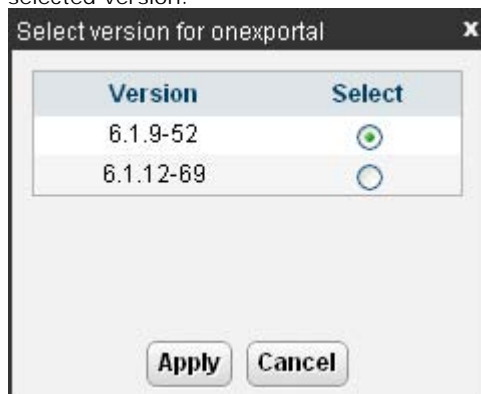
3.3.1 Services

This section shows details of the current version of an application installed and the latest version available.

Application	Current Version	Latest Available	Status	Actions		
VoiceMail PRO	6.1-10.0	6.1-10.0	out of date	Change Version	Update	Uninstall
oneX Portal	6.1.9-52	6.1.12-69	up to date	Change Version	Update	Uninstall

- The behavior of the Change Version, Update and Update All buttons in this panel depend on the following of factors:
 - The controls are not useable unless appropriate update files are available in the applications [software repository](#)^[36]. This also affect the availability of the Install button option.
 - Some applications do not support being upgraded or downgraded without first being uninstalled. The controls are not active for those applications until the application is uninstalled (and appropriate update files are available as above).
 - Voicemail Pro supports the options without having to first be uninstalled.
 - For one-X Portal for IP Office, the buttons are only available after using Uninstall to remove the existing one-X Portal for IP Office.
- Change Version

Clicking on this button shows the update files available for the related application in the server's [file repository](#)^[36]. The current version is selected. Selecting another version and then clicking Apply will upgrade or downgrade to the selected version.



- Update

Clicking on this button will start an update of the related application to the latest available version in the application [file repository](#)^[36].
- Uninstall

Clicking on this button will uninstall the selected application.

 - If there are installation files for the application available in the application [file repository](#)^[36], the button will change to become an Install button.
 - If there are no installation files for the application available in the file repository, the application is no longer listed.
- Install

This button is displayed if an application is uninstalled and update files for the application are available in the file repository.
- Check Now

Clicking this button makes the IP Office Application Appliance Server recheck the version of update files available in the file repository. Normally it does this automatically when the Updates page is loaded.
- Update All

If this button is clicked, those applications that support upgrading without being uninstalled (see above) are updated to the latest versions available in the application file repository.

3.3.2 System

This section shows details of the operating system and whether there are updates available.



- Check Now
Clicking this button makes the IP Office Application Appliance Server recheck the version of update files available in the file repository. Normally it does this automatically when the Updates page is loaded.
- Review updates
Clicking this button will display a list of the available update files. This list allows selection of which updates you want to install.



- Update All
Clicking this button will install all the available updates without going through the process of selecting with updates to install.

3.4 Settings

This menu has sub-menus for various areas of server configuration and operation.

- [General](#) ^[49]
General server settings such as the locations of software update repositories.
- [System](#) ^[52]
View and manage the server setting for date, time and IP address details.

3.4.1 General

Applications Appliance Web Control v6.1.6(2) (rev 23492) Logged in as webcontrol | Logout | Help | **AVAYA**

Home Logs ▲ Updates **Settings** Windows Clients

General System

Software Repositories

Operating System: Local File:

Applications: Local File:

Windows Clients: Local File:

Watchdog

Log files age (days):

Web Control

Application Port:

Protocol:

SNMP Support

Protocol: TCP UDP

Traps IP:

Traps Port:

Device ID:

System Description:

System Location:

Enable SNMP

Backup and Restore

Service	Action
VoiceMail PRO	<input type="button" value="Backup"/> <input type="button" value="Restore"/>

Software Repositories

The IP Office Application Appliance Server can use either remote or local software repositories to store software update files. Separate repositories are configured for operating system updates, IP Office application installation files and Windows client files.

The screenshot shows a configuration window titled 'Software Repositories' with two tabs: 'General' and 'System'. The 'General' tab is selected. The window contains three rows of configuration options:

- Operating System:** A text input field is empty. To its right is a checked checkbox labeled 'Local', followed by a 'File:' label, an empty text input field, a 'Browse...' button, and an 'Add' button.
- Applications:** A text input field is empty. To its right is a checked checkbox labeled 'Local', followed by a 'File:' label, an empty text input field, a 'Browse...' button, and an 'Add' button.
- Windows Clients:** A text input field contains the URL 'http://www.example.com/support/windows'. To its right is an unchecked checkbox labeled 'Local', followed by a 'File:' label, an empty text input field, a 'Browse...' button, and an 'Add' button.

A 'Save' button is located at the bottom right of the window.

The files uploaded or present in the file repositories are used by the [Updates](#) ^[46] and [Windows Clients](#) ^[54] menus.

- **Repository**
If the Local option is not selected, this field is used to set the URL of a [remote HTTP file repository](#) ^[38]. Note that each repository must be different, the same URL must not be used for multiple repositories.
- **Local**
This checkbox is used to set whether the file repository used is local (files stored on the IP Office Application Appliance Server or remote (a folder on a HTTP web server specified in the Repository field).
- **File / Browse / Add**
If the Local option is selected, this field and adjacent buttons can be used to browse to a specific update file. When the file is located and selected, click Add to upload the file to the file store on the IP Office Application Appliance Server.

Watchdog

- **Log files age (days)**
Sets the number of days that log file records are retained. This does not affect log file [archives](#) ^[45].

Web Control

Note that changing any of these settings will require you to login again.

- **Application Port**
Change the port used for logging in. If you change this value you must ensure that you do not set it to a value already used by another service or application.
- **Protocol**
Select the protocol used for connection. The options are http or https.

SNMP Support

The IP Office Application Appliance Server can send SNMP event trap information to a specified SNMP server.

- **Protocol**
Sets the protocol, TCP or UDP, to be used for the SNMP messages.
- **Traps IP**
Sets the target IP address for the SNMP messages.
- **Traps Port**
Sets the target port for the SNMP messages.
- **Device ID**
Sets the device ID to be used in the SNMP messages
- **System Description**
Sets the system description value included in SNMP messages.
- **System Location**
Sets the system location value included in SNMP messages.
- **Enable SNMP**
This option must be selected to enable SNMP

Backup and Restore

These controls allow you to backup and restore the application settings being used selected IP Office application servers. Note that this is a simple backup and restore of current application settings. For complete backup and restore functions including user information and files, the separate backup and restore functions of the applications should be used.

3.4.2 System

These settings allow the IP address and time settings specified during installation to be changed.

Applications Appliance Web Control v6.1.6(2) (rev 23492) | Logged in as webcontrol | Logout | Help | AVAYA

Home | Logs | Updates | **Settings** | Windows Clients

General | **System**

Network

Network Interface: eth0

Host Name: APPSDVD

Use DHCP

IP Address: 192.168.0.7

Subnet Mask: 255.255.255.0

Default Gateway:

DNS: 192.168.0.1

Automatically obtain DNS from provider

Save

Datetime

Date: 2010-16-09

Time: 21 : 26

Timezone: Europe/London

Enable Network Time Protocol

NTP Servers: 0.centos.pool.ntp.org
1.centos.pool.ntp.org
2.centos.pool.ntp.org

Synchronize system clock before starting service

Use local time source

Save

Network

- **Network Interface**
If the server PC has multiple ethernet interfaces, this drop down allows selection of which of the interfaces is currently being configured by the web form.
- **Host Name**
Sets the host name that the IP Office Application Appliance Server should use. This setting requires the local network to support a DNS server.
- **Use DHCP**
If selected, the IP address, subnet mask and default gateway information is obtained by the server making DHCP requests. The related fields are greyed out and cannot be set manually.
- **IP Address**
Displays the IP address set for the server. If DHCP is not being used, the field can be edited to change the setting.
- **Subnet Mask**
Displays the subnet mask applied to the IP address. If DHCP is not being used, the field can be edited to change the setting.
- **Default Gateway**
Displays the default gateway settings for routing. If DHCP is not being used, the field can be edited to change the setting.
- **DNS**
Enter the address of the primary DNS server. This option is greyed out if the address of the DNS server is set to be obtained from the DHCP server (see below).
- **Automatically obtain DNS from provider**
Obtain the DNS server details from the DHCP server.

Date Time

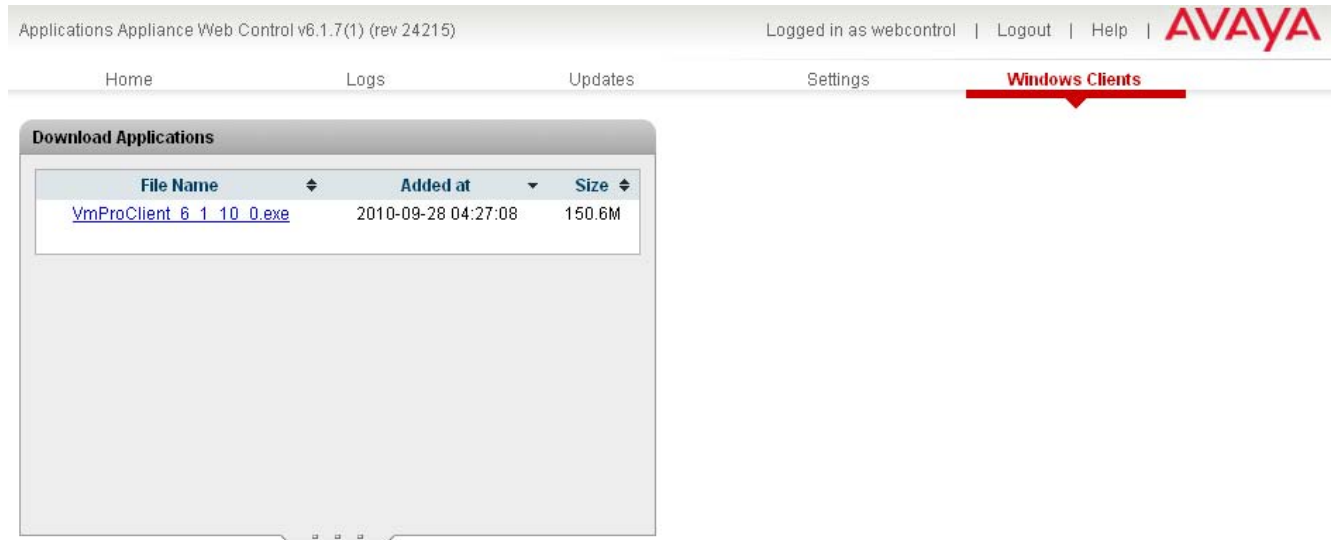
These settings are used to set or obtain a UTC date and time value for use by the IP Office Application Appliance Server and services.

- **Date**
Shows the current UTC date being used by the server. If Enable Network Time Protocol is selected, this is the date obtained from the NTP server and cannot be manually changed.
- **Time**
Shows the current UTC time being used by the server. If Enable Network Time Protocol is selected, this is the time obtained from the NTP server and cannot be manually changed.
- **Timezone**
In some instances the time displayed or used by a function needs to be the local time rather than UTC time. The Timezone field is used to determine the appropriate offset that should be applied to the UTC time above.
- **Enable Network Time Protocol**
If this option is selected, the IP Office Application Appliance Server will attempt to obtain the current UTC time from the NTP servers listed in the NTP Servers list below. It will then use that time and make regular NTP requests to update the date and time. The following options are only used if Enable Network Time Protocol is selected.
 - **NTP Servers**
This field is used to enter the IP address of an NTP server or servers which should be used when Enable Network Time Protocol is selected. Enter each address as a separate line. The network administrator or ISP may have an NTP server for this purpose. A list of publicly accessible NTP servers is available at <http://support.ntp.org/bin/view/Servers/WebHome>, however it is your responsibility to make sure you are aware of the usage policy for any servers you choose. Choosing several unrelated NTP servers is recommended in case one of the servers you are using becomes unreachable or its clock is unreliable. The operating system uses the responses it receives from the servers to determine which are reliable.
 - An IP Office Release 6.1+ systems can also use NTP to obtain its system time. Using the same servers for the IP Office Application Appliance Server and IP Office system is recommended.
 - **Synchronize system clock before starting service**
When using NTP, the time obtained by the operating system is used to gradually change the server PCs hardware clock time. If this option is selected, an immediate update of the server PC clock to match the NTP obtained time is forced.
 - **Use local time source**
When using NTP, the time obtained by the operating system is used to gradually change the server PCs hardware clock time. If this option is selected, the PCs hardware clock time is used as the current time rather than the NTP time.

3.5 Windows Clients

This page is used to download files for use on the local PC. For example the Voicemail Pro client used to administer the Voicemail Pro server application.

The file repository location is configured through the [Settings | General](#) page.



The screenshot shows the Avaya Applications Appliance Web Control interface. At the top, it displays 'Applications Appliance Web Control v6.1.7(1) (rev 24215)' and 'Logged in as webcontrol | Logout | Help | AVAYA'. Below this is a navigation menu with 'Home', 'Logs', 'Updates', 'Settings', and 'Windows Clients' (which is highlighted with a red underline). The main content area is titled 'Download Applications' and contains a table with the following data:

File Name	Added at	Size
VmProClient 6 1 10 0.exe	2010-09-28 04:27:08	150.6M

Index

A

Address
 DNS 31, 52
 IP 31, 52
 Administrator
 Login 20
 Application
 Install 34
 Uninstall 35
 Upgrade 34
 Application Logs 44
 Archive 45
 Audit Log 44

B

Backup 49

C

CentOS 8
 Compatibility 8
 Change Password
 Root Password 39
 Web Browser Password 28
 Clients 54
 Compatibility 8
 Configuration
 one-X Portal for IP Office 20
 Voicemail Pro 23
 CPU
 Usage 43
 Create Archive 45

D

Date 33, 52
 Default
 Gateway 31, 52
 Password 18, 27
 DHCP 31, 52
 Disk
 Usage 43
 Disk Space 8
 DNS 31, 52
 Download
 Logs 45
 Windows Clients 54
 DVD Drive 8

G

Gateway 31, 52
 General 49

H

Hard Disk 8
 Headless 8
 Home 43
 Host Name 31, 52

I

Initial configuration 20
 Install
 Application 34
 IP Office Application Appliance Server 11
 Service 34
 IP Address 31, 52
 IP Office
 Check 20
 Select 20

L

Linux 8
 Local 49
 Log Files Age 49
 Logging In 18, 27
 Login
 Administrator 20
 Logs 44
 Application 44
 Archive 45
 Audit 44
 Download 45
 Log Files Age 49

M

Mask 31, 52
 Memory 8
 Usage 43
 Menu
 Download 45
 General 49
 Home 43
 Logs 44
 Logs Download 45
 Logs View 44
 Services 47
 Settings 49
 System 48, 52
 Updates 46
 Updates Services 47
 Updates System 48
 View 44
 Windows Clients 54

N

Network Time Protocol 33, 52
 Notifications 43
 NTP 33, 52

O

one-X Portal for IP Office
 Configuration 20
 Operating System 8

P

Passwd 39
 Password
 Change 20
 Root Password 39
 Web Browser Password 28
 PC Requirements 8
 Port
 Web Control 49

Processor 8

R

RAM 8
 Usage 43
 Reboot 30, 43
 Remote Software Repositories 38
 Repositories 38
 Repository 49
 Requirements 8
 Restore 49

S

Server
 NTP 33, 52
 Reboot 30, 43
 Shutdown 30, 43

Service
 Install 34
 Uninstall 35
 Upgrade 34

Services 47
 Start 43
 Starting 29
 Status 43
 Stop 43
 Stopping 29

Settings 49

SFTP 40

Shutdown 30, 43

SNMP 49

SNMP Support 49

Software
 Repositories 38

Software Repositories 49

Specification 8

SSH access 40

Start Services 43

Status 43

Stop Services 43

Subnet Mask 31, 52

System 48, 52

T

Time
 Timezone 33, 52

U

Uninstall
 Application 35
 Service 35

Update
 Services 47
 System 48

Updates
 Services 46
 System 46

Upgrading Applications 34

Usage
 CPU 43
 Disk 43
 Memory 43

V

View Logs 44

Voicemail Pro
 Configuration 23
 Limitations 7, 23

W

Watchdog 49

Web Control Port 49

Windows Clients 54

Performance figures and data quoted in this document are typical, and must be specifically confirmed in writing by Avaya before they become applicable to any particular order or contract. The company reserves the right to make alterations or amendments to the detailed specifications at its discretion. The publication of information in this document does not imply freedom from patent or other protective rights of Avaya or others.

All trademarks identified by the ® or ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners.

This document contains proprietary information of Avaya and is not to be disclosed or used except in accordance with applicable agreements.

© 2010 Avaya Inc. All rights reserved.