Retek® Predictive Application Server™ 11.2.0.1

Installation Guide

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Contact Method	Contact Information
E-mail	support@retek.com
Internet (ROCS)	rocs.retek.com Retek's secure client Web site to update and view issues
Phone	+1 612 587 5800

Toll free alternatives are also available in various regions of the world:

Australia	+1 800 555 923 (AU-Telstra) or +1 800 000 562 (AU-Optus)
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Korea	00 308 13 1342
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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 Oracle Retail On-Line Customer Support web site (ROCS), located at: http://rocs.retek.com. A user name and password are required to access this site. You can obtain a user name and password from your Oracle customer contact.

If you are currently running RPAS 11 it is recommended that you install RPAS 11.2 from ROCS and follow the standard process for installing an RPAS 11 patch.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 and Tools components on UNIX systems.
- Chapter 5: Installing the RPAS server and Tools components on Windows systems.
- Chapter 6: Installing the RPAS client.
- Chapter 7: Installing the components for deploying and using RPAS over the Web.
- Chapter 8: Installing the provided sample configuration.
- Chapter 9: Configuring the RPAS client to connect to the server and a domain.
- Chapter 10: Using the provided sample configuration.

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 Oracle Retail solutions such as Retek Demand Forecasting (RDF), Assortment and Space Optimization (ASO), and Advanced Inventory Planning. 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.
- RPAS domain: The collection of server-side directories and files containing data and procedures that comprise the RPAS solution. Refer to the RPAS 11.2 Administration Guide and the RPAS 11.2 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 solution. See the RPAS 11.2 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

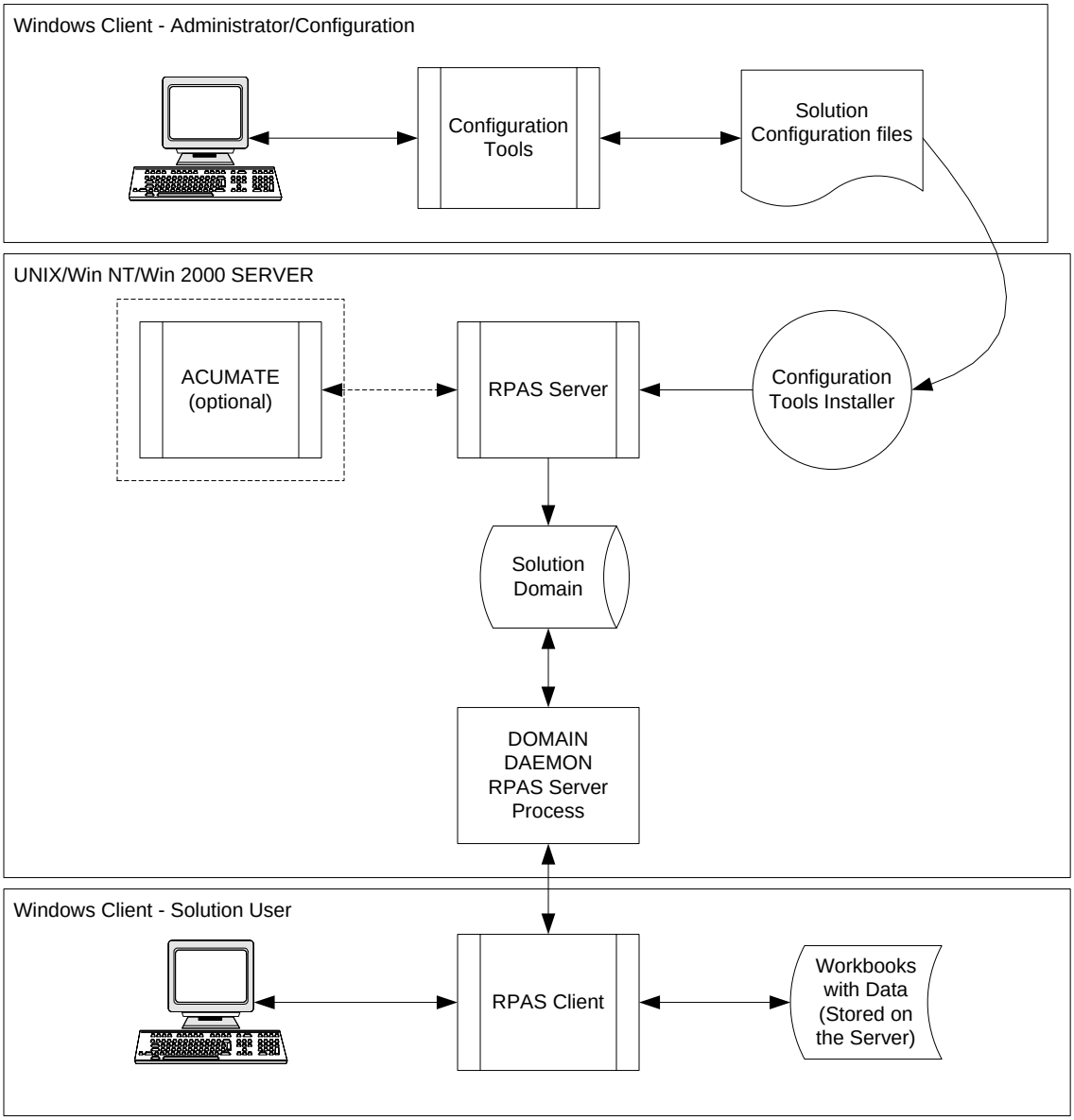
RPAS platform overview

RPAS 11.2 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 11.2 foundation; these solutions must be installed separately. 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

A typical RPAS, server-based installation is illustrated below. RPAS and the Configuration Tools may also be installed on a single Windows stand-alone machine. For instructions on installing on a Windows machine, refer to "Chapter 5 – RPAS server and tools installation on Windows."



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	RPAS Server	RPAS Client	Configuration Tools	Java v1.4.2	Manually Set Environment Variables
Log in to an existing (built) RPAS domain for the primary purpose of building workbooks.	End-User	Windows	No	Yes	No	No	No
Use the configuration tools to create or modify solutions.	Solution/ Product Administrator	Windows	No	No	Yes	Yes	No
Use the configuration tools to build configured solutions.	Solution/ Product Administrator	Windows UNIX	Yes	No	Yes	Yes	Yes (for RPAS server)

Java 2 Run-time Environment (JRE) 1.4.2 can be acquired from java.sun.com for Sun Solaris and Microsoft Windows or from the respective vendor's web site for IBM and HP.

For instructions on building a domain using the Sample configuration, please refer to "Chapter 8 – Install sample configuration" of this guide.

System requirements

The basic client and server components are required for RPAS 11.2.

Server

Supported Platform	Compiled on Version	Versions Supported
Sun Solaris (SPARC)	8	8
HP-UX (PA-RISC)	11i (11.11)	11.11
IBM AIX	5L (5.1)	5.2, 5.3
Windows NT/2000/XP	NT 4.0 (Service Pack 3 or later)	Windows 2000, Windows XP

- You will also need to install Java Run-time Environment (JRE) v1.4.2 if you are installing the Configuration Tools. For AIX and HP, you should use the 32-bit version of Java v1.4.1
- HP has been patched to PHSS_32572.
- If you are installing the RPAS server on Windows NT/2000, you must install the MKS Toolkit in order to emulate UNIX commands (required for starting the RPAS server on Windows). Oracle employees and partners should contact Oracle IT Support to obtain a copy. Customers can go to www.mks.com for more information about this product. Users running Windows XP should be using MKS version 8.7 as users running older versions of MKS encountered problems on XP.
- 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

- Microsoft Windows NT, 2000, or XP
- Java Run-time Environment (JRE) v1.4.2
- CPU: Pentium 233 or better
- Memory: 256MB RAM minimum
- Disk: 15 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:

- README.txt
- Acumate
- Server
- Client
- Sample_Config
- Tools
- Web

The archive is called **RPAS-11.2.<Operating System>.**tar.zip (for windows, the archive is named **RPAS-11.2.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 11.2. Any version of Acumate installed with a previous RPAS version (RPAS 9.4, 11.0.x, or 11.1) is compatible with 11.2. Also note that the installation of Acumate is only required if using Acumate's native MSPL language.

Server directory

The Server 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 both server-side and client-side directories. Inside the server-side directory, you will find the .zip file containing the RPAS configuration tools that should be installed on the server. In the client-side directory, you will find an executable that will be used on your windows PC to install the gui portion of the configuration tools, for maintaining your configurations.

Note: If you are on windows the Tools directory will be empty, as both tools components are included in the RPAS installation.

Note: The files msvcr71.dll and msvcp71.dll are needed in the configuration tool executable on the client side. If these are missing from your machine please unzip dll.zip from the CDROM.

Web directory

The Web directory contains the two files required for deploying the RPAS client via the intranet (referred to as “web deployment”).

Sample_Config directory

The Sample_Config directory contains the sample configuration that is provided with RPAS. This configuration is used for testing the installation and domain build process.

Chapter 3 – Acumate installation

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

Beginning with RPAS 11.2 the installation of Acumate is only required if there is a need to use Acumate's native programming language MSPL. RPAS (by itself) no longer uses MSPL.

Note: It is required for version 11.4 of Oracle's Advanced Inventory Planning solution (AIP), and for users/administrators that desire the ability to analyze data in RPAS domains using MSPL.

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 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:

   6B28 E200 D81E DD0E

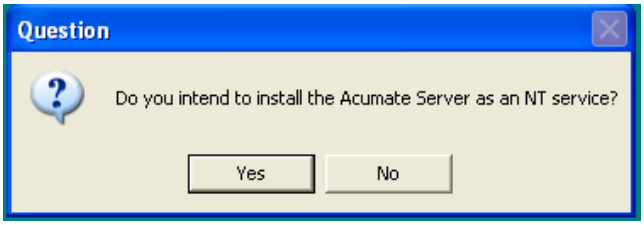
8. Type `exit` at the ACUMATE COMMAND prompt.
9. When prompted for verification, enter `Y`. The [ACUDIR]/bin directory should now contain updated aculogin.sh and aculogin.csh files.
10. Go into the [ACUDIR]/bin directory and source the shell file aculogin.sh by entering the command:
    - . ./aculogin.sh
11. Exit the session.

Acumate installation on Windows

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

Note: Make sure that you have already extracted the file RPAS-11.2.nt.zip , which was discussed in Chapter 2.

1. Open the Acumate folder in the RPAS Installation directory.
2. Run Setup.exe. The program initializes the setup routines.
3. The welcome page is displayed. Follow the procedures in the installation process.
4. After the files have been installed you are asked whether you intend to install Acumate Server as an NT service – select No.



5. You are informed that the Acumate Server installation is complete. Click Finish.
6. Once the Acumate Server installation is complete, you need to provide the Acumate license code.

Note: The Acumate license for Windows is a global license and can be used for all installations (previously individuals had to obtain a license code that was specific to the local installation, which was based on the serial number). The license code must be set using the DOS command line and cannot be set using the Acumate Server User Interface that is launched when selecting Acumate from the Start/Programs menu (as was previously possible).

To launch the DOS command line, go to the Start menu and select Run; type “cmd” in the “Open” field and press OK. This will launch a DOS window.

7. Change directory to the location where the Acumate Server was installed (commonly “C:\acumate server”).

8. Type “aculmode” at the command line and press Enter. Enter the following license number with spaces when prompted to do so:

   D8C6 A204 732A CA87

   Ignore the instructions to “Please contact your Support Representative…” as that step is no longer necessary.

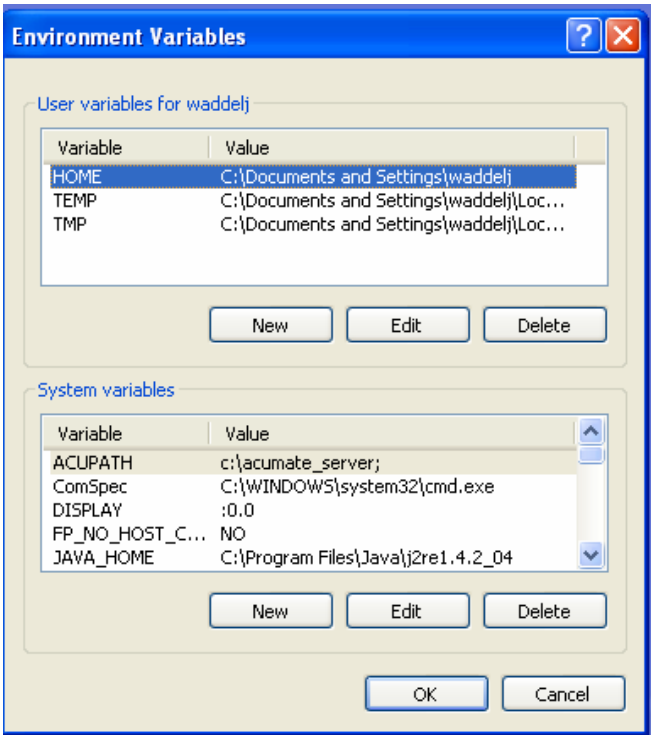
9. (Optional step) If desired verify that the environment variables have been correctly set (PATH and ACUPATH):

   a. Go to Start > Control Panel.

   b. In Classic View, select the “System” icon. In the Category View (Windows XP), select “Performance and Maintenance,” then “System.”

   c. Click the Advanced tab.

   d. Click the Environment Variables button.



   e Scroll down the System Variables and verify that the “ACUPATH” and “Path” variables are set to the folder where Acumate was installed (“C:\acumate server” was used in this sample installation process). Use the following procedure to create or update the path if necessary:

   - Select New.
   - Type ACUPATH in the Variable box.
   - Type the path to the folder where Acumate was installed in the Value box (for instance, “C:\Acumate Server”).

Acumate is now installed and properly configured.

Chapter 4 – RPAS server and tools installation on UNIX

The following chapter describes how to install the RPAS server and the Configuration Tools on UNIX systems.

Server installation

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

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]/Server`

   into the new [RPASDIR] directory.
   - /u00/acusys> cd Server
   - /u00/acusys/RpasServer> cp –rf [RPAS Installation]/Server/* .
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
   - devkit
   - domain
   - 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 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
```

Configuration Tools installation

You must install the configuration tools on the machine where domains will be built and where the RPAS server is installed. Follow these steps to install the configuration tools on a UNIX server.

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

   ```
   [RPAS Installation]\Tools\server-side
   ```

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

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

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

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

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

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

   ```
   .  .profile
   ```

   This step is very important before 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
   ```

Chapter 5 – RPAS server and tools installation on Windows

The following chapter describes how to install the RPAS server and Configuration Tools on a Windows NT, 2000, or XP environment.

Beginning with RPAS 11.2 the RPAS Server and Configuration Tools are installed using a single InstallShield installation process. This process will also set the system environment variables.

Install the server and tools

1. Run **rpas11.2-setup.exe** from the RPAS installation directory.
2. Follow the installation procedures as prompted by the InstallShield program; the program will default to use the following installation directory:

   `C:\Oracle\RPAS`

   If you wish to override this path **make sure that the new path does not contain spaces** as the RPAS server will not function.

Once the installation process is complete, the RPAS server or Tools can be used. There is no need to manually set the environment variables.

Using multiple versions of RPAS on the same Windows machine

If you have multiple versions of RPAS installed on your PC, it is important to note that the environment variables will reference RPAS 11.2 after the InstallShield installation process is complete.

Note: Previously set environment variables for other versions or installations of RPAS will still exist in the "Path" System variable, but Windows uses the first set of variables defined in the path, which is where the installation process places them.

To switch to a different version of RPAS that is installed on your machine, you will need to manually update the environment variables each time you wish to switch. You can either insert the path to the version you wish to use and leave the path to 11.2, or delete the path and either reinstall the 11.2 components or manually reinsert the paths when you wish to revert back to 11.2.

Verify the environment variables

To verify the current environment variables open a DOS window by going to Start > Run, type "cmd" in the "Open:" box, and press OK.

At the command prompt type **env** and verify that the following environment variables are referencing the version of RPAS that you desire to use:

- "RIDE_HOME" variable = path to root directory of Configuration Tools
- "RPAS_HOME" variable = path to root directory of RPAS server (cannot contain spaces)
- "Path" variable
  - Path to "bin" directory of RPAS server
  - Path to "lib" directory of RPAS server
  - Path to "applib" directory of RPAS server
  - Path to "bin" directory of Configuration Tools
  - Path to "lib" directory of Configuration Tools

Update the environment variables

1. From the Windows XP Start menu, go to Control Panel > Performance and Maintenance > System. Click on the Advanced tab, and select the Environment Variables button.
2. Under the System variables section, click on the **Path** environment variable and select Edit. Insert the complete paths for **RPAS_HOME**, including its respective **lib**, **bin**, and **applib** sub-directories as below:

   ```
   [RPASDIR];[RPASDIR]\bin;[RPASDIR]\lib;[RPASDIR]\applib;
   ```

3. Select OK to save your changes.

Verify the Java version

If it is not already installed, install Java 2 Run-time Environment (JRE) v1.4.2. If more than one version of Java is installed on a machine (or if you are unsure if more than one version is installed), you will need to verify the path to Java 1.4.2 in your system environment variables.

Note: It is recommended that you remove any prior versions of Java that are installed on the PC unless they are being used by other applications. This can be done using the "Add or Remove Programs" option of the Windows Control Panel.

1. To verify that the correct path to Java 1.4.2 is set in your environment variables (for Windows XP) go to Control Panel > Performance and Maintenance > System. Select the Advanced tab and the Environment Variables button.
2. In the "System variables" section locate the variable "JAVA_HOME." Ensure that the value of the variable is set to the directory in which Java 1.4.2 is installed, which is commonly:

   ```
   C:\Program Files\Java\j2re1.4.2_04
   ```

3. Update the path if it is not correct.

Chapter 6 – RPAS client installation

This chapter describes the installation of the RPAS client on Windows machines.

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 generally accessible

1. Create a directory on the network from where users will install the RPAS client.

   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 located in the [RPASCLIENT] directory on the network.
2. The welcome page is displayed. Follow the installation procedures as prompted.
3. The setup program exits after the installation is complete.

Chapter 7 – Web deployment

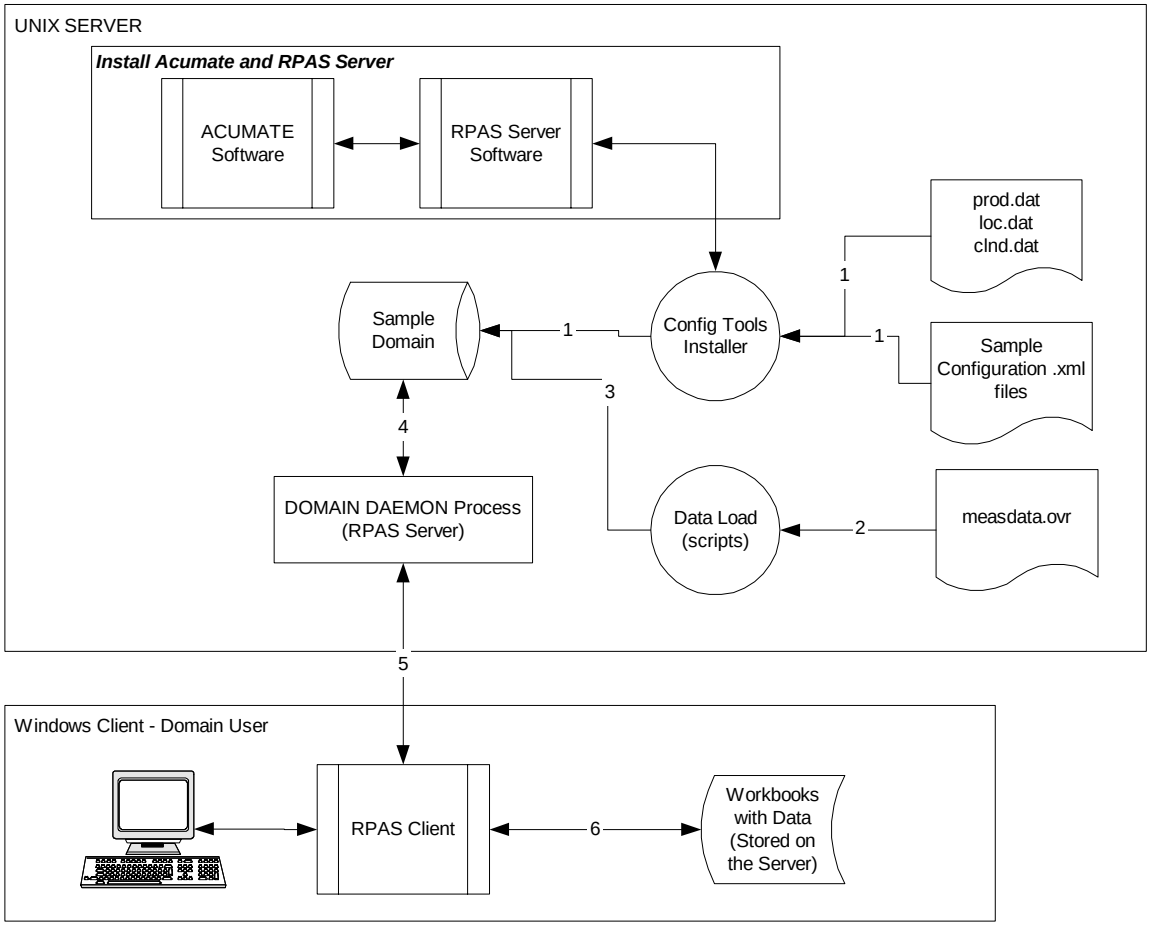
Overview of RPAS Web deployment support

Web deployment for 11.2 will be forthcoming in a future patch.

Chapter 8 – 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/Sample_Config.

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

scripts/ – contains the loadmeas.sh data load script

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

configuration/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, HPUX, 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, unless short file naming conventions are utilized. Given this restriction, do not place your Tools build, Tool Configurations or RPAS installation under Program Files or My Documents. If you do, define all RPAS related environment variables using short (8dot3) file names.

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_Config**, 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_Config

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 <project_name> –ch <project_home> –dh <domain_home> –in
<input_directory> [-rf <function_name>]
–log <logfile_path_and_name>
```

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

```
rpasInstall -fullinstall –cn Sample_Config –ch
/root/testenv/Sample_Config/configuration –dh /root/testenv/domain –
in /root/testenv/Sample_Config/data –log
/root/testenv/domain/rpasinstall.log
```

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 is created, copy the script, **loadmeas.sh**, from the configuration directory /root/testenv/Sample_Config/scripts to the domain folder:

root/testenv/domain/Sample_Config/**scripts**

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

/root/testenv/domain/Sample_Config/**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_Config/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_Config> 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 server (DomainDaemon)

In order to use the domain built from the sample configuration, the RPAS server must be running on the server/machine where the domain is located.

The RPAS server is started by executing the RPAS executable "DomainDaemon," which provides a centralized process for managing domain connections between the client and the server.

Below are the basic instructions for running the DomainDaemon, which will allow a user to connect to the RPAS server and a domain using the RPAS client. Complete information about the Domain Daemon is located in the RPAS 11.2 Administration Guide.

Execute the following command from a UNIX command line (or using MKS on Windows). If the environment variables paths have been properly set, this command can be run from any directory.

```
DomainDaemon –port <port_number> -start
```

Where <port_number> is an integer between 1025 and 65535.

This port number must be used in the configuration file for the RPAS client. Refer to Chapter 9 – Configure the RPAS Client for additional information.

Chapter 9 – Configure the RPAS client

After creating an RPAS domain and starting the DomainDaemon (see the RPAS 11.2 Administration Guide), 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. EConfigure lets users specify communication parameters and produces a file that is used as input to the client. These files must be in FCF (Foundation Configuration File) format/extension. 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.

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 on the network, 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. This value should be “localhost” when running the RPAS server on a Windows machine.

Daemon port

The port number on which the domain daemon is listening. This must be an integer between 1025 and 65535 (for example: 55278).

The Domains group

Domain
This is the name of the domain that will be displayed to the user when logging in. 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
Provide the user ID if you do not wish to force the user to provide it when logging in. The user ID must be defined in the associated domain.

Password
Provide the password for the above user is you do not wish to force the user to provide it when logging in. This password must match the password defined in the domain for the associated user.

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 RPAS server processes will be started by the DomainDaemon (the “rpasDbServer” processes). The port “Start” and port “End” fields are the lower and upper limits of this range respectively.

These fields must be integers between 1025 and 65535, which are also the default values if values are not specified. 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.

Chapter 10 – Using the sample domain

The following describes how to use the sample domain to confirm the successful installation of the RPAS software components and to confirm a successful domain build.

Note: the RPAS server (DomainDaemon) process must be running on the machine where the domain is built. See Step 5: Start the RPAS DomainDaemon in Chapter 8 – Install Sample Configuration for additional information.

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, the data load was successful. If data is not present, 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, Refer to the RPAS 11.1 Configuration Guide.

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

Hierarchies

There are three 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 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 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, ten simultaneous user launches with a launch time of ten 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.