

**Retek[®] Predictive Application
Server[™]
11.1**

Installation Guide

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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 RPAS platform, the installation process, and the contents of the installation package.
- Chapter 3: Upgrading to RPAS 11.1 from 11.0.4.x
- Chapter 4: Installing Acumate
- Chapter 5: Installing the RPAS server components
- Chapter 6: Installing the RPAS client.
- Chapter 7: Installing the RPAS Configuration Tools.
- Chapter 8: Installing the components for deploying and using RPAS over the Web.
- Chapter 9: Installing the sample configuration provided with the GA release
- Chapter 10: Configuring the RPAS client to connect to the server and a domain
- Chapter 11: Using the sample configuration that is provided with the GA release

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 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 a UNIX system. HP-UX, AIX and Solaris are considered to be in this category.
- **HPUX:** Indicates that the following text is relevant only if the server software is installed on a machine running HP-UX.
- **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 solutions such as Retek Demand Forecasting (RDF) or Assortment and Space Optimization (ASO). RPAS does not include any business logic, but it enables the solutions to store, manipulate and retrieve data. It provides the solutions with a standard interface based on wizards, templates, workbooks and batch processes.
- **RPAS solution:** The software that uses RPAS. RPAS solutions are added on to RPAS domains as separate modules. All the business logic is encapsulated in the solution. An RPAS domain can support solutions. Examples of RPAS solutions are RDF and ASO.
- **RPAS Domain:** The collection of server-side directories and files containing data and procedures that comprise the RPAS solution. Refer to the RPAS 11.0.5 Configuration Guide for more information.
- **RPAS client:** The Windows-based client interface for end users and system administrators of a RPAS domain. An administrator may perform maintenance work in a domain using the RPAS client, server-side RPAS utilities or the Acumate command-line or graphical user interface to directly manipulate the domain.
- **RPAS configuration tools:** The tools used to configure an RPAS application. See the RPAS 11.0.5 Configuration Guide for more information.

Chapter 2 – Getting Started

This chapter provides:

- An overview of the RPAS platform
- Typical installation scenarios
- A list of the system requirements
- An overview of the installation contents

RPAS platform overview

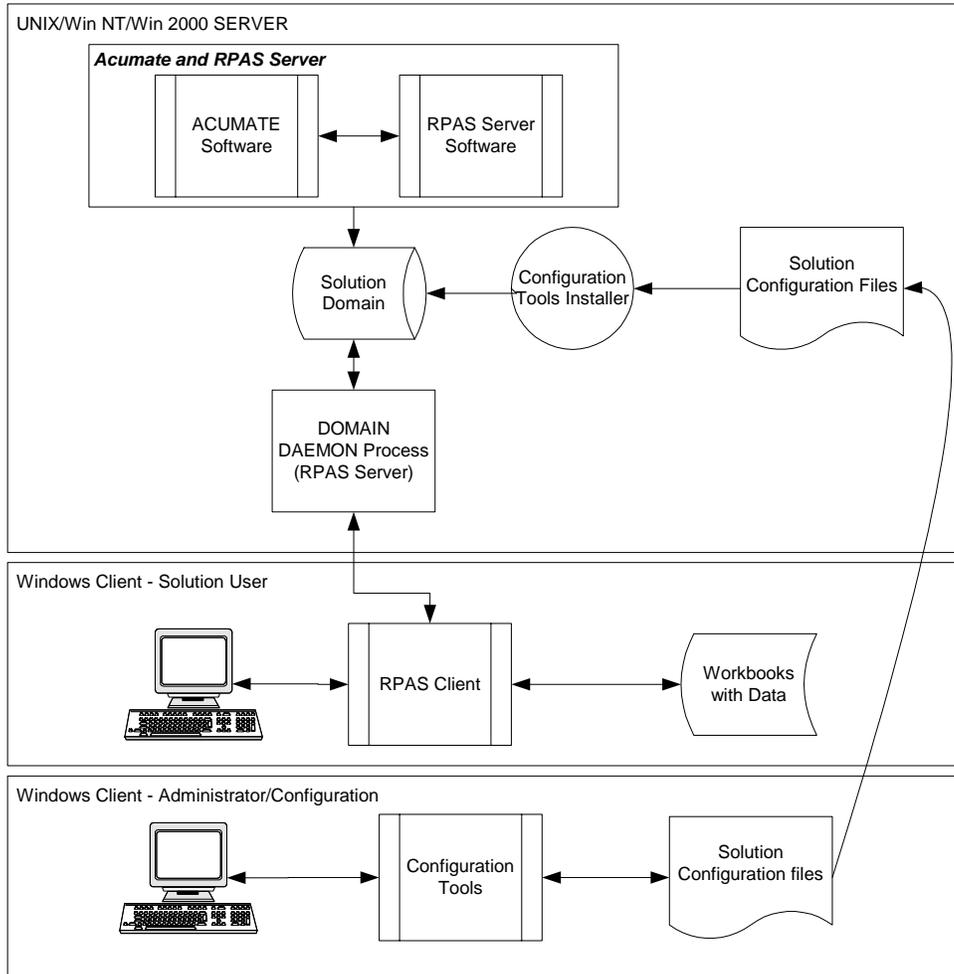
RPAS 11.1 is supported on several platforms (NT, HPUX, AIX, and SUN) and is comprised of many components. In addition, there are GA solutions that have been developed using the RPAS 11.1 foundation. Examples of GA solutions include Retek Merchandise Financial Planning™ and Retek Advanced Inventory Planning™.

The components of the RPAS software include the following:

- Acumate v2.5
- RPAS server and related utilities
- RPAS client
- RPAS Configuration Tools
- RPAS Sample Configuration

Retek Predictive Application Server

A typical RPAS, server-based installation is illustrated below. RPAS and the Configuration Tools may also be installed on a single NT/2000 stand-alone machine. For instructions on installing on a single workstation, refer to the NT/2000 portion of each installation instruction in Chapter 3.



The following table indicates which software components are needed for each task. The reference to Windows includes Windows NT 4.0 (service pack 3+), Windows 2000, and Windows XP.

Task	Typical user	Platforms	Acumate v 2.5	RPAS Server	RPAS Client	Configuration Tools	Java v1.4.2	Environment Variables to be set
Build an RPAS domain.	System Administrator	Windows Solaris AIX HPUX	Yes	Yes	No	Yes (only Installer portion is used)	Yes	RPAS_HOME RIDE_HOME JAVA_HOME PATH
Log in to an existing (built) RPAS domain for the primary purpose of building workbooks.	End-User (Planning User)	Windows	No	No	Yes	No	No	None
Use the configuration tools to modify solutions.	Solution/Product Administrator	Windows	No	No	No	Yes	Yes	RPAS_HOME RIDE_HOME JAVA_HOME PATH
Use the configuration tools to build configured solutions.	Solution/Product Administrator	Windows Solaris AIX HPUX	Yes	Yes	No	Yes	Yes	RPAS_HOME RIDE_HOME JAVA_HOME PATH

For instructions on building a domain using the Sample configuration, please refer to “Chapter 9 – Install Sample Configuration” of this guide.

For instructions on installing the configuration tools to modify or build configured solutions, see Chapter 7 – Configuration Tools Installation. Then, refer to the RPAS 11.1 Configuration Guide for instructions on using the Tools Workbench.

System requirements

The basic client and server components are required for RPAS 11.1.

Server

Supported Platform	Versions Supported
Solaris (SPARC)	8
HP-UX (PA-RISC)	11i (11.11)
AIX	5L (5.1)
Windows NT/2000	NT 4.0, Service Pack 3 or later 2000

- You will also need to install Java Run-time Environment (JRE) v1.4.2 if you are installing the Configuration Tools. For AIX, you must use the 32-bit version of Java v1.4. Customers upgrading from 11.0.4.x will need to install this new version of JRE in order to use the Configuration Tools on 11.1.
- 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.
- Perl is an interpreted language that is included on all supported UNIX platforms (included with MKS Toolkit for NT); Perl is used by our patching and service pack systems.
- An application for unzipping (.zip) components on UNIX must be installed and used for extracting the RPAS Configuration Tools; Unzip is an open source software package that can be used for this process.

RPAS client

- Microsoft Windows 98, 2000, or XP
- Microsoft Windows NT 3.51 or higher

Minimum desktop configurations:

- 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) v1.4.2
- 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.11.1.<Operating System>.tar.Z (for windows, the archive is named ARPOplatform-11.1.nt.zip). After downloading, the archive file must be extracted to a staging directory. This directory 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 11.1. Any version of Acumate installed with a previous RPAS version (RPAS 9.3, 9.4, or 11.0.x) is compatible with 11.1.

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 – Upgrading to RPAS 11.1

Customers currently running RPAS 11.0.4.x have the ability to upgrade to RPAS 11.1. Like with any major release there have been numerous changes to the RPAS platform and Configuration Tools; as such it is important that the following upgrade process is carefully followed.

Upgrade Process Overview

The following is a high level description of the process that must be followed to upgrade an RPAS domain and configuration.

- Apply any outstanding 11.0.4 configuration changes to the 11.0.4 domains by running the Tools patch process such that the configuration and domains are in sync..
- Acquire the new version of the platform which includes the following key components (refer to other sections of this Installation Guide for details about installing these components):
 - RPAS Server
 - RPAS Client
 - RPAS Configuration Tools
- Upgrade the Java Runtime Environment (JRE) to version 1.4.2; this is available on the Java Sun website (java.sun.com).
- Commit any existing workbooks that have not yet been committed (if desired); existing workbooks are not compatible with the new version of the platform
- Create a backup copy of any domains that will be upgraded (including the installs directory) and the corresponding configuration
- Run the upgrade utility on existing domains; note the utility must be run separately on each domain
- Upgrade existing configuration
- Apply upgraded configuration to upgraded domains to ensure that they are synchronized

Note the following important implications of upgrading to the new version of the platform.

- User selections in wizards will be removed during the upgrade process – the positions that a user selects during the wizard process were saved in RPAS 11.0.x. These selections are removed in 11.1 because of a new use of “position queries” that allows a user to save and load these selected positions.
- All existing workbooks must be deleted before or during the upgrade process. Additionally, all workbooks in the workbook batch queue must be deleted as well; workbooks scheduled to be built must be removed due to the change in the mechanism for storing user selections; workbooks scheduled to be refreshed and committed are no longer valid since old workbooks are incompatible with the new release. Purging workbooks can be manually completed before the upgrade or using an optional parameter during the upgrade process (“-**purgeWorkbooks**” option of the **upgradeDomain** utility).

Upgrade Domains

- 1 Ensure that all existing workbooks have been committed if necessary. They will not be compatible with RPAS 11.1 after the upgrade has been completed.
- 2 After the new version of the RPAS 11.1 platform has been acquired and installed, the administrator should create a backup copy of any domains (including the associated “installs” directory) that will be upgraded. The “installs” directory should be located at the same directory level as the root of the domain. The backup process can be done by using the copy (cp -Rf) command if the domain is on a UNIX platform or by using Windows Explorer if on a Windows platform. We recommend that you start making the backup at the directory level above the actual domain, such that it will include the installs directory:
- 3 The RPAS utility **upgradeDomain** will be used to upgrade each domain. This utility is located in the directory: **\$RPAS_HOME/bin/**

If necessary, an administrator can verify the version of the upgradeDomain utility by typing the following command; the version should be 11.1.0.

```
upgradeDomain -version
```

- 4 To upgrade a domain execute the **upgradeDomain** utility with the following usage.

```
upgradeDomain -d pathtodomain {-n} {-verbose} -purgeWorkbooks
```

Argument	Description
-d <i>pathtodomain</i>	The path to the domain that is being upgraded.
-n	Optional parameter to report which changes would be applied without applying the changes.
-verbose	Optional parameter to show the detail about each change that is applied to the domain.
-purgeWorkbooks	Required parameter that purges all existing workbooks and clears the workbook batch queue.

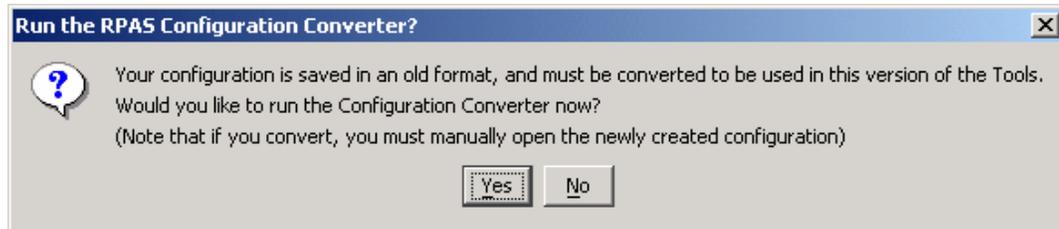
Notes:

- If an administrator attempts to run the upgrade utility on a domain that has already been upgraded the following message will return:
“Domain is already at version 11.1.0. Nothing to do.”
- An administrator can also run the Domain Information utility to verify the upgrade process.
`domaininfo -d pathtodomain -domainversion`

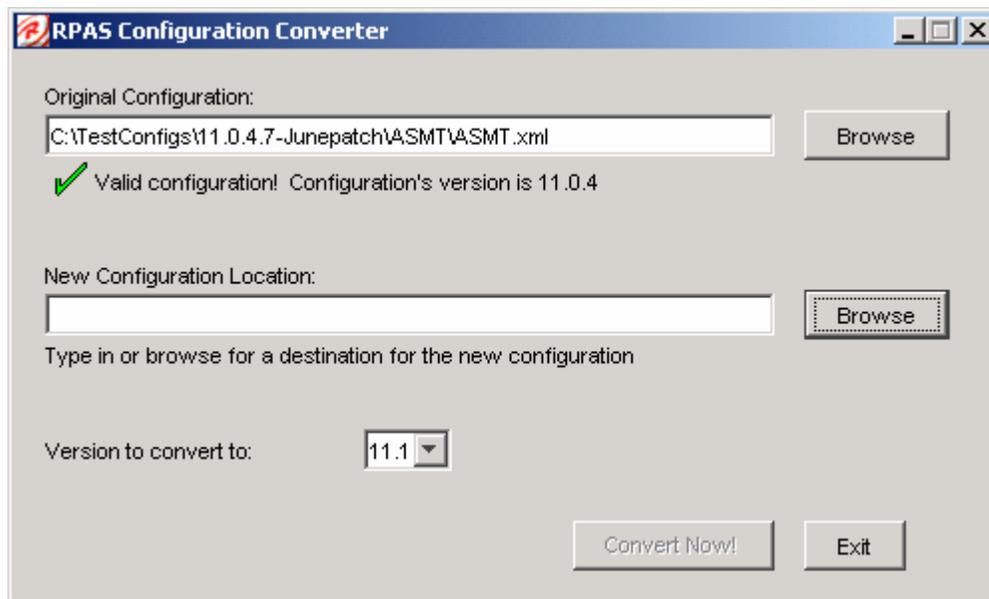
Upgrade Configurations

The steps below pertain to the process for upgrading to the initial Configuration Tools 11.1 release. If you are upgrading to the Configuration Tools 11.1.1 patch or later, please refer to the Configuration Tools 11.1.1 Release Notes, and use the process that is specified in the release notes instead of the steps below. The steps for upgrading the configuration (steps 2 thru 5 below) are different; although the remainder of the process is the same as below.

- 1 Once the domains have been upgraded using the above process, follow the installation process for the RPAS 11.1 Configuration Tools and Java Run-time Environment (JRE) v1.4.2.
- 2 Once the installation process is complete, create a backup copy of your existing 11.0.4.x configuration.
- 3 Launch the new version of the Configuration Tools; open the existing configuration using File/Open. Select the configuration, click “OK”, and the following message should appear:



- 4 After selecting “Yes” the following window will appear. The administrator must specify a new location for the upgraded configuration.



- 5 Once you have chosen a new location and name, click “Convert Now!”. The system then allows an Administrator to convert another configuration.

- 6 ***Before making any changes to the configuration***, you need to apply it to the upgraded domain. Confirm that the backup copy of the 11.0.4.x domain includes the associated “installs” directory for the domain.

Once you have confirmed that you have a backup copy of the “installs” directory for each domain that you upgraded, delete the contents of the “installs” directory for each upgraded domain. The installs directory contains the configuration that reflects the current state of the domain. It is used during the Tools Installer patch process to compare the old configuration with the new configuration and determine any changes that have been made to the configuration and apply those specific changes to the domain. So, in essence, you are removing the old 11.0.4.x configuration for the new 11.1 upgraded domain since it no longer is indicative of the current state of the domain.

- 7 For each domain that you upgraded, copy the new upgraded 11.1 configuration into the installs directory of the 11.1 upgraded domain. Make sure that you copy the entire configuration starting at the root directory of the configuration.
- 8 Using the patch install process, run a patchinstall on the domain to ensure that the configuration is now compatible with the domain. Check the Installer log file for any errors.
- 9 If desired, you can now make changes to your upgraded configuration and patch the domain using the patch install process (see the RPAS 11.1 Configuration Guide for additional information).

Chapter 4 – Acumate Installation

This chapter describes the step-by-step procedure for installing Acumate on the UNIX and NT platforms.



Note: During the installation of Acumate, you will need to enter a license number. Retek Customer Support can provide this license number once you are given the Acumate serial number *during the installation process*.

Acumate installation on UNIX systems

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

Create the user account

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

Install Acumate

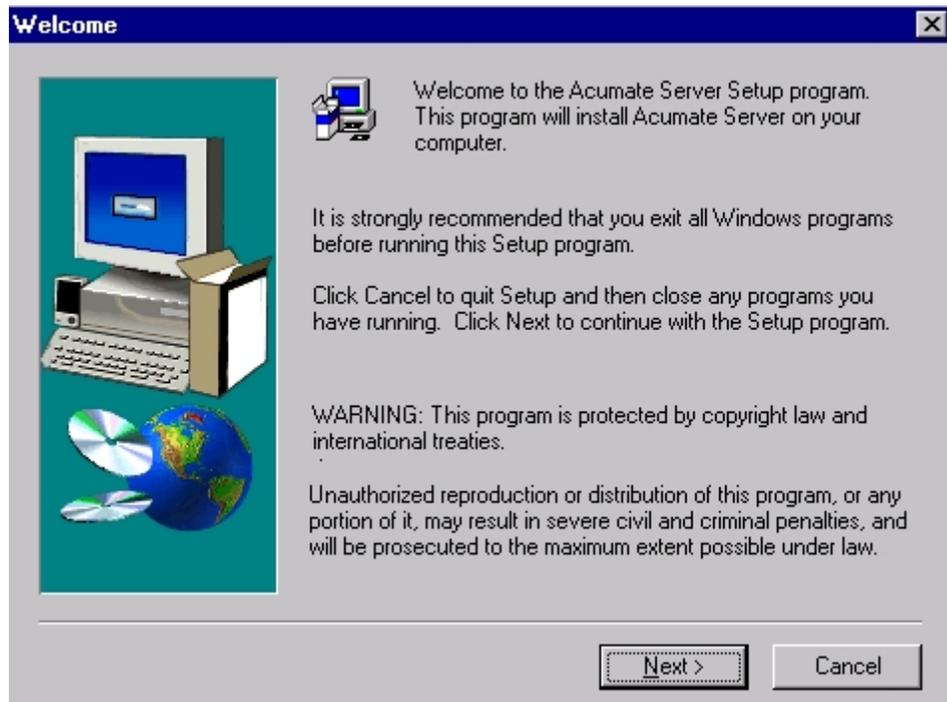
- 1 Log on to the UNIX system using the `acusys` user name.
- 2 Create the directory to copy the Acumate files into. The location and the name of the directory are up to the system administrator's preferences. This directory is henceforth referred to as the `[ACUDIR]` directory.
- 3 Restore the files 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 γ . Enter the license code provided by Retek.
- 8 Type `exit` at the ACUMATE COMMAND prompt.
- 9 When prompted for verification, enter γ . 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.

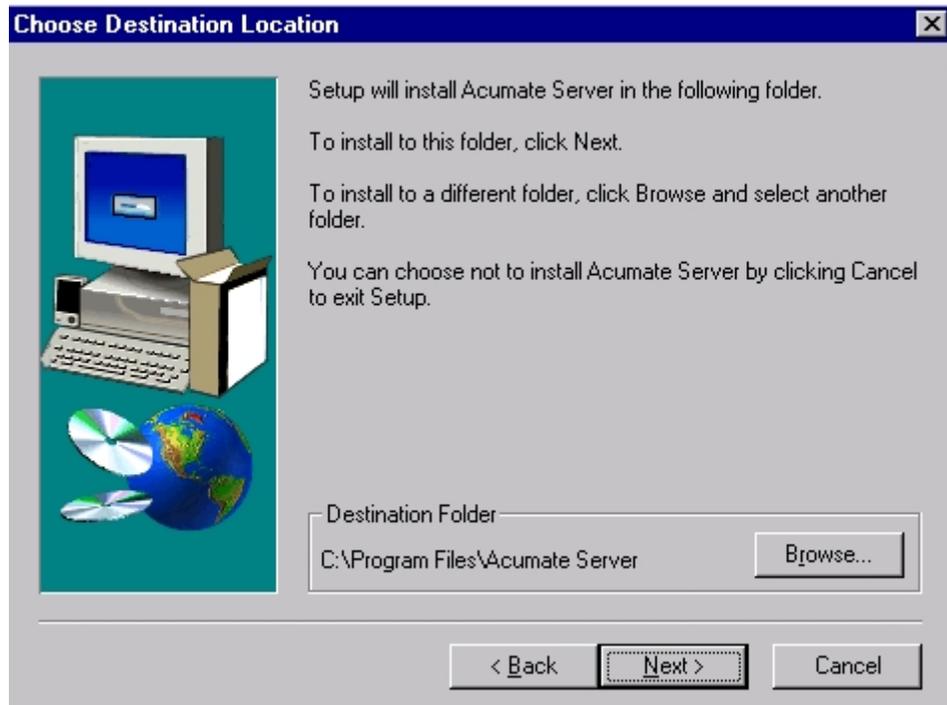
Acumate installation on Windows NT/2000

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

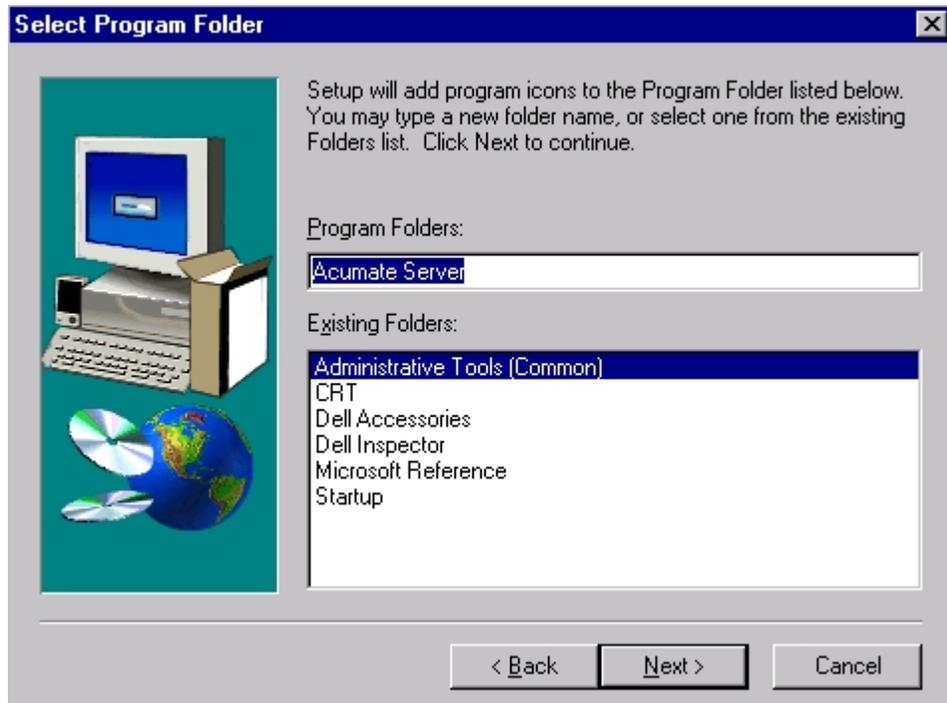
- 1 Run `Setup.exe` located in the [RPAS Installation]/Acumate directory. The program initializes the setup routines.
- 2 The welcome page is displayed. Click Next.



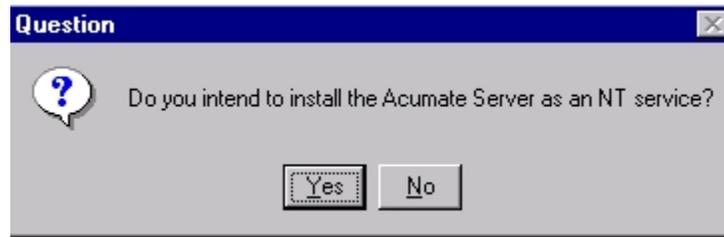
- 3 Confirm or change the destination folder for Acumate Server client programs. Click Next.



- 4 Confirm or change the Program Folder in which to add the program icon. The default value is Acumate Server. Click Next.



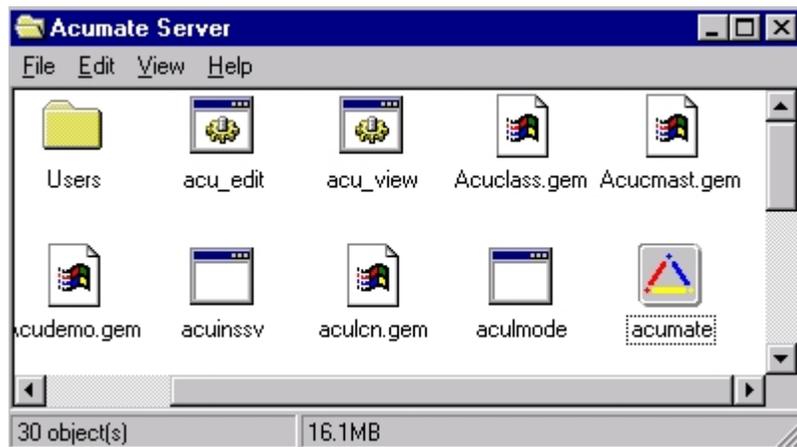
- 5 You are asked whether you intend to install Acumate Server as an NT service. Click No.



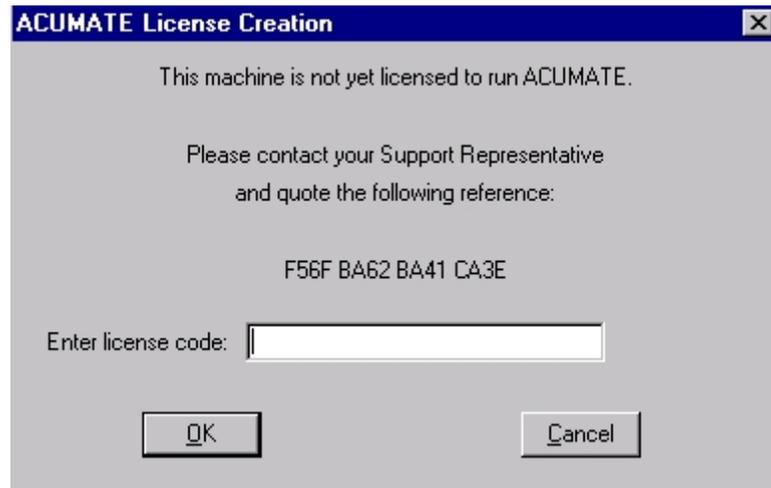
- 6 You are informed that the Acumate Server installation is complete. Click Finish.



- 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.

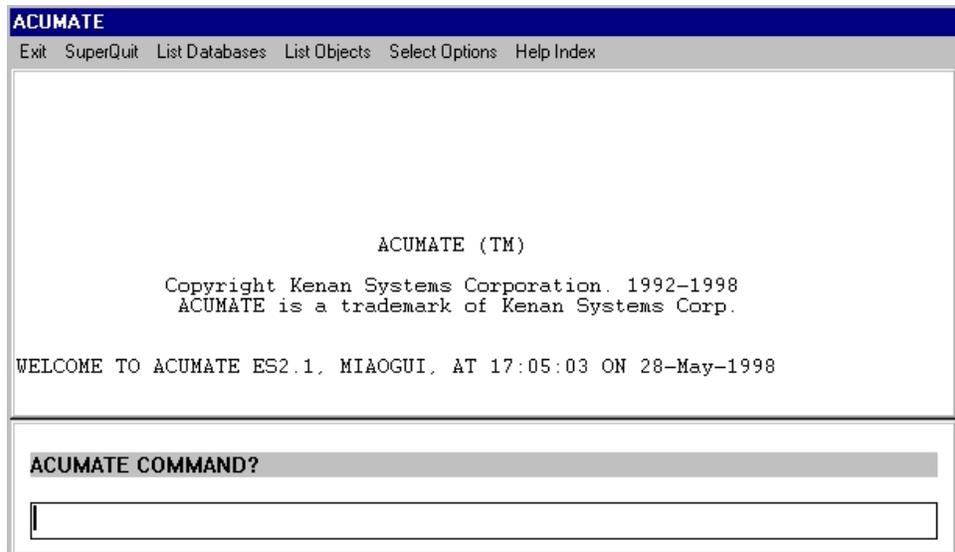


- 8 Acumate prompts you for a license code that corresponds to the code: “xxxx xxxx xxxx xxxx” (upper- and lower-case sensitive). Enter the code and click OK.

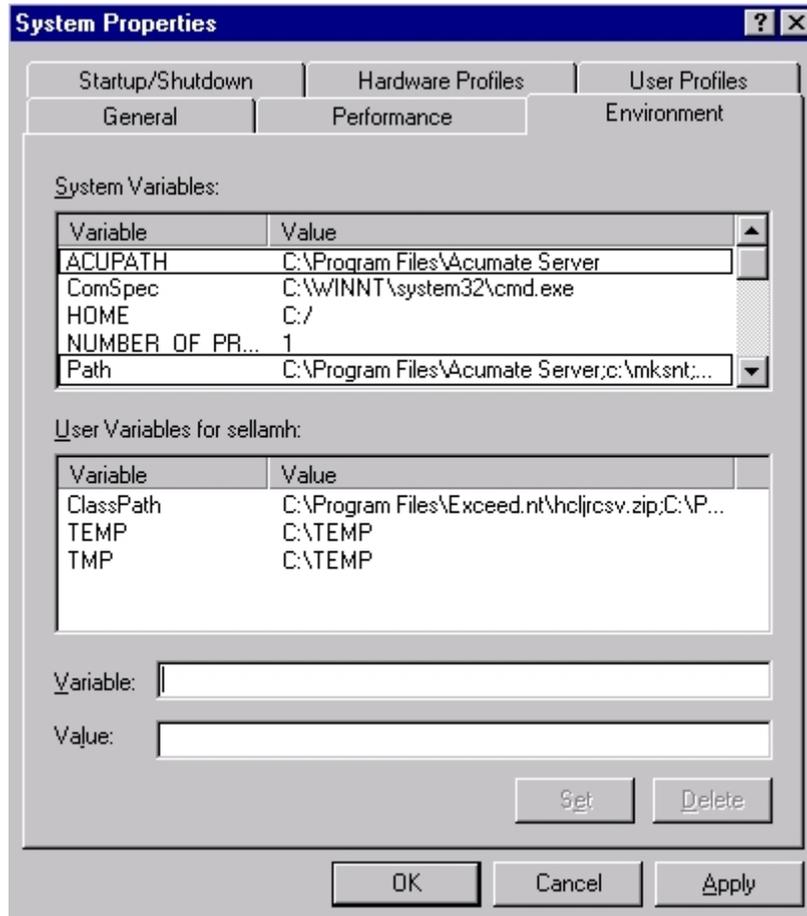


 **Note:** To get a license code, please call Retek Customer Support at +1-800-61-RETEK. Ask the Customer Support Consultant for an Acumate license from Kenan Technology. You will need to provide the Acumate serial number that is provided. An appropriate license code: “xxxx xxxx xxxx xxxx” will be provided (upper- and lower-case sensitive). Enter the license code and click **OK**.

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



- 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.



- 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 5 – RPAS Server Installation

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

RPAS server installation on UNIX systems

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

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]\RpasServerinto 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=/retек/RpasServer
export RPAS_HOME
. $RPAS_HOME/rpaslogin.ksh
. /retек/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



Important: After updating your .profile file with the proper environment variable settings, check to see if you have a .cshrc file (or .kshrc or comparable file, depending on your shell) in your userid's home directory. If so, please make sure that it does not contain a reference to reset the PATH environment variable. If it does, please remove the reference from the file.

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
```

RPAS server installation on Windows NT/2000

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

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. **This directory and path should *not* contain spaces.**
- 2 Restore the files from the following directory from the archive:
 - [RPAS Installation]\RpasServerinto 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**, **bin**, and **applib** sub-directories as below:

```
%RPAS_HOME%\bin;%RPAS_HOME%\lib;%RPAS_HOME%\applib
```
- 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 6 – 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. See Chapter 9 of this guide.

Make RPAS client files accessible

- 1 Create a staging directory on the network where the RPAS client files can be copied.
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 Copy the files from the following directory on the server:
[RPAS Installation]/Client
to the [RPASCLIENT] directory.

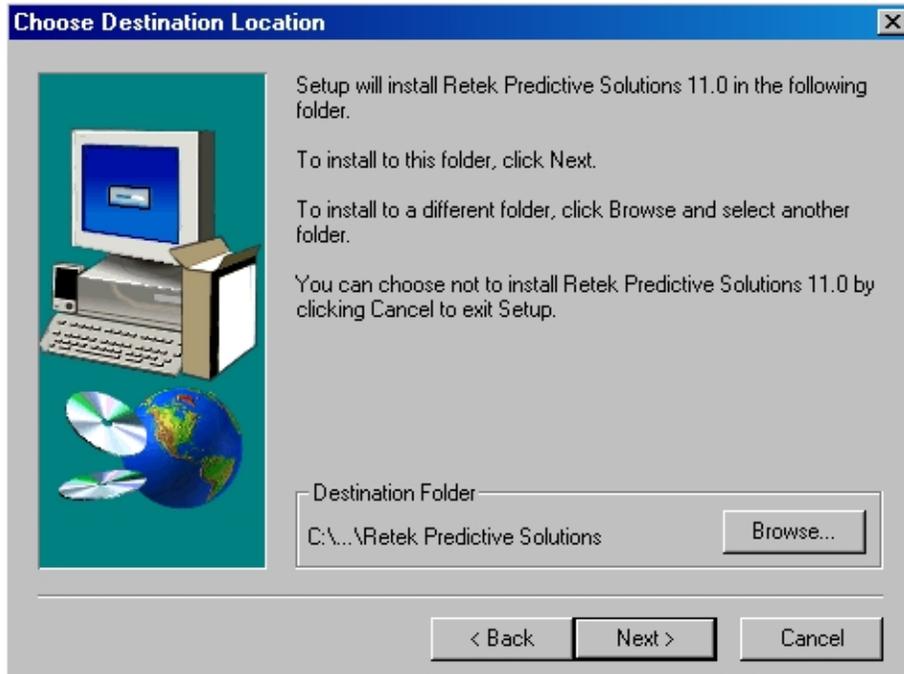
RPAS client installation procedure

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 [RPASCLIENT] directory on the network.
- 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 7 – Configuration Tools Installation

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



Note: If you are not using the configuration tools, either to create or modified configuration solutions you can skip this chapter.

If you will be building an RPAS domain from a configured solution, you must install the configuration tools on the machine where the RPAS server is located.

If you will be using the configuration tools to create RPAS configurations, you must also install them on the workstations that will be used to create those configurations.

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. Skip to Installing the configuration tools on NT/2000.

- 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 [TOOLS DIR] directory.
- 2 Restore the files from the following directory from the archive:

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

into the [TOOLS DIR] directory.
- 3 Change the permissions on the entire [TOOLS DIR] directory to be executable:

```
chmod -R 750 /[TOOLS DIR]
```
- 4 If it is not already installed, install Java Run-time Environment (JRE) v1.4.2 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):

```
[TOOLS DIR]> unzip -a ConfigTools.zip
```

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

- bin
 - dist
 - help
 - lib
 - resources
 - utilities
- 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=/retек/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 continuing with 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 on NT/2000

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

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.

Follow these steps to install the configuration tools in Windows:

- 1 If it is not already installed, install Java Run-time Environment (JRE) v1.4.2 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 [TOOLS DIR] directory.
- 3 Restore the files from the following directory from the archive:
  - [RPAS Installation]\Toolsinto the [TOOLS DIR] 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
  - utilities

- 5 If you are *not* using the RPAS NT server installation to build domains, then proceed with steps 5 thru 9. Otherwise, go to step 10.
  - a Create a directory to copy the RPASlibs files into. We recommend creating a folder under the C: root called **RPASlibs**.
  - b Double-click on the **RPASlibs.zip** file to unzip it.
  - c Using WinZip, extract the files to the folder you created in step a, making sure the “Use folder names” box is checked.



**Note:** The RPASlibs.zip file is only necessary to use the Tools Workbench without the RPAS NT server installation. Do not extract this archive underneath the My Documents folder or the [TOOLS DIR] folder.

- 6 From the Windows Start menu, go to Settings > Control Panel > System > Advanced tab, and click on the Environment Variables button.
- 7 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 RPASlibs installation.
  - c Click OK to add the new variable.



**Note:** The RPAS\_HOME variable is required to run the Tools Workbench.

- d Click on the **Path** environment variable, and select Edit. Add the RPAS\_HOME variable including the **lib** and **applib** sub-directories as below:  

```
%RPAS_HOME%\lib;%RPAS_HOME%\applib
```
- 8 Click OK to save your changes.
- 9 Reboot your computer in order to have the changes to the environment variables take effect. Then go to step 15.

- 10 If you will be using the RPAS NT installation to build domains on your NT or Windows platform, then you need to perform steps 10 thru 14.
  - a Under the *System variables* section, select New.
  - b In the Variable Name field, type **RIDE\_HOME**
  - c In the Variable Value field, type the path to the root of the configuration tools installation.
  - d Click OK to add the new variable.
- 11 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.

- 12 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 NT server installation.
  - c Click OK to add the new variable. <sup>13</sup>Click on the **Path** environment variable, select Edit. Add the RIDE\_HOME, JAVA\_HOME, and RPAS\_HOME variables including their respective **lib** and **bin** sub-directories as below:  

```
%RPAS_HOME%\lib;%JAVA_HOME%\bin;%RIDE_HOME%\bin;%RIDE_HOME%\lib;
```
- 13 Select OK to save your changes.
- 14 Reboot your computer to make the changes to your environment variables take effect.
- 15 Open a new Command Prompt window and type **env** to display the current environment variable settings. Verify the settings.
- 16 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.



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



# Chapter 8 – Web Installation

## Introduction

### Overview of RPAS Web Support

RPAS 11.1 can be deployed and used in both client-server and web-based environments. This chapter describes the installation and operation of a web-based deployment of RPAS referred to as “web launch”.

Web-based deployment allows a user to use a web browser to install the RPAS client application when it has not been installed on a user’s computer, launch the RPAS client when it has already been installed, and reinstall the client when an updated version is available. An administrator can set up the domain locations and communication parameters. Users can install and launch the client application.



**Note:** Web deployment has been tested and is supported for the following components:

- IBM Web Sphere Application Server version 1.5.0, which includes version 1.4.1 of the Java Runtime Environment (JRE);
- Microsoft Internet Explorer version 6 and Mozilla Firebird 0.7;
- A Java Virtual Machine (JVM) from either Sun (version 1.4 plug-ins, available at [www.Java.com](http://www.Java.com)) or Microsoft that is run on the web browser.

These instructions assume that the software specified above has been properly installed and configured. Consult the documentation of each component for installation and configuration information, as well as hardware and software requirements.

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

### Installation and Configuration Process Overview

The following is an overview of the process that must be followed to install RPAS for web launch.

- Install the RPAS Web Application – this installation is completed onto the web server and involves 2 components that are included with an RPAS distribution (RPAS.war and RpasData.tar)
- Configure the RPAS Servlet – using the deployment descriptor “web.xml” to specify servlet properties and servlet path.
- Start the RPAS Web Configuration Utility – using the location specified in the RPAS Servlet users and administrators follow this process to log into the system
- Configure web launch– using the Enterprise Configuration component of the Administration Console the administrator indicates web launch is to be used.
- Other web client administration activities – remainder of configuration and administration activities including domain configuration and managing administrative users

## Install the RPAS Web Application

 **Note:** WAS\_HOME refers to the directory where the WebSphere Application Server was installed.

- 1 Log into the UNIX server as the retek user and determine where the ARPOplatform Web files will be installed. There should be a minimum of 5 MB disk space available for the application installation files.
- 2 Copy the ARPOplatform Web files (RPAS.war and RpasData.tar) located at INSTALL\_DIR/Web/ to a newly created staging directory on the UNIX server (this directory will be referred to as STAGING\_DIR).
- 3 Open the WebSphere Administration Console that is to be used for Administering the RPAS Web application by loading the Administrator Console url in a browser.  
http://<server>:<admin\_port>/admin

- Server = name or IP address of machine WebSphere is running on for RPAS Web application
- Admin\_port = WebSphere Admin Console port (default value is 9090)

 **Example:** <http://server:9090/admin>

- 4 Click on Applications->Install New Application.
- 5 Under Preparing for the application installation, click the Server Path radial button and set this field to the location of the RPAS.war file (from step 2 above), including the name of the RPAS Web application file. The Context Root field can be set to an alias that will be required in the RPAS Web application url, or it can be set to “/” enabling the RPAS Web application to be available at the WebSphere Application Server application url root. Click Next.

- Server path = location and name of RPAS.war file
- Context Root = /rpas11

 **Example:** Server path: <STAGING\_DIR>/RPAS.war  
Context Root: /rpas11

- 6 In the Generate Default Bindings window, leave all default settings and click Next.
- 7 In Step 1 – Step 3, leave all default settings and click Next.
- 8 In Step 4: Summary window, verify all fields contain the correct information and click Finish.
- 9 Click the [Save to Master Configuration](#) link when it appears.
- 10 Click the Save button in the Save to Master Configuration section. Following a successful save, you will be re-directed to the WebSphere Application Server Administrative Console.
- 11 On the Enterprise Applications page, stop the newly created RPAS\_war application if it is running. Ensure that the status of this application is down (red x). To stop the RPAS\_war application, check the box next the new application and click the Stop button.
- 12 Extract the RpasData.tar file (from step 2 above). Two directories (client/ and db/) are created. Validate that the client directory has read permissions and the db directory has read and write permissions.

- 13 Edit the file propfile located in the `WAS_HOME/installedApps/<node>/RPAS_war.ear/RPAS.war/WEB-INF/config` directory. The data base path, client source directory and log file parameters need to be updated as appropriate.
  - `dbPath = <STAGING_DIR>/db`
  - `clientSourceDir = <STAGING_DIR>/client`
  - `logFile = <WAS_HOME>/logs/tunnel.log`

 **Example:** `dbPath=/u00/webximck/rpas11/db`  
`clientSourceDir=/u00/webximck/rpas11/client`  
`logfile=/u00/webximck/WebSphere/AppServer/logs/tunnel.log`
- 14 On the Enterprise Applications page, start the newly created `RPAS_war` application by checking the box next to this application and clicking the Start button. Ensure that the status of the new application is up (green arrow).

## Configure the RPAS servlet

The class for the RPAS servlet is `com.retek.mdap.servlet.ServletManager`. The servlet properties have been configured in the deployment descriptor “web.xml” that is originally archived in **RPAS.war**. After being installed on WebSphere, the file “web.xml” resides under the directory `<WAS_HOME>/installedApps/<node>/RPAS_war.ear/RPAS.war/WEB-INF`.

This deployment descriptor provides two sets of initialization parameters to the RPAS servlet.

-  **Note:** The deployment descriptor is recommended not to be modified; and moreover, all the servlet initialization parameters besides the “timeout” and “sleep” parameters that specify the time in seconds are not allowed to change. If editing is unavoidable, for example, if the servlet name and URL pattern mapping must be changed to fit into your deployment environment, you should modify it following the documentation of your web server.

If the web.xml is not modified, the first servlet instance has the name “`rpasLogin`” and is mapped to “web”, and the second servlet instance has the name “`rpasTunnel`” and is mapped to “tunnel”. The second instance of the servlet named “`rpasTunnel`” will be utilized in a future release. The mapped URL pattern is referred as **[RPAS\_LOGIN]**.

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.

# Configure and Administer the Web Application

## Start the RPAS web configuration utility – Administration Console

- 1 To access the RPAS web configuration utility, start a web browser (Internet Explorer 6 recommended) and go to the following location:

`http://[WEB_SERVER_ADDRESS]/[CONTEXT-NAME]/[RPAS_LOGIN]`

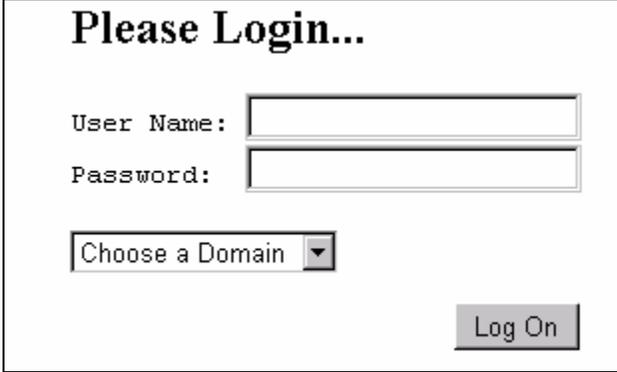
WEB\_SERVER\_ADDRESS is the address you use to access your web server.

CONTEXT\_NAME is the value set by the administrator for the Context Root field as indicated in “Install the RPAS Web Application” section above.

RPAS\_LOGIN is the value specified in the “RPAS Servlet Configuration”. Note if web.xml is not modified it defaults to “web”.

 **Example:** <http://mspdev18:13085/rpas11/web>

The following login window is displayed:

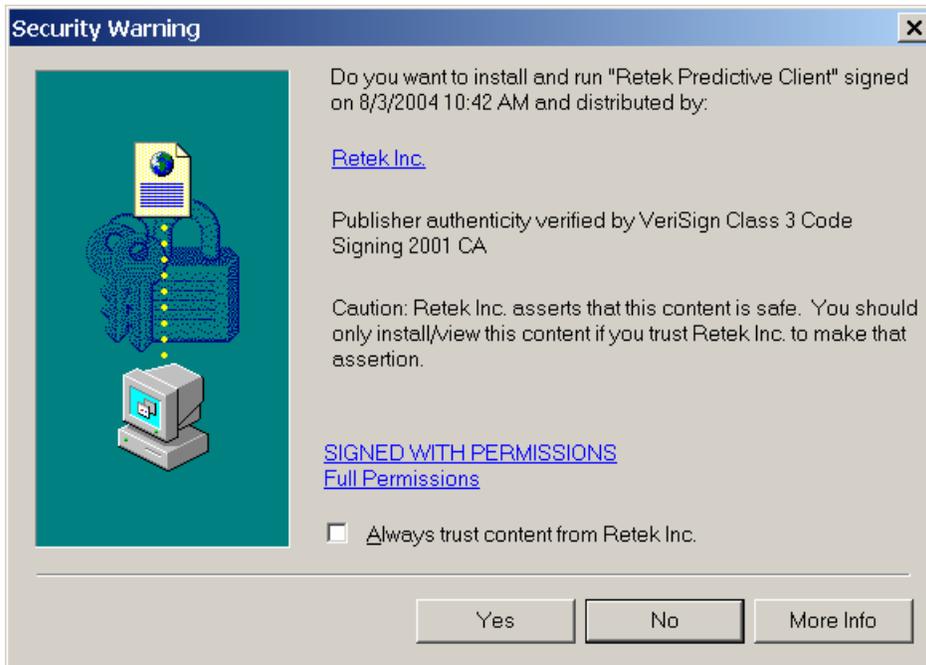


The login window is titled "Please Login...". It contains three input fields: "User Name:" followed by a text box, "Password:" followed by a text box, and "Choose a Domain" followed by a dropdown menu. A "Log On" button is located at the bottom right of the window.

*Figure 1 – 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.

4 A security warning window is presented.

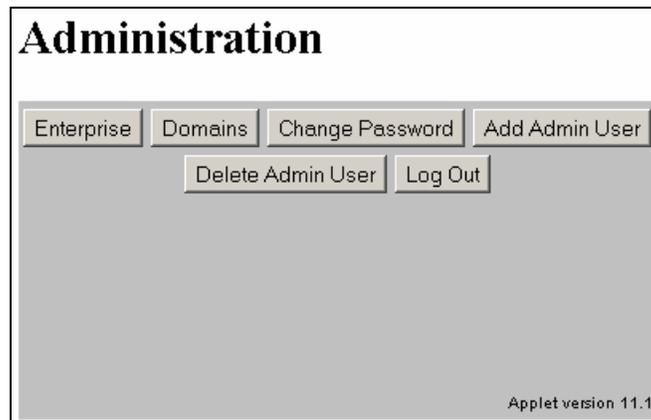


**Figure 2 – Security Warning on Internet Explorer**



**Figure 3 – Security Warning on Firebird**

- 5 Click “Yes” and the Administration Console is presented to the user.



**Figure 4 – Administration Console**

### **Configure web launch – Enterprise configuration**

The following section describes how to configure the use of the web launch. Web launch allows domain location setup, client application installation, and application launch processes to be initiated from a web browser.

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).

- 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.

- 2 Make sure the **Web Server Name** field in the RPAS Enterprise Configuration dialog is empty, and then click the **Confirm** button. All other fields in this window are ignored.

RPAS Enterprise Configuration

Web Server Name:

Tunnel Servlet Name:

Proxy Server Name:

Proxy Server Port:

Staging Server Name:

Staging Input Path:

Staging Output Path:

Socks Port:

SSL Encryption Level:

Message Timeout:

Compression Threshold:

Force SSL:  Use HTTP 1.1:

**Figure 5 – RPAS Enterprise Configuration Window**

## Other web client administration activities

### Domain configuration

- 1 Click Domains on the Administration Console to open the RPAS Domain Configuration window. This window allows specification of the location of RPAS domains. Each domain that can be accessed by a user must be specified with the dialog.

The screenshot shows the 'RPAS Domain Configuration' dialog box. It features a table with two columns: 'Domains' and 'Description'. The 'Description' column contains the following fields:

|                                               |                         |                                              |
|-----------------------------------------------|-------------------------|----------------------------------------------|
|                                               | Description:            | <input type="text" value="RDF Domain 1"/>    |
|                                               | Path: *                 | <input type="text" value="/path/to/rdf/dc"/> |
|                                               | Database Server Name: * | <input type="text" value="dbserver"/>        |
|                                               | Daemon Port: *          | <input type="text" value="12345"/>           |
| <input type="text" value="RDF Domain 1 (1)"/> | Staging Prefix: *       | <input type="text" value="xxx"/>             |
|                                               | Memory Size:            | <input type="text" value="-1"/>              |
|                                               | Start Port:             | <input type="text" value="40000"/>           |
|                                               | End Port:               | <input type="text" value="45000"/>           |
|                                               | Client Version:         | <input type="text"/>                         |

\* Required Fields

Buttons: New, Delete, Copy, Paste, Confirm, Cancel

**Figure 6 – RPAS Domain Configuration Window**

- 2 To add a new domain, click **New**, enter the following information, and then click **Confirm**.

| Field Name                  | Value Description                                                                                                                                                                                                                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>          | This is displayed to users when they are selecting a domain to log in to. Required.                                                                                                                                                                                                                     |
| <b>Path</b>                 | The full path to the directory containing the domain on the database server. Required.                                                                                                                                                                                                                  |
| <b>Database Server Name</b> | The hostname of the database server containing the domain. Required.                                                                                                                                                                                                                                    |
| <b>Daemon Port</b>          | The port number of the <b>DomainDaemon</b> process running on the database server. The port must be between 1025 and 65535 (inclusive). Required.                                                                                                                                                       |
| <b>Staging Prefix</b>       | Only used by <b>retail.com</b> deployments. This can be set to any arbitrary value.                                                                                                                                                                                                                     |
| <b>Memory Size</b>          | Leave Blank. Not used right now.                                                                                                                                                                                                                                                                        |
| <b>Start Port</b>           | Start of the range of ports used by a client PC (web launch architecture) or the web server (web tunneling architecture) to connect to the database server. This value <b>must be &gt; 1025</b> . If it not specified, the RPAS database server attempt to find a free port whenever a client connects. |
| <b>End Port</b>             | End of the range of ports used by a client PC (web launch architecture) or the web server (web tunneling architecture) to connect to the database server. This value cannot be greater than <b>65535</b> .                                                                                              |
| <b>Client Version</b>       | Currently unused; leave blank.                                                                                                                                                                                                                                                                          |

- 3 To change an existing domain configuration, select the domain from the **Domains** list, modify any of the fields, and click the **Confirm** button. The **Cancel** button will discard any changes that have been made.
- 4 The **Delete** button will delete the currently selected domain configuration.
- 5 To copy all of the domain settings of a domain, select the domain from the Domains list and click **Copy**. Selecting another domain and clicking the Paste button will update the selected domains settings with the copied settings. Click the **Confirm** Button to save the updated information.

### 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 that allows access to the administrative console.
- 2 Enter the current password in the Old Password field. Passwords should not exceed 30 characters in length.
- 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. The user name must not be used by other people. If the user name has been used, then an error dialog will pop up. Click OK on this error dialog to acknowledge this error, and then enter another name for this new administrative user.
- 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

Click **Logout** to exit the administrative console. This returns you to the **Login** window as in Figure 1.

## 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 (Internet Explorer 6 is recommended) and go to the following location:  
http://[WEB\_SERVER\_ADDRESS]/[CONTEXT\_NAME]/[RPAS\_LOGIN]



**Example:** http://mspdev18:13085/rpas11/web

This address is established during the initial installation and configuration; administrators must provide this to the end users. The WEB\_SERVER\_ADDRESS portion of the URL is the address of the host on which the Java application service is live. This address may also include an alternate TCP/IP port number to communicate on (e.g., for port 8080, webss:8080). You should see a login screen that looks like Figure 1 (Login Window).

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

When the **Log On** button is clicked, the **DomainDaemon** on the database server is contacted to verify that the specified user is allowed to access the selected domain. Please ensure that the **DomainDaemon** process is running on the database server before clicking on **Log On**. If access to the domain is allowed, the user is presented with a security window from the web browser. On Internet Explorer the security window looks something like in Figure 2 and on Firebird, the security window looks like Figure 3.

- 3 After you click **Yes** in the security window, a check is made to see if the RPAS client application needs to be installed on the user's PC. The web server administrator is able to dictate a common location of an RPAS client installation for all users' PCs. This is accomplished by setting the appropriate value in the server-side clientPath.txt file (note the mixed-case filename) under the [STAGING\_DIR]/client directory. The file "clientPath.txt" is an optional file under [STAGING\_DIR]/client directory. RPAS web installation files don't contain it. It's up to the installer to decide whether or not he wants to dictate the installation location on user's PC by creating this file and specifying the full path of installation directory within it. The client installation directory must have at least 12 MB storage space. If the user has not previously installed the RPAS client application, or if a newer version has been installed on the server, the RPAS client will be downloaded and installed. If 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 12 MB of free storage for installing Rpas client, 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, and 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.



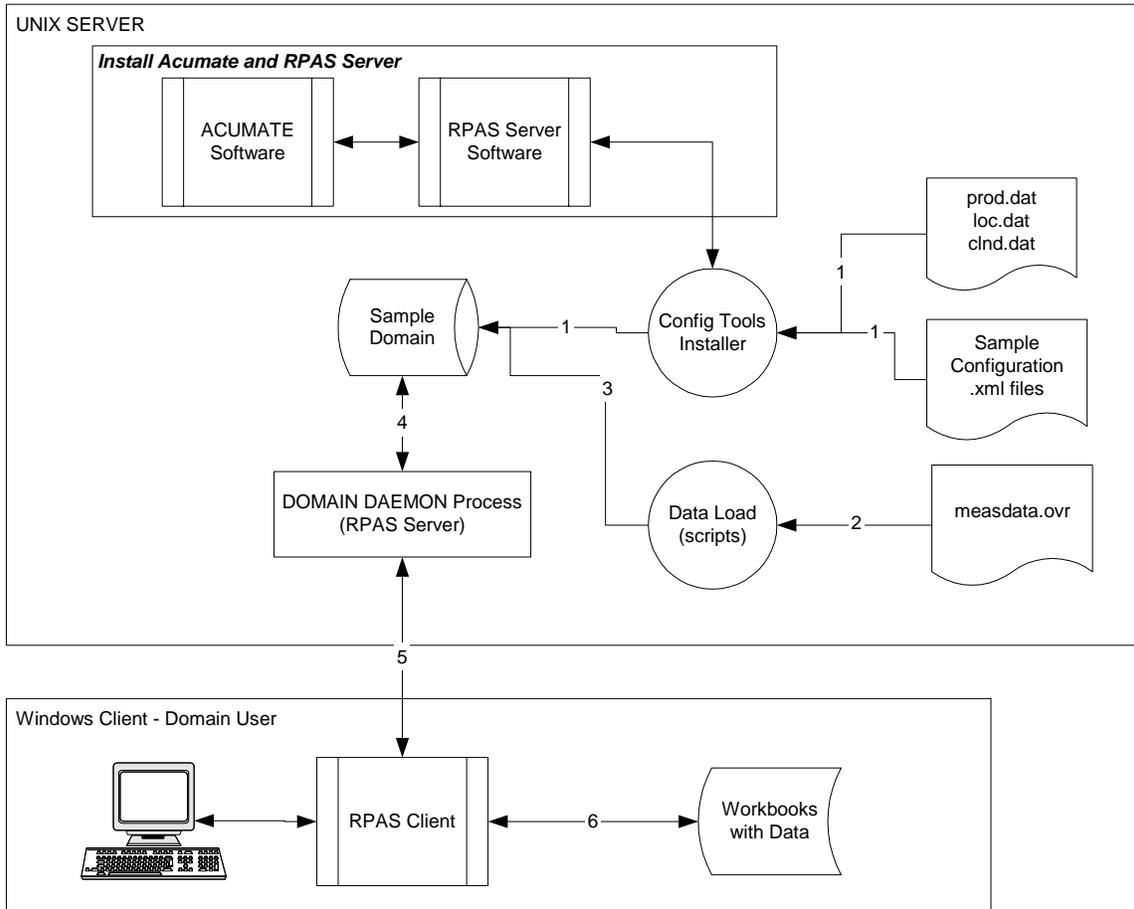
**Note:** If the RPAS client application does not need to be installed on the user's PC after you click **Log On**, the RPAS client application immediately starts and connects the user to the selected domain.



# Chapter 9 – Install Sample Configuration

## Overview of process steps

This diagram shows an overview of the steps involved in the building and use of an RPAS domain. This section will review and document each of the steps in this diagram, referring to each step by the number indicated on the flow chart.





## Step 1: Extract Sample Configuration from .zip file

Unzip the **SampleConfig.zip** file to a location on the server. For the purposes of these instructions assume that location is called `/root/testenv`.

The following subfolders will be created in `/root/testenv`:

`/Sample_Config` – contains the directory and files for the configuration

`/Sample_Config/scripts` – Data load script

`/Sample_Config/data` – hierarchy and sample data files (this path is used in conjunction with the `-in [input]` option of the `rpasInstall` command)

`/Sample_Config/Sample_Config` – Configuration files for use in building the domains

Do not change the directory name for the configuration or alter the contents in any way.

## Step 2: Build the Sample RPAS domain

This chapter provides instructions for how to create the Sample RPAS 11.1 domain using the Sample configuration that was created using the Configuration Tools 11.1.

Because building an RPAS domain is currently a manual process, the person building the domain should be skilled in administering UNIX or NT servers and should have scripting skills.



**Note:** The configuration tools are supported on all platforms (Sun, HP-UX, AIX, and NT); however, they require Java v1.4.2. Make sure that the server you will be using has this version of Java.

### Verify the environment variable settings

Prior to beginning this step, you should have installed RPAS and the Configuration Tools on your server. During that process, you should have set up the necessary environment variables for RPAS and the Configuration Tools.

Log into the server. Use the commands below to verify your environment settings:

```
echo $RPAS_HOME
```

```
echo $RIDE_HOME
```

```
echo $JAVA_HOME
```

```
echo $PATH
```



**Note:** The path for the `RPAS_HOME` variable may change from release to release.

If you make any changes to the environment variable settings, remember to exit and restart your UNIX session in order to execute your `.profile` and make the changes effective. This step is very important before you continue to the remaining steps.



**Note:** The paths for your `RIDE_HOME` and `RPAS_HOME` variables cannot have spaces in them. Given this restriction, do not place your Tools build, Tool Configurations or RPAS installation under Program Files or My Documents.

### Sample Data Files

The domain build process requires the following data files to be available:

- prod.dat
- loc.dat
- clnd.dat
- measdata.ovr

These files should be located in the `/root/testenv/Sample_Config/data` directory. This directory path will be used during the domain build process as the input directory.

### Domain Environment Setup

The path that the domain will be created must exist prior to running the domain build process.

For the Sample domain, manually create the directory structure:

```
/root/testenv/domain
```

The domain name, **Sample\_Project**, that is stored within the configuration, will automatically be created under the domain path. So, for the above domain path, the full path to the domain will be as follows once the domain build process is completed.

```
/root/testenv/domain/Sample_Project
```

### Tools Installer – Build the Domain

Run the Tools Installer, the **rpasInstall** script, to build the domain. This executable is located in bin directory of your Tools installation. The general syntax for the **rpasInstall** script is as follows:

```
rpasInstall [-version | -testinstall | -fullinstall | -patchinstall]
-cn <config_name> -ch <config_home> -dh <domain_home> -in
<input_directory> [-rf <function_name>]
-log <logfile_name>
```

For example, to run the **rpasInstall** script in order to build the Sample domain, the command would be as follows:

```
rpasInstall -fullinstall -cn Sample_Config -ch
/root/testenv/Sample_Config -dh /root/testenv/domain -in
/root/testenv/Sample_Config/data -log /root/testenv/domain
```

Please refer to the RPAS 11.1 Configuration Guide, Chapter 12 – Building an RPAS domain, for more details on the Tools Installer and the specific options to the **rpasInstall** command.



**Note:** The **rpasInstall** script only loads the hierarchy files and builds the domain. It does not load any measure data. The hierarchy files are copied to the `/input/processed` directory of the domain and appended with a time-date stamp.

## Step 3: Copy data load script and data file

Once the Sample domain has been created, copy the script, **loadmeas.sh**, from the configuration directory `/root/testenv/Sample_Config/scripts` to the domain folder:

```
root/testenv/domain/Sample_Project/scripts
```

Copy the file **measdata.ovr** from `/root/testenv/Sample_Config/data` to the input directory of the Sample domain:

```
/root/testenv/domain/Sample_Project/input
```

## Step 4: Load data into the Sample Domain

The Sample configuration has been delivered with data that can be loaded into the domain. You may substitute your company's data for the sample data if you wish, however the data files must conform to the format of the data files provided.

Data is loaded into the Sample Domain at the subclass/channel/day level.

Navigate to the directory `/root/testenv/domain/Sample_Project/scripts` and run the script `loadmeas.sh` using following syntax:

```
loadmeas.sh <<Absolute_Path_To_Domain>> > dataload.log
```

For example, if the Sample domain were located at `/root/domains/Sample/Sample_Project`, the `loadmeas` command would be the following:

```
loadmeas.sh /root/testenv/domain/Sample_Project > dataload.log
```



**Note:** You can validate that the data loaded correctly by building the sample workbook as described in Chapter 11.

The `loadmeas.sh` script utilizes the *loadmeasure* utility to load the sample data.

## Step 5: Start the RPAS DomainDaemon

The RPAS DomainDaemon process runs on the server. It allows a user to access any domain on the server using the RPAS client installed on their local machine.

Please refer to the RPAS 11.1 Administrator's Guide, Chapter 2 – Domain Administration for instructions on how to use the DomainDaemon.



**Note:** You will need to record the port number that is used to start the process. It will be needed to install and configure each RPAS client that is installed.



# Chapter 10 – Configure the RPAS Client

After creating an RPAS domain and starting the DomainDaemon, you must configure the RPAS client to connect to the domain on a server. This section provides instructions for configuring the RPAS client on a local computer using a Microsoft Windows operating system.

## The EConfigure Utility

EConfigure is a Windows application that configures the client-server communication for RPAS. Configure lets users specify communication parameters and produces files that are used as input to the client. These files must be in FCF (Foundation Configuration File) format. The files contain the necessary information for the client to start up the communication with the server. These files can be stored on the client machine or on the network.



**Note:** Included with the RPAS 11.1 client installation is the previous version of this utility named “**Configure.exe**”. This older version is included with and supported in 11.1 in addition to “EConfigure.exe” but will be deprecated with RPAS 11.2. The only difference between these utilities is that “EConfigure” stores passwords in an encrypted format. It is recommended that customers begin using the new “EConfigure” utility whenever possible.

When the client is executed, a file named Foundation.FCF is expected in the same directory. If the file has a different name or if it is stored somewhere in the network, then the path to this file must be passed in as an argument to the client.

EConfigure consists of a menu bar, a main view and the advanced settings dialog box. Passwords saved in the FCF file are encrypted. To launch EConfigure, double-click the EConfigure.exe file, which is by default located in the root directory of the RPAS client.

### The Menu bar

The files produced by EConfigure may contain multiple connections. Each connection will be specific for a server with certain communication settings. Connections need to have unique descriptions, and they can be added and deleted using the menu bar.



### The Main view

The main view has the basic connection parameters. On this view, three groups of controls are available:

- The connection group
- The domains group
- The Advanced Settings dialog

### The Connection group

#### Database server

The hostname or the IP address of the server. For example: atldev03 or 10.2.1.23

#### Daemon port

The port number on which the domain daemon is listening. Must be an integer between 2048 and 65535. For example: 55278

### The Domains group

#### Domain

The name of the domain. Select a domain from the list or type the name of a new domain and click Add Domain. You can delete a domain from the list by selecting it and then clicking Delete Domain.

#### Domain path

Domain path is the full path to the directory containing the domain. For example:  
/root/testenv/domain/Sample\_Project

#### User

The database user that is specified for the domain. For example: adm

#### Password

The database password that is specified for the domain. For example: adm

### The Advanced Settings dialog

#### Default database login

##### User

The database (Acumate) user that will be used by the client if a domain specific user has not been entered. For example: adm

##### Password

Like the default database user, default database password will be used if a domain specific password has not been entered. For example:adm

#### Database port range

Port range is used to specify the range of ports on which the Acumate processes will be started by the DomainDaemon. The port start and port end fields are the lower and upper limits of this range respectively.

These fields must be integers between 2048 and 65535. For example: Start: 40000, End: 45000

#### Compression threshold

The number of bytes above which client and server will be using compression. Only advanced users should be manipulating this number.

#### Web tunnelling

The configuration of web tunneling is not completed in this utility.

#### Proxy settings

The configuration of the RPAS client to support a proxy server is not completed in this utility.

## Language configuration

Several of the RPAS-based Retek products and solutions are available in languages other than English.

By default, the language of the RPAS client is determined by the language of the client-side operating system. You can override this behavior by setting the Language entry in the Options section of the foundation.ini file, for example:

```
[Options]
Language=9
```

If the RPAS client cannot find the library for a specified language, it will default to English. Availability of an RPAS-based solution in a language other than English is based on contractual commitments between Retek and individual customers. If a customer has been granted support for a language other than English, Retek will provide the language number that can be set in the foundation.ini file.



# Chapter 11 – Using the Sample Domain

## Build the Sample Workbook

The validation process is complete when the Sample RPAS workbook can be built without error.

To build the Sample workbook:

- 1 Launch the RPAS client by double-clicking on foundation.exe in the location where the client was installed in Chapter 5.
- 2 Once the client window opens, select File→ New from the menu
- 3 Select the tab “Templates” in the workbook selection window
- 4 Select the workbook “Sample” and click OK
- 5 Select the calendar, product, and locations for the workbook



**Note:** Data has been loaded for years 2004 and 2005, all products, Brick and Mortar channel only. The channels Catalog and E-Commerce have not been pre-loaded with data.

If the workbook opens without error, then the validation process is complete. If data is present in the workbook for years 2004 and 2005, all the products, and the Brick and Mortar channel, then the data load was successful. If data is not present, then check the log file generated in Chapter 8 Step 4 when the loadmeas.sh script was run.



# Appendix A – Sample Domain Overview

The Sample domain that has been provided with the ARPO Platform is a simple design with limited functionality. The capabilities of the RPAS and Configuration Tools products allow you to create a more complex domain that would reflect a company's specific business processes.

This section will provide a summary of the components of the Sample Domain and their functionality. For guidance on modifying or creating custom configurations, please refer to the RPAS 11.1 Configuration Guide.

For an introduction and description of the components that make up an RPAS Domain, please refer to the RPAS 11.1 Configuration Guide.

## Hierarchies

There are 3 hierarchies defined for the Sample domain:

### 1 Product

The dimensions that make up the product hierarchy are:

Subclass > Class > Department > Group > Division > Company

### 2 Location

The dimensions that make up the location hierarchy are:

Channel > Company

### 3 Calendar

The dimensions that make up the Calendar hierarchy are:

Day > Week > Month > Quarter > Season > Year

## Workbooks and Worksheets

There is one workbook in the Sample domain called "Sample". This workbook contains the following tabs and worksheets:

- Simple Balance Set
  - Daily by Subclass – worksheet displays data by day, subclass, channel
  - Weekly by Class – worksheet displays data by week, class, channel

## Measures and Rules

| Measure        | Description                             | Rule                                                                                                               | Aggregation Method | Access                                                                                       |
|----------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------|
| Wp BOP R       | Beginning of Period Inventory at Retail | If not the first period, equals EOP of prior period; otherwise, equals BOS                                         | Period-Start       | Read Only                                                                                    |
| Wp BOS R       | Beginning of Season Inventory at Retail | Equals BOP at the [All Calendar] level<br>Cells not displayed at other calendar levels                             | N/A                | Writable; editable at any product or location, but only at [All Calendar] calendar dimension |
| Wp Sales R     | Retail Sales                            | None                                                                                                               | Total              | Writable                                                                                     |
| Wp Markdowns R | Retail Markdowns                        | None                                                                                                               | Total              | Writable                                                                                     |
| Wp Receipts R  | Retail Receipts                         | None                                                                                                               | Total              | Writable                                                                                     |
| Wp EOP R       | End of Period Inventory at Retail       | BOP – Sales – Markdowns + Receipts                                                                                 | Period-End         | Read Only                                                                                    |
| Ly Sales R     | Last Year Sales                         | For each Day, equals the value of Wp Sales R corresponding to the same day 365 days past (i.e. same day last year) | Total              | Read Only                                                                                    |

## Appendix B – 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 approximately 5 MB 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 older version of the software that needs to be upgraded.

Each time a user logs into the RPAS web launch software through a web browser, approximately 70 KB of data is transferred from the server to the client PC. Data transfers from the PC back to the server are, at most, only a couple of kilobytes. Other than these data transfers, for web launch configuration, there is no communication between a PC and the web server, only between the PC and the database server; however, for web tunnel configuration, all data transfer goes through web server.

One way to estimate the bandwidth requirements centers on a “burst” scenario where a particular number of users logs into RPAS at once. To calculate for this scenario, take the total number of users that might be launching an application at one time, multiply this number by **560,000** (70 KB \* 8 bits per byte), then divide the result by the desired maximum launch time (the number of seconds lapsed between clicking the **Login** button and the appearance of a usable application window) to get the approximate maximum bandwidth rate that would be needed in terms of bits per second. For example, 10 simultaneous user launches with a launch time of 10 seconds calculates to a bandwidth requirements of  $10 * 560000 \text{ bits} / 10 \text{ seconds} = 560000 \text{ bps}$  bandwidth.

Another metric for estimating bandwidth requirements focuses on the time it takes to download the client software. To calculate this particular metric, divide **40,000,000** (5 MB client download \* 8 bytes per byte) by the desired installation time to get bandwidth in bits per second. For example, the download of one copy of the client software in 60 seconds would take  $40,000,000 \text{ bits} / 60 \text{ seconds} = 666667 \text{ bps}$ .