Retek® Predictive Application Server™

11.0.3

Installation Guide

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Customer Support

Customer Support hours:

Customer Support is available 7x24x365 via e-mail, phone, and Web access.

Depending on the Support option chosen by a particular client (Standard, Plus, or Premium), the times that certain services are delivered may be restricted. Severity 1 (Critical) issues are addressed on a 7x24 basis and receive continuous attention until resolved, for all clients on active maintenance.

Contact Method	Contact Information
Internet (ROCS)	www.retek.com/support Retek's secure client Web site to update and view issues
E-mail	support@retek.com
Phone	US & Canada: 1-800-61-RETEK (1-800-617-3835) World: +1 612-587-5800 EMEA: 011 44 1223 703 444 Asia Pacific: 61 425 792 927
Mail	Retek Customer Support Retek on the Mall 950 Nicollet Mall Minneapolis, MN 55403

When contacting Customer Support, please provide:

- Product version and program/module name.

- Functional and technical description of the problem (include business impact).

- Detailed step by step instructions to recreate.

- Exact error message received.

- Screen shots of each step you take.

Contents

Chapter 1 – Introduction

Welcome to the Retek Predictive Application Server (RPAS) Installation Guide. This chapter outlines the contents of this guide, discusses the updated components with respect to the previous version, and defines commonly used notations and terms.

How to use this guide

This guide describes the installation procedure for the Retek Predictive Application Server software.

RPAS is available at the Retek Fulfillment Download Center at http://fulfillment.retek.com. A user name and password are required to access the site. This guide accompanies the software and provides step-by-step procedures to complete the installation of the client, server, and any other utility or software needed.

This installation guide is organized as follows:

- Chapter 1: Using this guide and terminology.

- Chapter 2: An overview of the installation process and the contents of the installation package.

- Chapter 3: Discusses Acumate installation on Windows NT/2000 and various UNIX platforms.

- Chapter 4: Discusses installation of the RPAS server components on Windows NT/2000 and various UNIX platforms.

- Chapter 5: Discusses the RPAS client installation on Windows platforms.

- Chapter 6: Explains how to install the configuration tools.

- Chapter 7: Explains how to perform a Web installation.

Notations and terms

The following notations and terms are used throughout this document to make it easier to read and understand.

Notations

These are the special notations used in this guide:

- **Note:** Indicates a note with additional information to clarify text.

- NT: Indicates that the following text is relevant only if the application is installed on a machine running Windows NT/2000.

- UNIX: Indicates that the following text is relevant only if the server software is installed on a machine running UNIX.

- HPUX: Indicates that the following text is relevant only if the server software is installed on a machine running HPUX.

- AIX: Indicates that the following text is relevant only if the server software is installed on a machine running AIX.

- Solaris: Indicates that the following text is only relevant if the server software is installed on a machine running Solaris.

- `Courier New font:` Indicates a directory, user input, or command that you type in the command line.

Terms

The following terms are used in this guide:

- RPAS: Retek Predictive Application Server provides the foundation for Retek applications such as Retek Demand Forecasting (RDF) or Assortment and Space Optimization (ASO). RPAS does not include any business logic, but it enables the applications to store, manipulate and retrieve data. It provides the applications a standard interface based on wizards, templates, workbooks and batch processes.

- RPAS Application: The software that uses RPAS. RPAS applications are added on to RPAS domains as separate modules. All the business logic is encapsulated in the application. An RPAS domain can support applications. Examples of RPAS applications are RDF and ASO.

- RPAS Domain: The collection of server side directories and files containing data and procedures that comprise the RPAS. Refer to the *RPAS 11.0.3 Configuration Guide* for more information.

- RPAS Client: The Windows client interface used by users of a RPAS domain. A system administrator may perform work in a domain using the RPAS Client or using Acumate commands to directly manipulate the domain.

- RPAS configuration tools: The tools used to configure an RPAS application. See the *RPAS 11.0.3 Configuration Guide* for more information.

Chapter 2 – Installation overview

In order to use RPAS applications, you must install the server and client components in the appropriate locations. If you will be using the configuration tools, you must install them, as well.

If you will be using the configuration tools, your installation will correspond to one of the following scenarios:

- The server components (Acumate, the RPAS server, and the configuration tools) are installed on a UNIX server. The RPAS client is installed on various workstations running a compatible version of Windows. Additionally, the configuration tools must be installed on the workstations of those users who will be creating RPAS configurations.

- The server components, the RPAS client, and the configuration tools are installed on a single workstation running Windows NT/2000.

- The server components (Acumate, the RPAS server, and the configuration tools) are installed on a Windows NT/2000 server. The RPAS client is installed on various workstations running a compatible version of Windows. Additionally, the configuration tools must be installed on the workstations of those users who will be creating RPAS configurations.

If you are not using the configuration tools, your installation will correspond to one of the following scenarios:

- The server components (Acumate and the RPAS server) are installed on a UNIX server. The RPAS client is installed on various workstations running a compatible version of Windows.

- The server components and the RPAS client are installed on a single workstation running Windows NT/2000.

- The server components are installed on a Windows NT/2000 server. The RPAS client is installed on various workstations running a compatible version of Windows.

This chapter provides:

- A list of the system requirements

- An overview of the installation contents

System requirements

The basic client and server components are required for RPAS 11.0.3.

Server

Supported Platform	Versions Supported
Solaris (SPARC)	8
HPUX	11.x
AIX	5.x
Windows NT/2000	NT 4.0, Service Pack 3 or later

- You will also need to install Java Run-time Environment (JRE) v1.4 if you are installing the configuration tools. For AIX, you must use the 32-bit version of Java v1.4.

- If you are installing the RPAS server on Windows NT/2000, you must install the MKS Toolkit in order to emulate UNIX commands. Go to www.mks.com for more information about this product.

RPAS client

- Microsoft Windows 98, 2000, or XP

- Microsoft Windows NT 3.51 or higher

Minimum practical desktop configurations for either platform is:

- CPU: Pentium 233 or better

- Memory: 64MB RAM

- Disk: 15 MB for install, no additional data saved on client.

- Monitor / Video Card: Minimum resolution of 800x600 (strongly suggest higher resolution)

Configuration tools client

- Microsoft Windows NT, 2000, or XP

- Java Run-time Environment (JRE) v1.4

- CPU: Pentium 233 or better

- Memory: 256MB RAM minimum

- Disk: 23 MB for install, plus space for configurations.

- Monitor / Video Card: Minimum resolution of 800x600 (strongly suggest higher resolution)

Archive contents

The client and server software components are provided in a single archive, which includes the following directories:

- Acumate

- RpasServer

- Client

- Tools

The archive is called **ARPOplatform.11.0.3.<Operating System>.zip**. It should be extracted to a staging directory that will be referred to as [RPAS Installation] for the remainder of the installation guide.

Acumate directory

The Acumate directory contains the Acumate installation files.

Note: You should only install from this directory if you have not installed Acumate on your server before. There is no Acumate upgrade required for RPAS 11.0. Any version of Acumate installed with RPAS 9.3 or 9.4 is compatible.

RpasServer directory

The RpasServer directory contains the installation files for the RPAS server.

Client directory

The Client directory includes Windows setup files. The client setup files can be copied on to either floppies or CDs and launched locally, or they can be launched from a network location.

Tools directory

The Tools directory contains the .zip file containing the RPAS configuration tools.

Chapter 3 – Acumate installation

This chapter describes the step-by-step procedure for installing Acumate on UNIX and NT platforms. For AIX, HPUX, or Solaris servers, see UNIX Acumate installation. For Windows NT/2000 servers, see

Windows NT/2000 Acumate installation.

Important: Any version of Acumate installed with RPAS 9.3 or 9.4 is compatible with RPAS 11.0. If you have already installed Acumate, you can skip this chapter and go to Chapter 4.

Note: During the installation of Acumate, you will need to enter a license number for your server installation. Retek Customer Support can provide this license number once you are given the Acumate serial *during the installation process*. Follow the steps below for your server type and call Retek Customer Support during normal operating hours.

UNIX Acumate installation

The following series of steps installs Acumate onto a UNIX platform.

Note: If you are installing Acumate and the RPAS server in an NT environment, go to

Windows NT/2000 Acumate installation.

Create the user account

- Create the UNIX user `acusys`. It can be assigned to any UNIX group.

Install Acumate

1   Log on to the UNIX system using the acusys user name.

2   Create the directory to copy the Acumate files into. The location and the name of the directory are up to the system administrator's preferences. This directory is henceforth referred to as the [ACUDIR] directory.

3   Restore the files from the following directory from the archive:

```
[RPAS Installation]\Acumate
```

into the [ACUDIR] directory.

4   Change the permissions on the entire [ACUDIR] directory to be executable:

```
chmod –R 755 /[ACUDIR]
```

5   Confirm that the following files have been restored to the [ACUDIR] directory:

- acumate.tar.Z

- install_acumate.ksh

6   Go into the [ACUDIR] directory and run the command:

```
./install_acumate.ksh
```

The warning messages that appear are NORMAL. These messages indicate older terminals that are no longer supported.

7   When prompted to enter license information, select Y. Enter the license code provided by Retek.

8   Type exit at the ACUMATE COMMAND prompt.

9   When prompted for verification, enter Y. The [ACUDIR]/bin directory should now contain updated aculogin.sh and aculogin.csh files.

10 Go into the [ACUDIR]/bin directory and source the shell file aculogin.sh by entering the command:

```
. ./aculogin.sh
```

11   Exit the session.

Windows NT/2000 Acumate installation

Follow these steps to install Acumate on Windows NT/2000 server.

Note: If you are installing Acumate and the RPAS server on a UNIX platform, go to UNIX Acumate installation.

1   Run Setup.exe located in the [RPAS Installation]/Acumate directory. The program initializes the setup routines.

2   The welcome page is displayed. Click **Next**.
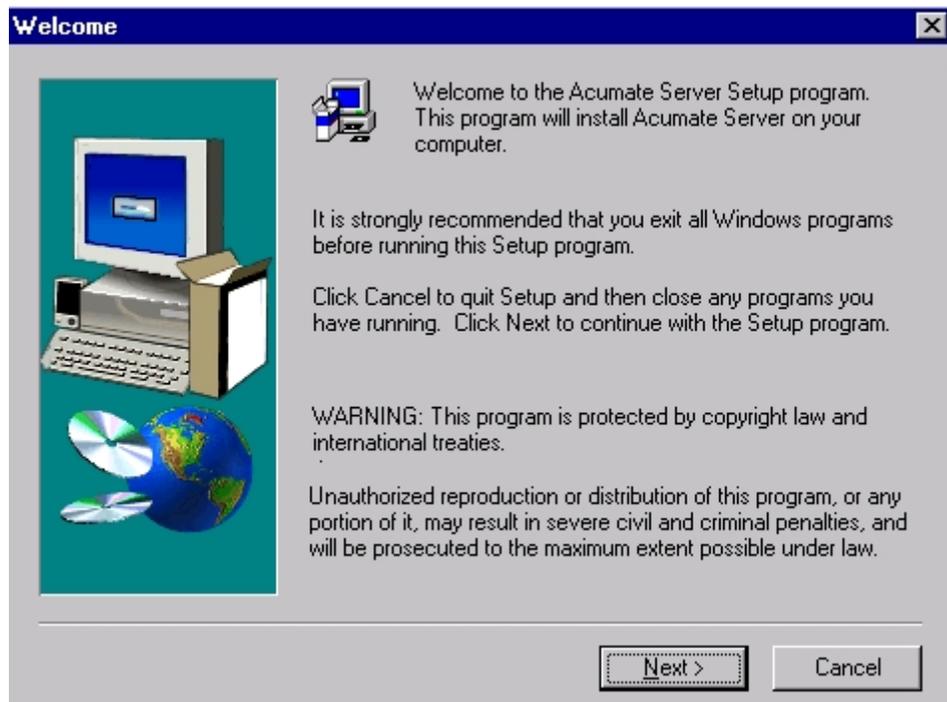
3   Confirm or change the destination folder for Acumate Server client programs. Click **Next**.

Choose Destination Location ✕

Setup will install Acumate Server in the following folder.

To install to this folder, click Next.

To install to a different folder, click Browse and select another folder.

You can choose not to install Acumate Server by clicking Cancel to exit Setup.

Destination Folder

C:\Program Files\Acumate Server   Browse...

< Back   Next >   Cancel
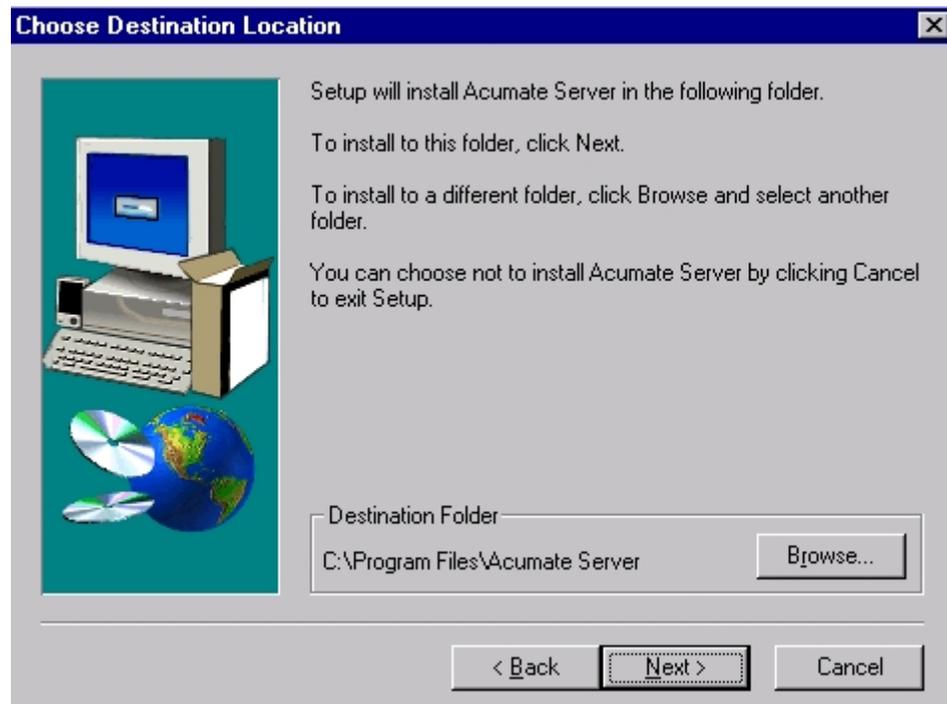
4   Confirm or change the Program Folder in which to add the program icon.
     The default value is Acumate Server. Click **Next**.

Select Program Folder ✕

Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.

Program Folders:

Acumate Server

Existing Folders:

Administrative Tools (Common)
CRT
Dell Accessories
Dell Inspector
Microsoft Reference
Startup

< Back   Next >   Cancel

5   You are asked whether you intend to install Acumate Server as an NT
    service. Click **No**.

Question

? Do you intend to install the Acumate Server as an NT service?

Yes   No
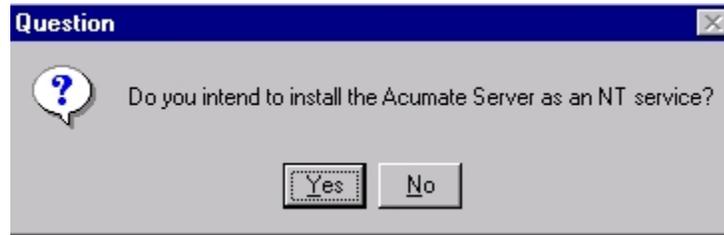
6   You are informed that the Acumate Server installation is complete. Click
    Finish.

Setup Complete

Setup has finished installing Acumate Server on your computer.

Click Finish to complete Setup.

< Back   Finish
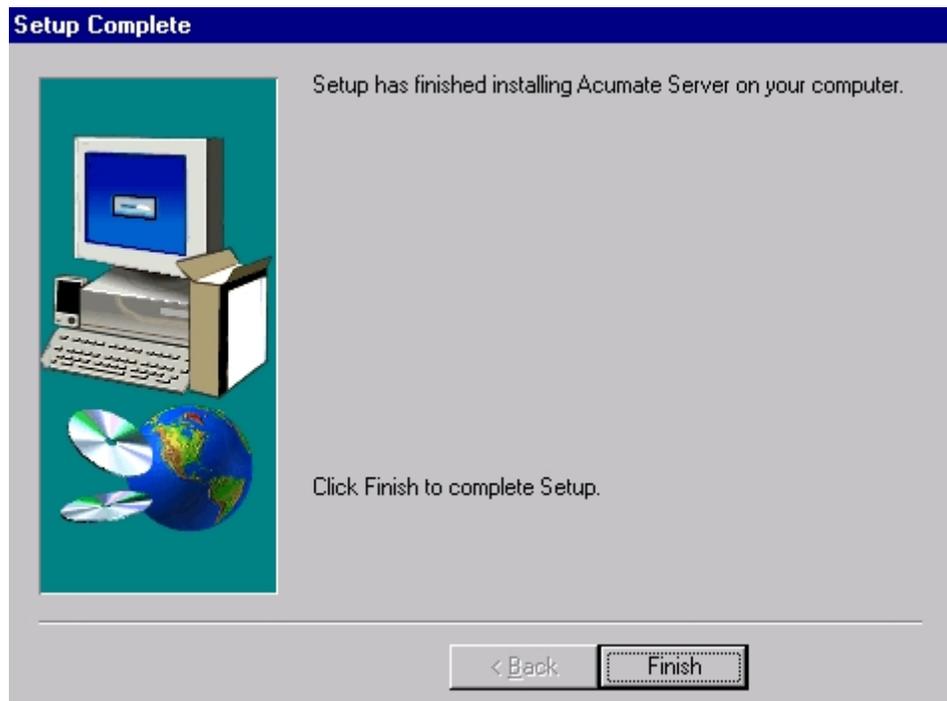
7   Once the Acumate Server installation has completed, double-click on the
    Acumate icon located in the Acumate Server program folder (which has been
    created by the installation process). This allows you to license the Acumate
    database.
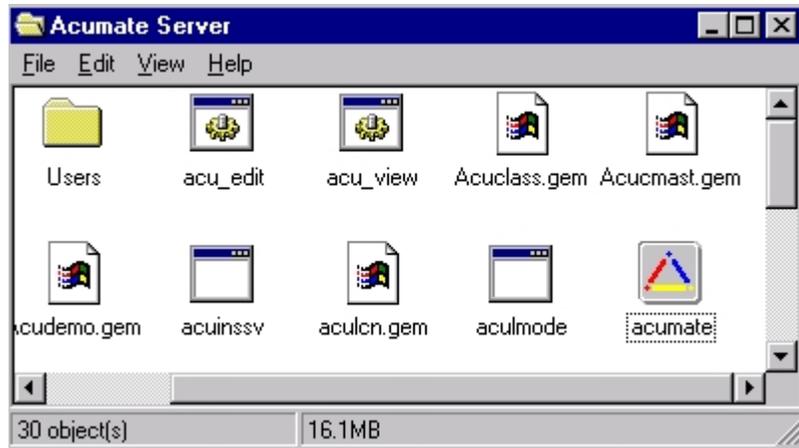
8   Acumate prompts you for a license code that corresponds to the code: "xxxx xxxx xxxx xxxx" (upper- and lower-case sensitive). Enter the code and click **OK**.
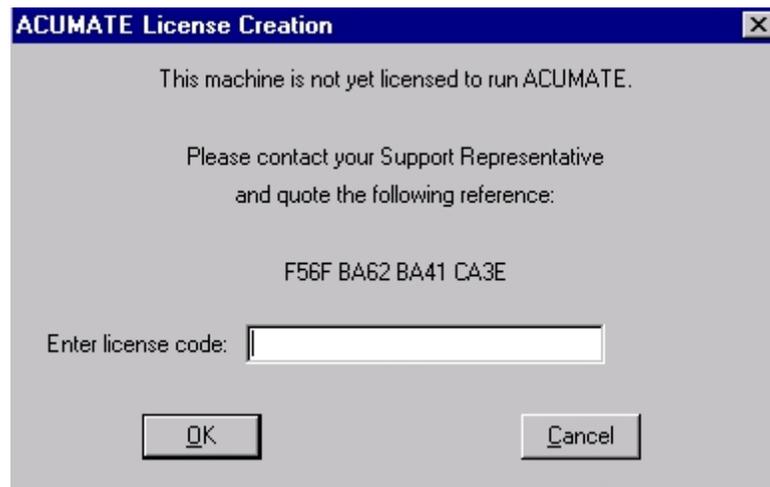
Note: To get a license code, you need to call Retek Customer Support at +1-800-61-RETEK. Tell the Customer Support Consultant that you need to obtain an Acumate license from Kenan Technology. You will need to provide the Acumate serial number that is provided. An appropriate license code: "xxxx xxxx xxxx xxxx" will be provided (upper- and lower-case sensitive). Enter the license code and click **OK**.

9   After you enter the license code, the following window is displayed:

```
ACUMATE
Exit  SuperQuit  List Databases  List Objects  Select Options  Help Index




                            ACUMATE (TM)

             Copyright Kenan Systems Corporation. 1992-1998
              ACUMATE is a trademark of Kenan Systems Corp.

WELCOME TO ACUMATE ES2.1, MIAOGUI, AT 17:05:03 ON 28-May-1998



ACUMATE COMMAND?

|
```
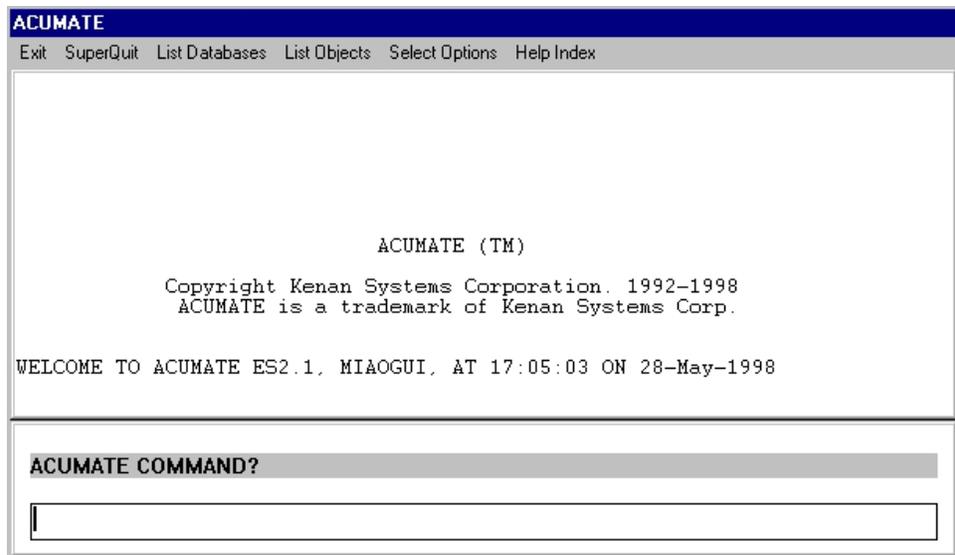
10 At the command prompt, enter the command: `Exit`.

11 Verify that PATH and ACUPATH are set correctly:

   a   Go to Start   Settings   Control Panel.

   b   Double-click on the System icon.

   c   Click on the Environment tab.

System Properties

Startup/Shutdown | Hardware Profiles | User Profiles
General | Performance | Environment

System Variables:

Variable	Value
ACUPATH	C:\Program Files\Acumate Server
ComSpec	C:\WINNT\system32\cmd.exe
HOME	C:/
NUMBER_OF_PR...	1
Path	C:\Program Files\Acumate Server;c:\mksnt;...

User Variables for sellamh:

Variable	Value
ClassPath	C:\Program Files\Exceed.nt\hcljrcsv.zip;C:\P...
TEMP	C:\TEMP
TMP	C:\TEMP

Variable:

Value:

Set   Delete

OK   Cancel   Apply
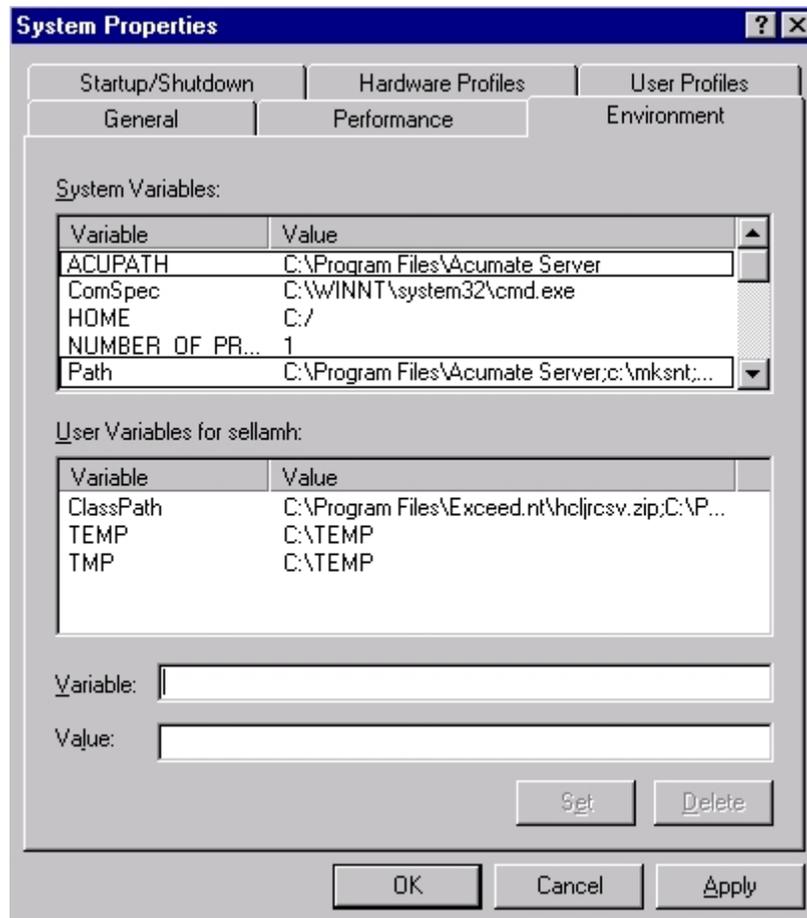
d   Scroll down the System Variables and verify that ACUPATH is set to
    C:\Acumate Server and PATH includes C:\Acumate Server.

e   Create/update these variables if they are not set correctly.

    The Acumate database is now configured and installed.

Chapter 4 – RPAS server installation

This chapter explains how to install the RPAS server on either UNIX or Windows NT/2000.

If you are installing RPAS on Solaris, HPUX or AIX, see UNIX RPAS server installation.

If you are installing RPAS on Windows NT or Windows 2000, see Windows NT/2000 RPAS server installation.

UNIX RPAS server installation

Follow these steps to install the RPAS server components in a UNIX environment.

Note: If you are installing the RPAS server in an NT environment, go to Windows NT/2000 RPAS server installation.

Install the RPAS server

1   As the acusys user, create the directory to copy the RPAS server files into. The location and the name of the directory are up to the system administrator's preferences. This directory is henceforth referred to as the [RPASDIR] directory.

2   Restore the files from the following directory from the archive:

```
[RPAS Installation]\RpasServer
```

into the [RPASDIR] directory.

3   Change the permissions on the entire [RPASDIR] directory to be executable:
```
chmod –R 750 /[RPASDIR]
```

4   Confirm that the following files have been restored to the [RPASDIR] directory:

- rpas.tar.Z

- install_rpas.ksh

5   Run the **install_rpas.ksh** file, which will uncompress and untar the rpas.tar.Z file.

The following sub-directories should be extracted from the rpas.tar.Z file directly into the installation directory.

- applib

- bin

- domain

- lib

- rpaslogin.ksh (file)

- rpasVersion.ksh (file)

6   Change the permissions on the entire [RPASDIR] directory to be executable:

```
chmod –R 750 [RPASDIR]
```

Edit the acusys profile

You must edit the acusys profile to set up the environment variables needed by RPAS and to run the Acumate and RPAS login scripts.

You must edit the acusys profile to include the RPAS_HOME environment variable, which indicates the root directory for the RPAS server installation above. The .profile file is located in the home directory of the acusys userid (/home/acusys). To change directly to the acusys home directory after logging in, you can use the UNIX command **cd ~**

For example:

```
RPAS_HOME=/retek/RpasServer
export RPAS_HOME
. $RPAS_HOME/rpaslogin.ksh
. /retek/Acumate/bin/aculogin.sh
```

The rpaslogin.ksh file adds RPAS_HOME to PATH and sets the following additional variable for the respective platform:

Platform	Variable
SUN	LD_LIBRARY_PATH
AIX	LIBPATH
HPUX	SHLIB_PATH

You will need to execute your .profile to make these new environment variables become active. You can either exit and restart your UNIX session again, or use the following UNIX command:

```
.   .profile
```

This step is very important before you continue to the remaining steps.

Log back into the server as acusys to execute the .profile. Use the commands below to validate your environment settings:

```
echo $RPAS_HOME
echo $PATH
```

Windows NT/2000 RPAS server installation

Follow these steps to install the RPAS server in a Windows NT or Windows 2000 environment.

Note: If you are installing the RPAS server on a UNIX platform, go to UNIX RPAS server installation.

Install the RPAS server

1   Create the directory to copy the RPAS server files into. The location and the name of the directory are up to the system administrator's preferences. This directory is henceforth referred to as the [RPASDIR] directory.

2   Restore the files from the following directory from the archive:

```
[RPAS Installation]\RpasServer
```

into the [RPASDIR] directory.

3   Double-click on the **rpas.zip** file to unzip it. Using WinZip, extract the files to the installation path, making sure the "Use folder names" box is checked. The RPAS directory should now contain the following sub-directories and files:

- applib

- bin

- domain

- lib

- rpaslogin.ksh (file)

- rpasVersion.ksh (file)

Update the environment variables

1   From the Windows Start menu, go to Settings > Control Panel > System > Advanced tab. Click on the Environment Variables button.

2   Under the *System variables* section, select New.

a   In the Variable Name field, type **RPAS_HOME**

b   In the Variable Value field, type the path to the root of the RPAS installation.

c   Click OK to add the new variable.

3   Click on the **Path** environment variable, select Edit. Append the complete paths for RPAS_HOME, including its respective **lib** and **bin** sub-directories as below:

```
<RPAS_HOME>\bin;<RPAS_HOME>\lib;
```

4   Select OK to save your changes.

5   Open a new Command Prompt script and type **env** to display the current environment variable settings.

Chapter 5 – RPAS client installation

This chapter describes the installation of the RPAS client on Windows machines. It includes information on making install disks and outlines the installation procedure.

Note: Before you can use the RPAS client, you must configure it to connect to an RPAS domain. For more information about domains and configuring the RPAS client, refer to the *RPAS 11.0.3 Configuration Guide*.

Make RPAS client files accessible

1 Create a staging directory on the network to copy the RPAS client files into.

   The location and the name of the directory are up to the system administrator's preferences. This directory is henceforth referred to as the [RPASCLIENT] directory.

2 Restore the file from the following directory from the archive on the server:

   ```
   [RPAS Installation]/Client
   ```

   into the [RPASCLIENT] directory.

RPAS client installation procedure

The RPAS client installation procedure is the same for all of the RPAS applications. Below are the step-by-step instructions for installing the application onto a PC.

1   Run the setup.exe file found in the following directory:

    [RPASCLIENT]\CD\Disk1

2   The welcome page is displayed. Click **Next**.

3   Confirm or change the destination folder for the RPAS Client. The default
    value is `c:\Program Files\Retek Inc\Retek Predictive Solutions`. Click **Next**.
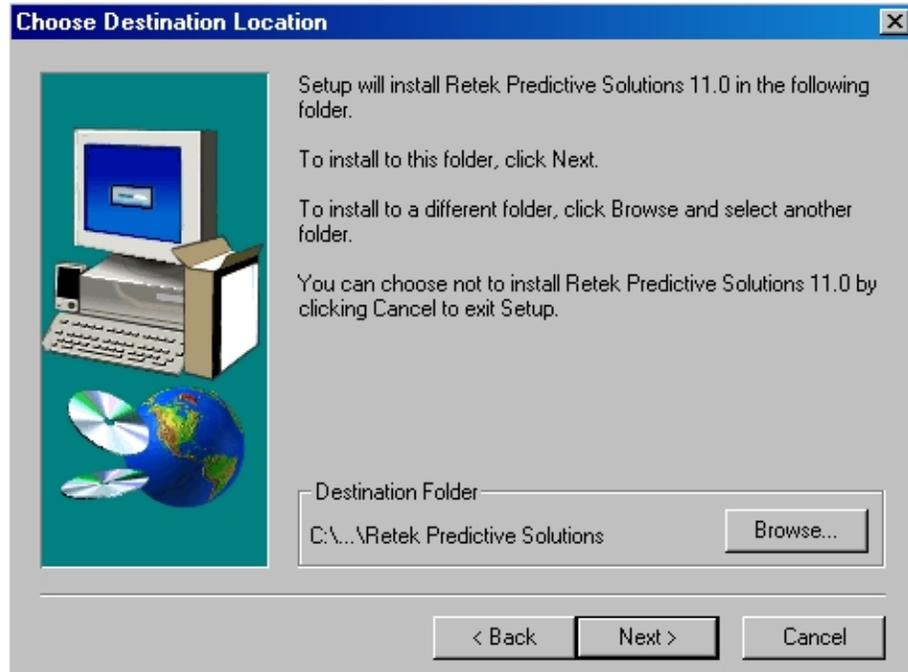
4   Confirm or change the Program Folder in which to add the program icon.
    The default value is `Retek Predictive Solutions`. Click **Next**.

5   The setup program exits after the installation is performed.

Chapter 6 – Configuration tools installation

Note: If you are not using the configuration tools, either to create RPAS configurations or to install a configuration created using the tools, you can skip this chapter.

This section explains how to install the RPAS configuration tools on UNIX and Windows.

If you will be installing an RPAS configuration that was created using the configuration tools, you must install the configuration tools on the machine where the RPAS server is located. Refer to "Chapter 10 – Building an RPAS domain" in the *RPAS 11.0.3 Configuration Guide* for more information

If you will be using the configuration tools to create RPAS configurations, you must install them on any workstations that will be used to create those configurations. Refer to the *RPAS 11.0.3 Configuration Guide* for more information.

Installing the configuration tools on a UNIX server

You must install the configuration tools on the machine where the RPAS server is located. Follow these steps to install the configuration tools on a UNIX server.

Note: If you have installed the RPAS server on Windows NT/2000, you do not need to perform these steps. Go to Installing the configuration tools in Windows.

1   As the acusys user, create the directory to copy the configuration tools files into. The location and the name of the directory are up to the system administrator's preferences. This directory is henceforth referred to as the [TOOLSDIR] directory.

2   Restore the files from the following directory from the archive:

    [RPAS Installation]\Tools

    into the [TOOLSDIR] directory.

3   Change the permissions on the entire [TOOLSDIR] directory to be executable:

    chmod –R 750 /[TOOLSDIR]

4   If it is not already installed, install Java Run-time Environment (JRE) v1.4 and make a note of the installation path.

    Note: You should remove any prior versions of Java that are installed on the server unless they are being used by other applications.

5   Install the unzip utility, if necessary, for your operating system.

6   Unzip the **ConfigTools.zip** file (using the –a option):

```
[TOOLSDIR]> unzip –a ConfigTools.zip
```

The following sub-directories should be extracted from the ConfigTools.zip file.

- bin

- dist

- help

- lib

- resources

- docs

7   Your acusys .profile must contain environment variables for Java and the configuration tools. If necessary, edit your .profile to create these environment variables and add them to the PATH.

RIDE_HOME indicates the root directory of the configuration tools installation.

JAVA_HOME indicates the root directory of the Java installation.

For example:

```
RIDE_HOME=/retek/Tools
export RIDE_HOME
JAVA_HOME=/usr/java140
export JAVA_HOME
PATH=$JAVA_HOME/bin:$RPAS_HOME/bin:$RIDE_HOME/bin:$PATH
export PATH
```

8   Execute your .profile to make these new environment variables become active. You can either exit and restart your UNIX session again, or use the following UNIX command:

```
.  .profile
```

This step is very important before you continue to the remaining steps.

9   Use the commands below to validate your environment settings:

```
    echo $RPAS_HOME
    echo $RIDE_HOME
    echo $JAVA_HOME
    echo $PATH
```

Installing the configuration tools in Windows

You must install the configuration tools on any workstation that will be used to create RPAS configurations.

If you have installed the RPAS server in a Windows NT/2000 environment, you must also install the configuration tools on the workstation on which the RPAS server is running, regardless of whether that workstation will be used to create RPAS configurations.

Note: If you installed RPAS on a UNIX server and will not be using the configuration tools to create RPAS configurations, you do not need to perform these steps. However, if you will be installing RPAS configurations that were created using the configuration tools, you must install the configuration tools on the same machine where the RPAS server is located. See Installing the configuration tools on a UNIX server.

Follow these steps to install the configuration tools in Windows:

1   If it is not already installed, install Java Run-time Environment (JRE) v1.4 and make a note of the installation path.

   Note: You should remove any prior versions of Java that are installed on the PC unless they are being used by other applications.

2   Create the directory to copy the configuration tools files into. The location and the name of the directory are up to the system administrator's preferences. This directory is henceforth referred to as the [TOOLSDIR] directory.

3   Restore the files from the following directory from the archive:

   ```
   [RPAS Installation]\Tools
   ```

   into the [TOOLSDIR] directory.

4   Double-click on the **ConfigTools.zip** file to unzip it. Using WinZip, extract the files to the installation path, making sure the "Use folder names" box is checked. The configuration tools directory should now contain the following sub-directories:

- bin

- dist

- help

- lib

- resources

- docs

5   From the Windows Start menu, go to Settings > Control Panel > System > Advanced tab. Click on the Environment Variables button.

6   Under the *System variables* section, select New.

   a   In the Variable Name field, type **RIDE_HOME**

   b   In the Variable Value field, type the path to the root of the configuration tools installation.

   c   Click OK to add the new variable.

7   Under the *System variables* section, select New:

   a   In the Variable Name field, type **JAVA_HOME**

   b   In the Variable Value field, type the path to the root of the Java installation.

   c   Click OK to add the new variable.

8   Click on the **Path** environment variable, select Edit. Append the complete paths for the RIDE_HOME and JAVA_HOME variables including their respective **lib** and **bin** sub-directories as below:

```
<JAVA_HOME>\bin;<RIDE_HOME>\bin;<RIDE_HOME>\lib;
```

9   Select OK to save your changes.

10   Open a new Command Prompt script and type **env** to display the current environment variable settings.

11 If you will be using the configuration tools from this workstation, complete the following steps:

a   Go to the **bin** sub-directory.

b   Create a shortcut from the **RPAS Configuration Tools.bat** file.

c   Copy the shortcut to the desktop.

You can execute the configuration tools by double-clicking on the shortcut.

Chapter 7 – Web installation

RPAS version 11.0.3 supports deployment in both client-server and web-based environments. This document describes the installation and operation of a web-based deployment of RPAS. Web-based deployment allows a web browser to be used to configure domains and to install and launch the RPAS client application. An administrator can configure locations of domains and communication parameters. Users can install and launch the client application.

Note: Currently, web deployment has been tested and is supported for Apache 1.3.12. Web deployment should work with IBM WebSphere 3.5 and Netscape's IPlanet 4.1, but Retek has not tested deployment in these environments. This document assumes that one of these web servers has been properly installed and configured. Consult their documentation for installation and configuration information, as well as hardware and software requirements.

For the RPAS web deployment to function properly, users must have security access to their PC that allows them to install software. Specifically, they need permission to write into the Windows Registry.

This section explains how to install the Web client and configure it for use in your enterprise environment.

Note: Before you can use the Web client, you must configure it to connect to an RPAS domain. For more information about domains and configuring the RPAS client, refer to the *RPAS 11.0.3 Configuration Guide*.

Install the RPAS servlet and applets

1   Copy [INSTALL_DIR]/web/servletBase11.tar to the base servlet class directory for the web server.

    This directory requires 50 kilobytes of free space. The location of this directory depends on the configuration of your web server. Unpack the file by executing "tar xf servletBase11.tar".

2   Create a directory somewhere on the web server to contain the RPAS web server files (for example, /opt/rpas). Ten megabytes of space are required in this directory.

    This directory is referred to below as [RPAS_WEB_DIR].

3   Copy [INSTALL_DIR]/web/rpas_servlet11.tar to [RPAS_WEB_DIR].

4   Unpack the file by executing "tar xf rpas_servlet11.tar".

5   Copy [INSTALL_DIR]/web/applet11.tar to the HTML root directory of your web server.

The location of this directory will vary depending on the configuration of your web server. One megabyte of free space is required in this directory.

6   Unpack the file by executing "tar xv applet11.tar".

Configure the RPAS servlet

Following the documentation for your web server, create a servlet. You are free to choose any name for your servlet (for example, rpasLogin). The servlet name is referred to as [RPAS_SERVLET] later in this document. The class for the servlet is com.retek.mdap.servlet.ServletManager. For the servlet, set the following properties:

Property Name	Property Value
worker	com.retek.mdap.adminServlets.AdminRequestHandler
classpath	[RPAS_WEB_DIR]/servlet
clientSourceDir	[RPAS_WEB_DIR]/client
dbType	RpasDB
dbPath	[RPAS_WEB_DIR]/db
codebase	../..

After the servlet is configured, load it into your web server. You might be required to reload your web server to activate the new servlet.

Start the RPAS web configuration Utility

1   To access the RPAS web configuration utility, start a web browser (Netscape version 4.72 or Internet Explorer 5.5 recommended) and go to location http://[WEB_SERVER_ADDRESS]/servlet/[RPAS_SERVLET]. [WEB_SERVER_ADDRESS] is the address you use to access your web server.

The following login window is displayed:

Login Window

2   Enter an Administrator user name and password (the initial administration user name is adm and the password is adm).

3   Select ADMIN as the domain and click **Log On** to access the Administration Console.

Administration

Enterprise   Domains   Change Password   Add Admin User

Delete Admin User   Log Out

Applet version 11.0
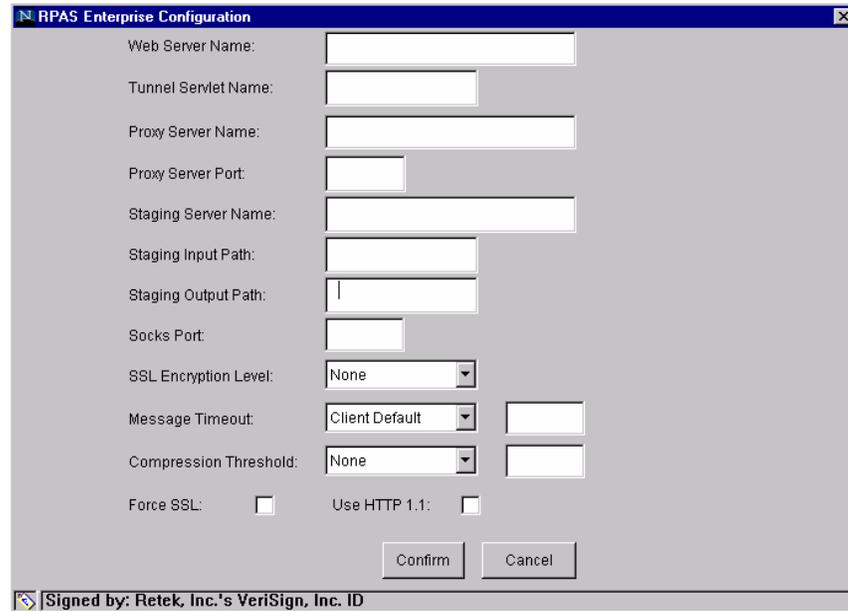
Administration Console

Enterprise configuration

1   Click **Enterprise** to open the RPAS Enterprise Configuration window.

This dialog allows an administrator to define the communications architecture that connects client PCs to the database server. RPAS 11.0 supports two web-based communications architectures – web launch and web tunnelling. Both the web launch and web tunnelling architectures allow domain configuration, client application installation, and application launch to be initiated from a web browser. The difference between the two architectures is in how data is communicated between the RPAS client application that runs on a user's PC and the RPAS domain that runs on the database server.

The web tunnelling architecture sends all data through the web server as it travels from a user's PC to the database server. This allows PCs that are located outside a company's network to communicate through the internet to a database server that is located inside a company's network.

The web launch architecture sends all data directly from a user's PC to the database server. This architecture assumes that the database server is on a network directly accessible by each user's PC (i.e., LAN).

2   To configure the web launch architecture, make sure the Web Server Name field in the RPAS Enterprise Configuration dialog is empty and click **Confirm**. All other fields in this window are ignored.

RPAS Enterprise Configuration Window

Web client administration

Change administrator password

1   Click **Change Password** to open the RPAS Change Password window. This allows the currently logged in administrator to change his/her password to the administrative console.

2   Enter the current password in the Old Password field.

3   Enter the new password in the New Password and Confirm New Password fields. Then, click **Confirm** to save the new password.

Add a new administrator account

1   Click **Add Admin User** to open the RPAS Add Admin User window. This window is used to add another RPAS administrative user.

2   Enter the administrative user's name in the User Name field.

3   Enter the initial password in the Password and Confirm Password fields.

4   Click **Confirm** to create the new administrator account.

Delete an administrator account

1   Click **Delete Admin User** to open the RPAS Delete Admin User window. This allows you to delete an RPAS administrative user.

2   Select the administrative user's name from the list in the window and click **Confirm** to delete the user account.

Log out

1   Click **Logout** to exit the Administrative Console. This returns you to the Login window.

Install and launch the RPAS client application

1   When a user wishes to launch the RPAS client application and log in to a domain, start a web browser (Netscape version 4.72 or Internet Explorer 5.5 recommended) and go to location http://[WEB_SERVER_ADDRESS]/servlet/[RPAS_SERVLET]. [WEB_SERVER_ADDRESS] is the address you use to access your web server.

2   Enter a user name and password, select a domain from the Domain list, then click **Log On**.

    Once you click **Log On**, the DomainDaemon on the database server is contacted to verify that the specified user is allowed to access the selected domain (make sure the DomainDaemon process is running on the database server before clicking **Log On**). If access to the domain is allowed, the user is presented with a security window from the web browser. The Internet Explorer window looks something like the following window.

The Netscape window looks like this:
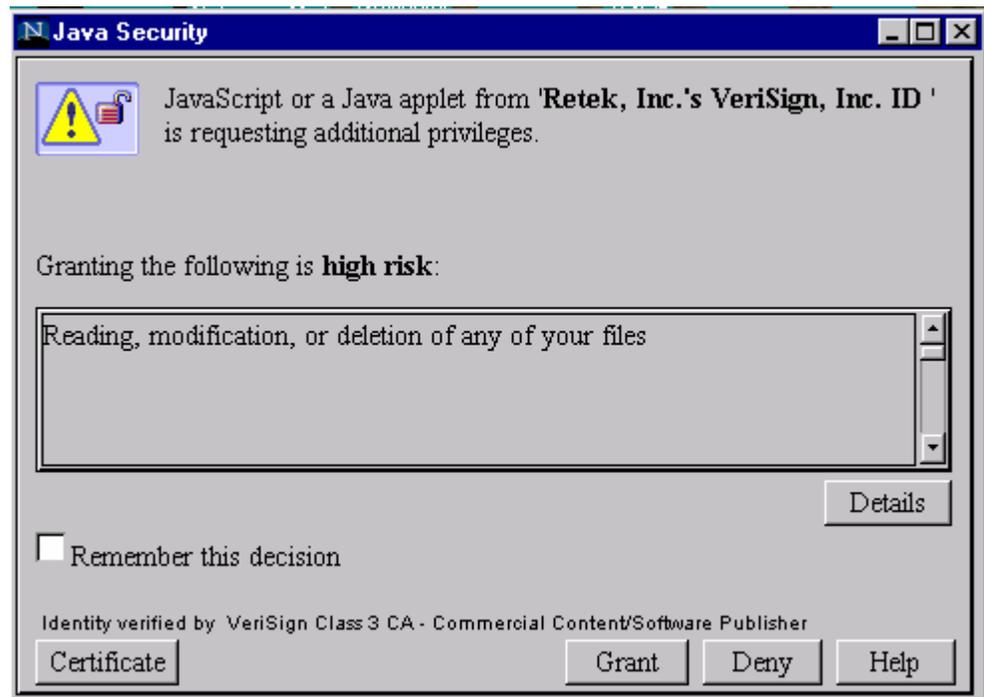
3   After you click **Yes** or **Grant** in the security window, a check is made to see if the RPAS client application needs to be installed on the user's PC. Web server administrator may pre-specify the RPAS client installation location on users' PC in **clientpath.txt** file under directory [RPAS_WEB_DIR]/client. If the user has not previously installed the RPAS client application or if a newer version has been installed on the server and the client path is not specified, the user is prompted for an installation location for the RPAS client application.

4   Select a directory that has at least 10 megabytes of free disk space and click **OK**. A status dialog box appears as files are copied from the server to the user's PC. After the files have been copied, a setup program runs, then the RPAS client application starts. If everything is successful, the user sees a Login Successful message in the bottom left corner of the RPAS client application window.

   If the RPAS client application does not need to be installed on the user's PC after you click **Log On**, the RPAS client application immediately starts and connects the user to the selected domain.

Appendix A – Configure Apache Servlets

This section details configuration of an Apache 1.3.12 web server installed on Solaris 8. Apache configuration involves modification of several configuration files located in /etc/apache/. These are httpd.conf, jserv.conf, jserv.properties, zone.properties,…

In the httpd.conf file, be sure to include the java servlet configuration file. For example, add this line at the end of httpd.conf

```
include /etc/apache/jserv.conf
```

In the jserv.conf files, set the following properties:

```
ApJservProperties  /etc/apache/jserv.properties

ApJServMount  /servlets /root

ApJServMount  /servlet /root
```

In the jserv.properties file, set the following properties:

```
zones=root

root.properties=/etc/apache/zone.properties
```

The zone.properties file needs an entry for the RPAS login servlet. To access the login servlet via http://my.server/servlet/rpasLogin, for example, use a [SERVLET_NAME] of rpasLogin. You can change the [SERVLET_NAME] tag if you desire.

```
repositories=/var/apache/servlets

servlet.[SERVLET_NAME].code=com.retek.mdap.servlet.Servl
etManager

servlet.[SERVLET_NAME].initArgs=worker=com.retek.mdap.ad
minServlets.AdminRequestHandler,classpath=[RPAS_WEB_DIR]
/servlet,clientSourceDir=[RPAS_WEB_DIR]/client,dbType=Rp
asDB,dbPath=[RPAS_WEB_DIR]/db,codebase=../../
```

After you edit the configuration files, stop and restart the web server to activate the RPAS servlet.

Appendix B – Configure iPlanet Servlets

This section details configuration of Netscape's IPlanet 4.1 on a Solaris 8 server. This should serve as an example of how to configure your IPlanet server.

The following variables are referred to in the configuation instructions below:

- [SERVLETBASE_WEB_DIR] is the directory where you unpacked servletBase11.tar

- [RPAS_WEB_DIR] is the directory where you unpacked rpas_servlet11.tar

- [APPLET_WEB_DIR] is the directory where you unpacked applet11.tar

For an IPlanet installation, three configuration files need to be updated – jvm12.conf, rules.properties, and servlets.properties. On Solaris 8, these files are located in /usr/iplanet/servers/https-server.name/config/.

In the jvm12.conf file, update the jvm.classpath variable. For example:

```
jvm.classpath=<default classpath>:[SERVLETBASE_WEB_DIR]
```

In the rules.properties file, add an entry for the RPAS login servlet. To access the login servlet via http://my.server/servlet/rpasLogin, for example, add this line:

```
/servlet/rpasLogin=RequestHandler
```

You can change the /servlet/rpasLogin tag if you desire. The RequestHandler tag can also be changed as well, but must match the [SERVLET_NAME] variable referred to in the servlets.properties file configuration.

In the servlets.properties file, add the configuration information for the RPAS login servlet. For example,

```
servlet.[SERVLET_NAME].code=com.retek.mdap.servlet.Servl
etManager

servlet.[SERVLET_NAME].initArgs=worker=com.retek.mdap.ad
minServlets.AdminRequestHandler,classpath=[RPAS_WEB_DIR]
/servlet,clientSourceDir=[RPAS_WEB_DIR]/client,dbType=Rp
asDB,dbPath=[RPAS_WEB_DIR]/db,codebase=[APPLET_WEB_DIR]
```

After you edit the configuration files, stop and restart your web server to activate the RPAS servlet.

Appendix C – Bandwidth requirements

For a web launch deployment, the bandwidth requirements are minimal. The only large data transfer that occurs in this configuration is installation of the RPAS client software to a PC (currently about 5 megabytes of data). This happens very infrequently. The client software is installed the first time a PC tries to connect to a domain or if the PC has an old version of the software that needs to be upgraded.

Each time a user logs into the RPAS web launch software via their web browser, we download about 70 kilobytes of data from the server to the client PC. Data transfers from the PC back to the server are at most a couple of kilobytes. Other than these data transfers, there is no communication between a PC and the web server, only between the PC and the database server.

To figure out their bandwidth requirements, take the total number of users that might be launching an application at one time and multiply by 560000 (70 kilobytes * 8 bits per byte). Divide this number by their desired launch time (the number of seconds from clicking the Login button until the application starts) to get the approximate maximum bandwidth in bits per second. For example, 10 simultaneous user launches with a launch time of 10 seconds calculates to a bandwidth requirements of 10 * 560000 / 10 = 560000 bps maximum bandwidth.

Another way to look at the bandwidth is to look at the time it takes to download the client software. Divide 40000000 (5 megabyte client download * 8 bites per byte) by the desired installation time to get bandwidth in bits per second. For example, to download one copy of the client software in 60 seconds would take 40000000 / 60 = 666667 bps.