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Retek® Predictive Application Server™ 11.1.4

Installation Guide

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Customer Support is available 7x24x365 via email, phone, and Web access.

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Contact Method	Contact Information
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Mail

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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 RPAS platform, the installation process, and the contents of the installation package.
- Chapter 3: Installing Acumate
- Chapter 4: Installing the RPAS server components
- Chapter 5: Installing the RPAS client
- Chapter 6: Configuring the RPAS client to connect to the server and a domain

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: The 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.
- 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.

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

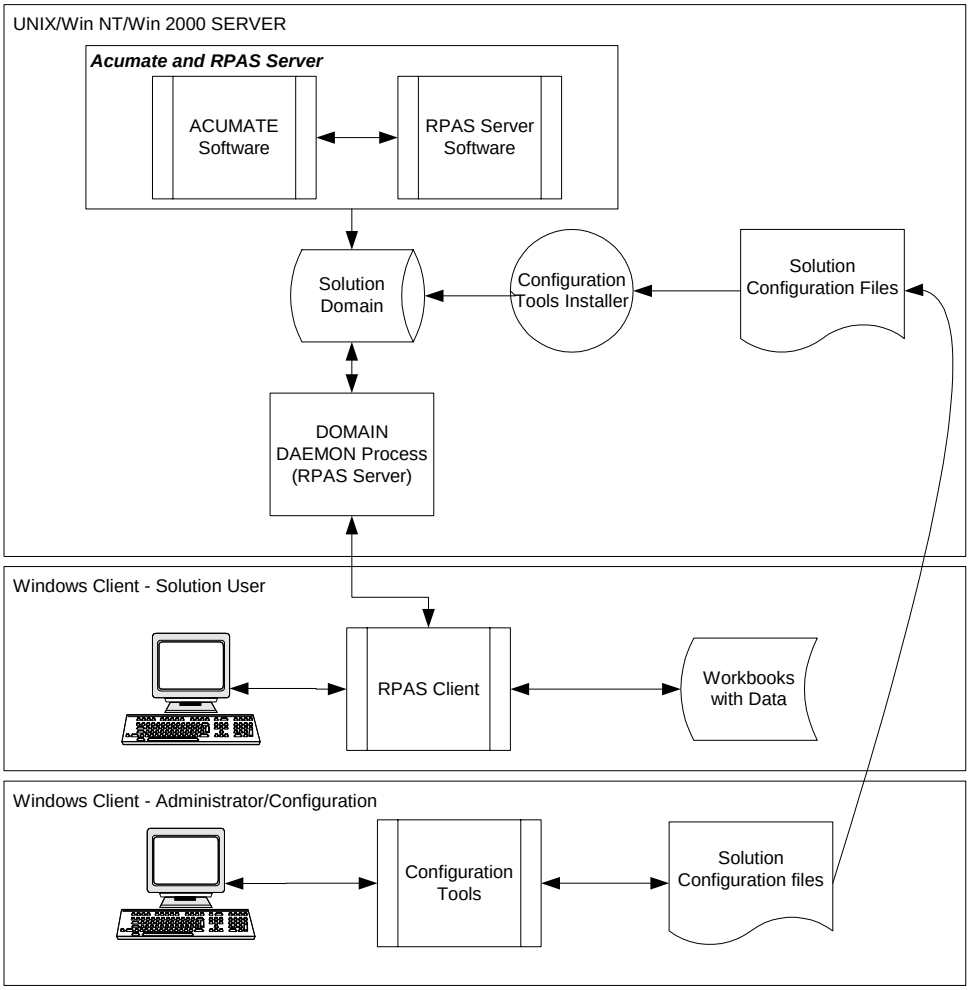
RPAS platform overview

RPAS 11.1.4 is supported on several platforms (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

A typical RPAS, server-based installation is illustrated below.



The following table indicates which software components are needed for each task.

Task	Typical user	Platforms	Acumate v 2.5	RPAS Server	RPAS Client	Environment Variables to be set
Build an RPAS domain.	System Administrator	Solaris AIX HPUX	Yes	Yes	No	RPAS_HOME
Log in to an existing (built) RPAS domain for the primary purpose of building workbooks.	End-User	Windows	No	No	Yes	None

System requirements

The basic client and server components are required for RPAS 11.1.4.

Server

Supported Platform	Versions Supported
Solaris (SPARC)	8
HP-UX (PA-RISC)	11i (11.11)
AIX	5L (5.1, 5.2)

- 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.

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)

Archive contents

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

- Acumate
- RpasServer
- Client

The archive is called ARPOplatform.11.1.4<Operating System>.tar.Z. 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 11.1.4. Any version of Acumate installed with a previous RPAS version (RPAS 9.3, 9.4, or 11.0.x) is compatible with 11.1.4.

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.

Chapter 3 – Acumate Installation

This chapter describes the step-by-step procedure for installing Acumate on UNIX operating systems.

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*.

Create the user account

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

Install Acumate

1 Log in to the UNIX server as the newly created acusys user.

2 Create a 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.

- /u00/acusys> mkdir Acumate

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

`[RPAS Installation]/Acumate`

into the mew `[ACUDIR]` directory.

- /u00/acusys> cd Acumate
- /u00/acusys/Acumate> cp –rf [RPAS Installation]/Acumate/* .

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

- /u00/acusys> chmod –R 755 Acumate

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

- acumate.tar.Z
- install_acumate.ksh

6 Change directories into the [ACUDIR] directory and run the command:

- /u00/acusys/Acumate> ./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 Change directories into the [ACUDIR]/bin directory and source the shell file aculogin.sh by entering the command:

- . ./aculogin.sh

11 Exit the session.

Chapter 4 – RPAS Server Installation

This chapter explains how to install the RPAS server on UNIX machines.

Install the RPAS server

1 As the acusys user, create a 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.

- /u00/acusys> mkdir RpasServer

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

`[RPAS Installation]/RpasServer`

into the new [RPASDIR] directory.

- /u00/acusys> cd RpasServer
- /u00/acusys/RpasServer> cp –rf [RPAS Installation]/RpasServer/* .

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

- `/u00/acusys> chmod –R 750 /RpasServer`

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
- include
- lib
- rpasVersion.ksh (file)
- rpaslogin.ksh (file)

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

- /u00/acusys> chmod –R 750 RpasServer

Edit the acusys profile

The acusys profile must be edited to set the environment variables needed by RPAS and to run the Acumate and the RPAS login scripts.

The RPAS_HOME environment variable must be set to the root directory of the RPAS server installation ; and the rpaslogin.ksh and aculogin.sh scripts must be run from the acusys profile (.profile). The .profile file is located in the home directory of the acusys account (/u00/acusys). To change directly to the acusys home directory after logging in, the following UNIX command can be run - **cd ~**

Example entries in the acusys .profile are:

```
RPAS_HOME=/u00/acusys/RpasServer
export RPAS_HOME
. $RPAS_HOME/rpaslogin.ksh
. /u00/acusys/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.

The .profile must be executed to make these new environment variables become active. A new acusys session can be started, or the following UNIX command can be run to source the .profile:

```
. .profile
```

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

Use the commands below to validate environment settings:

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

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. 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.

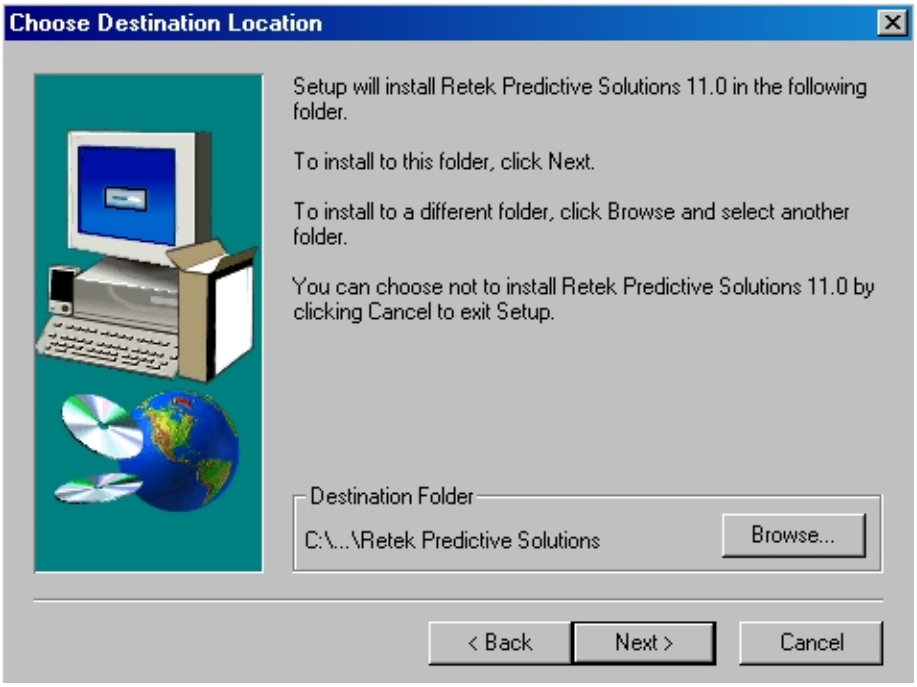
RPAS client installation procedure

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.

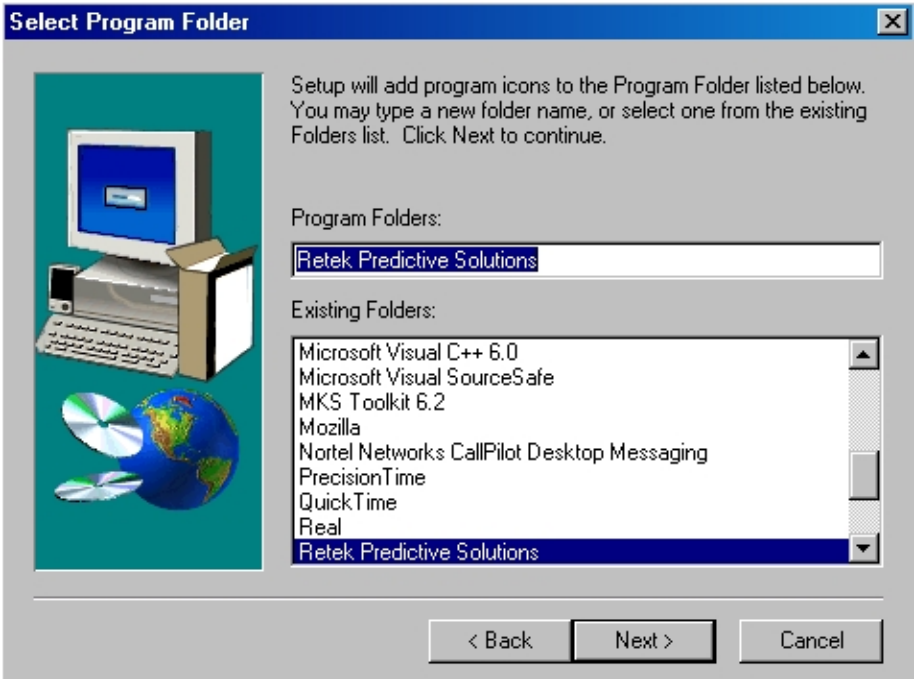
1 Run the setup.exe file found in the [RPASCLIENT] directory on the network.

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 6 – 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 11.1.4 client installation is the previous version of this utility named "**Configure.exe**". This older version is included with and supported in 11.1.4 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.

Appendix A – 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 scenaro, 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 bits / 10 seconds = 560000 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 bites 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 bits / 60 seconds = 666667 bps.