



**Retek<sup>®</sup> Predictive Application  
Server<sup>™</sup>  
11.0.4**

**Administrator's Guide**

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**Corporate Headquarters:**

Retek Inc.  
Retek on the Mall  
950 Nicollet Mall  
Minneapolis, MN 55403  
  
888.61.RETEK (toll free US)  
+1 612 587 5000

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**European Headquarters:**

Retek  
110 Wigmore Street  
London  
W1U 3RW  
United Kingdom

Switchboard:  
+44 (0)20 7563 4600

Sales Enquiries:  
+44 (0)20 7563 46 46  
Fax: +44 (0)20 7563 46 10

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Retek Customer Support  
Retek on the Mall  
950 Nicollet Mall  
Minneapolis, MN 55403

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# Chapter 1 – Introduction

## Overview

All Foundation-based products require setup and administration activities to be performed.

- Domain administration
- User account management
- User and workbook template administration
- Hierarchy maintenance
- Measure analysis
- Workbook auto build maintenance
- Translation administration

## System administration workbooks

Using the administration workbooks, designated employees manage other employees' use of the Retek Predictive Solutions. System administrators use the administration workbooks to:

- Set up and maintain users and user groups.
- Manage users' access to specific workbook templates and individual measures.
- Modify the labels associated with users and user groups.
- Modify the labels associated with workbook templates and template groups.
- Create custom workbook templates and template groups.
- Edit the contents of translation tables to support multiple-language use of the application.
- Specify the type, frequency, and format of workbooks in the automatic build queue.

## Workbook and wizard descriptions

- User Account Management wizards, a set of wizards for setting up and maintaining users and groups
- Security Administration Workbook, a workbook for setting up and maintaining user/template, user/measure, and template/measure access rights
- Workbook template definition, a workbook for specifying parameters of a custom workbook template
- Translation Administration Workbook, a workbook for managing the foreign language translation of strings and label text throughout the application
- Workbook auto build maintenance, a workbook for managing the workbook auto build queue

## General Workbook Procedures

### **Change a workbook's calculation method**

When in automatic calculation mode, every change to a cell in the worksheet causes a recalculation, which requires immediate communication from the worksheet back to the database. In this mode, there may be a pause between one data change and your ability to effect the next change.

To save server processing time when you are making large numbers of data changes, you can set the workbook to manual (deferred) calculation mode. The system then creates a queue of data changes to be submitted all at once to the server, at a time that you specify.

### **Set the workbook to deferred calculation mode**

Click the Edit menu and select Manual Calculation.

### **Return the workbook to automatic calculation mode**

Click the Edit menu and select Automatic Calculation.

### **Send the queue of data changes to the server**

Click the Edit menu and select Calculate Now.

### **Refresh and export data**

#### **Refresh the data in a worksheet**

The Refresh feature brings the most recent version of data from the master database into the current workbook. This lets you work with the most current data without having to rebuild the workbook.

#### **Refresh the data for all worksheets and measures in the workbook**

- 1 From the File menu, select Refresh.

#### **Export the current worksheet view to an output file**

- 1 From the File menu, select Export Sheet. The Save As dialog box is displayed.
- 2 In the Save In field, select a directory on your computer where you want to save the export file.
- 3 In the File Name field, type a name for the export file.
- 4 Click the Save As Type drop-down list and select a file type for the export file.

- 5 Make a selection for each of the following:
  - Delimiter: Specify the character used to separate information in the output file. Standard choices are Tab, Comma, or Space, but you can specify a different delimiter by selecting the Other radio button.
  - Labels: Specify the format of the label headers across the top of cells in the output file. The options are:
    - Do Not Include – no labels provided
    - Include Once – one label placed across the top of each section of related cells
    - Repeat – a separate label, repeated as necessary, appears atop each cell
    - Descriptions: Specify whether to identify dimensional positions in your output file with concise system names (for example, SKU00012) or the descriptive labels (for example, Cashmere Sweater – L – beige) assigned to each position.
- 6 Select Save to export the file.
- 7 Click OK.

#### **Insert measures into an open worksheet**

If you have the necessary access rights, you can insert a new measure or group of measures into an already open workbook. This functionality reduces the need to build new workbooks whenever a view of currently unrepresented measures is required. The ability to insert new measures into already open workbooks is particularly useful in the context of establishing access to alerts.

Use the following procedure to select a measure or group of measures to be inserted in a currently open workbook.

**Note:** A worksheet must be open and active for the Insert Measure menu option to be enabled. Any measure(s) selected to be inserted in the workbook will be placed on the currently active worksheet.

- 1 From the Edit menu, select Insert Measure.
- 2 From the Metric list box, select the desired metric(s). If a measure exists that matches the combination of attribute types selected in the preceding steps, its name/label will appear in the Measures list box. Multiple measures may appear here if multiple selections were made in any of the preceding steps.

**Note:** You can right-click in the Metric window to produce a quick menu, wherein you can toggle the display between metric name (the system name) and metric label (as it appears in the workbook).

- 3 Select the desired measure(s) in the Measures list box.
- 4 Click OK.



## Chapter 2 – Domain administration

### Overview

The RPAS DomainDaemon is a process that is used in enabling the communication channel between RPAS clients and RPAS domains.

The DomainDaemon runs on the server side and waits for requests from RPAS clients on a given port. Once it receives a request from a client, it starts a server process that the client connects to. From this point on, the client and server communicate directly. The system administrators may choose to have one single DomainDaemon process for all the users, or they may choose to have separate processes per domain, per enterprise etc.

The DomainDaemon is installed in the [RPASDIR]/bin directory, where [RPASDIR] stands for the full path to the directory in which the RPAS server is installed. The system administrators can start, stop and monitor the DomainDaemon processes using scripts that are provided in this directory.

### Starting the DomainDaemon

In order to start the DomainDaemon, execute the script called DomainDaemon in the Acumate installation directory. The port number on which the DomainDaemon will be running must be passed in as an argument. The port number must be between 1025 and 65535. If *auto* is specified instead of a number, the DomainDaemon is started on any available port.

**Note:** In the following examples, [RPASDIR] stands for the full path to the directory in which the RPAS server is installed.

For example, issuing the following command from a UNIX shell will start a DomainDaemon on port 55278.

```
([RPASDIR]/bin)$ DomainDaemon -port 55278 -start
```

### Monitoring the DomainDaemon

The `-ping` argument can be used to see whether a DomainDaemon is active. The port number must also be passed as an argument. If the DomainDaemon is active on the port, then a message will be printed, and the script will return true. Otherwise, the script will return false.

Example:

```
([RPASDIR]/bin)$ DomainDaemon -port 55277 -ping
DomainDaemon on port 55277 is alive.
```

## Stopping the DomainDaemon

Use the `-stop` argument to stop the DomainDaemon running on a given port.

Example:

```
([RPASDIR]/bin)$ DomainDaemon -port 55277 -stop
```

## Other DomainDaemon commands

### add

Use the `-add` argument to add a domain to the list of domains managed by a DomainDaemon process. You must specify the port number and the complete path to the domain.

Example:

```
DomainDaemon -port 55277 -add /mydomains/domain1  
Added domain /mydomains/domain1 to daemon.
```

### remove

Use the `-remove` argument to remove a domain from the list of domains managed by a DomainDaemon process. You must specify the port number and the complete path to the domain.

Example:

```
DomainDaemon -port 55277 -remove /mydomains/domain1  
Removed domain /mydomains/domain1 from daemon.
```

### deactivate

Use the `-deactivate` argument to mark a domain as temporarily unavailable. You must specify the port number and the complete path to the domain.

Example:

```
DomainDaemon -port 55277 -deactivate /mydomains/domain1
```

### activate

Use the `-activate` argument to reactivate a domain that you previously deactivated. You must specify the port number and the complete path to the domain.

Example:

```
DomainDaemon -port 55277 -activate /mydomains/domain1
```

## showActiveServers

Use the `-showActiveServers` argument to list all the active server processes managed by the `DomainDaemon`. You must specify a port number.

For each active server, the `DomainDaemon` shows the process ID, domain, and user ID.

Example:

```
DomainDaemon -port 55277 -showActiveServers
Registered Servers:
15920, /mydomains/domain1, adm
```

## showDomains

Use the `-showDomains` argument to list the domains managed by the `DomainDaemon`. You must specify a port number. For each managed domain, the `DomainDaemon` indicates whether it is active or inactive.

Example:

```
DomainDaemon -port 55277 -showDomains
Managed Domains:
/mydomains/domain1: Active
/mydomains/domain2: Inactive
```

## showLockTable

Use the `-showLockTable` argument to display the contents of the database lock table.

Example:

```
DomainDaemon -port 55277 -showLockTable
Lock Table:
```

## releaseLocks

Use the `-releaseLocks` argument to release all database locks held by the specified process. You must specify a port number and a process ID.

Example:

```
DomainDaemon -port 55277 -releaseLocks 15920
All locks released.
```

## stopServer

Use the `-stopServer` argument to stop a specified server process. You must specify a port number and a process ID.

Example:

```
DomainDaemon -port 55277 -stopServer 15920
Stop Server succeeded.
```



# Chapter 3 – Security and user administration

## Functional overview

This chapter describes the security model in RPAS, which includes workbook templates, workbooks, measures and positions. The levels of security are defined as measure level, position level and workbook level.

This chapter also describes user administration and security administration.

## User Logon Security

A user account may be marked as **locked out** by the domain administrator.

This will prevent the user from logging in to the RPAS 11.0 client. The account remains locked out until the administrator re-enables the account.

Account lockouts may be set or cleared by the domain administrator using the User Management utility.

A user account may be marked as **must change password**.

This is useful for brand-new accounts; the user will be allowed to logon with the current password, but will immediately be forced to select a new password.

**Must change password** may be set or cleared by the domain administrator using the User Management utility.

**Account Lockout** may be enabled for a domain.

The domain administrator selects a number of failed logon attempts after which the User account will be marked as locked out. The account will remain locked out until the administrator re-enables it.

Account Lockout can be enabled through the domainprop utility using the `-lockAccount` flag.

**Password expiration** may be enabled for a domain.

The domain administrator selects a number of days after which passwords expire. When a user logs in, if the configured number of days have passed since this user entered a new password, the system requires a new password to be entered.

Password expiration can be enabled through the domainprop utility using the `-expirePassword` flag.

**Password history** may be enabled for a domain.

The domain administrator selects a number of passwords to save. When a user attempts to change passwords, the system will not permit any password already stored in the password history to be used again.

Password history may be enabled through the domainprop utility using the `-passwordHistory` flag.

## Measure level security

Measures have access rights which are read-write, read-only or denied. Measures which are read-write or read-only may be selected in the extra measures and insert measure dialogs. RPAS ensures that read-only measures are not editable by the user and the presence of read-only measures does not affect the ability to commit a workbook.

Measure security can be specified when the measure is registered and can be changed later using the Security Administration workbook. The Measure Rights worksheet allows you to specify Read Only, Deny, or Read/Write access to a measure for each user.

A workbook template can override the default security of a measure, but can only narrow the security of the measure. For example, a measure could have default read-write access for a user and a template could specify that all users have read-only access to the measure when a workbook is built. However, if the default measure security was read-only, the template could not expand the security of that measure to read-write. Measures which are explicitly made read-only by a workbook template will not be expanded to read-write access by RPAS.

## Position level security

Position Level Security allows access control for dimensions on a position-by-position basis. This capability is completely optional. If position level security is not explicitly defined and configured, all users in a domain have access to all positions in all dimensions. Once position level security is defined, access to a position can be granted or denied for all users, for users in a group, or for an individual user.

Position level security can be defined at levels (dimensions) above base (such as class in the product hierarchy). As positions are added at a level/dimension lower in the hierarchy than where the position level security is maintained, access to those positions is automatically granted. In other words, if security is maintained at the subclass level, users are automatically granted access to all the SKUs in a given subclass, including those added after security has been established.

Exactly one dimension in each hierarchy can be defined as the security dimension for the hierarchy. If a security dimension is defined for the hierarchy, all dimensions in the hierarchy have position level security enabled. To specify the security dimension for a hierarchy, use the `inithier` utility. See `inithier` on page 44 for more information.

This should be done when the hierarchies are defined (in `asetup.init_hparm`, for example). The `abatch.create_wbts` proc should be run after adding or removing a security dimension in any hierarchy. This creates the administration worksheets that are used to allow user access to positions.

After a security dimension is defined for a hierarchy, all users in the domain default to not having access to any positions in any dimension in the hierarchy. Worksheets in the Security Administration workbook are used to control position access for users, groups, or default access. There are three worksheets in this workbook for each hierarchy with a defined security dimension. One sheet controls default access to positions (called Prod Security Default, for example); one controls group access (Prod Security Group); and the third controls individual user access (Prod Security User).

When a user creates a workbook in a domain with position level security enabled, only positions that the user has access to are copied into the workbook.

## Workbook security

Currently, workbook access is either granted or denied. If users have been granted access to a workbook, then they can open, modify and commit the workbook. No distinction is made between read-write-commit, read-write and read-only access. Workbook access is automatically granted to the user that built it, and may be shared with multiple groups or the world. Note, however, that a user must have access to the workbook template in order to access the workbook, even if the workbook has world access rights.

Users with administrator status automatically have access to all workbook templates; by default, this means that administrators have access to all workbooks saved with world access. If a workbook is saved with group access, administrators can access the workbook only if they are members of the default user group of the user who saved the workbook.

## User administration

### Overview

User administration is the process by which administrators add and/or delete authorized system users, create and/or delete user groups, and edit user profiles. These tasks are performed through completion wizards on the User Administration tab. The following procedures are discussed in this area:

- Access the User Administration tab
- Add a user
- Add a user group
- Delete a user
- Delete a user group
- Edit a user's profile.

Once users and user groups are set up, you can set access permissions to workbook templates and to measures within workbooks through Security Administration. Additionally, you can modify the label, default workbook template, and/or Admin status associated with individual users.

### Procedures

#### Access the User Administration tab

- 1 Select New from the File menu. The New dialog box is displayed.
- 2 Select the User Administration tab.

#### Add a user

- 1 From the File menu, select New.
- 2 Click the User Administration tab.
- 3 Select Add User and click OK.
- 4 In the ID field, type the ID string that the user will use for logging on.

**Note:** Each user ID must begin with a letter, must contain no spaces (the underscore character is acceptable), and must not exceed eight characters total.

- 5 In the User Label field, type a label describing the user (for example, the user's full name). This identifying label will appear in various locations throughout the application. For example, labels appear on the File > Open dialog box to identify the owner of a given workbook, and on the Forecast Approval worksheet to specify which user approved a given forecast.
- 6 In the Default Group field, select the user group to which the user will belong.
- 7 If a user will belong to more than one group, select the additional groups from the list in the Other Groups field.

- 8 In the Password field, type a password for the user.
- 9 In the Password Verification field, type the same password.
- 10 If the user should have Admin status, which allows that user to create system-wide default styles for workbook templates, check the Administrator box.

**Note:** Admin status enables users to perform the Format menu option Save Format/Admin, which creates new system-wide default styles for workbook templates. If you are not sure whether a user should be granted this ability, note that a user's Admin status can later be modified on the Users worksheet of the User & Template Administration workbook.

Note also that while granting a user Admin status gives them access to all workbook templates, it does not automatically give them access to all workbooks.

- 11 If the user must change his or her password when logging on for the first time, check the Force Password Change box.
- 12 If you want to temporarily disable the user's account, check the Lock User Account box.
- 13 Click Finish to add the new user to the database.

You can now assign workbook template and measure access rights to the user. To do so, access the User & Template Administration workbook.

#### **Add a user group**

User groups provide an intermediate level of security to workbooks created and saved by specific users. When you assign new users to the system, they must be assigned to existing user groups. User groups should consist of individuals with similar job functions or responsibilities. In the Retek Predictive Planning Suite, the user group corresponds to the user's planning role.

- 1 Select New from the File menu.
- 2 Click the User Administration tab.
- 3 Select Add User Group and click OK.
- 4 In the Group Name field, type a name for the group.
- 5 In the Group Label field, type a descriptive label for the group. This label is displayed when referring to the group throughout RPAS.
- 6 Click Finish to add the user group to the database.

### Delete a user

If a user profile is no longer needed, it should be deleted from the system in order to maintain system security.

- 1 From the File menu, select New.
- 2 Click the User Administration tab.
- 3 Select Delete User and click OK.
- 4 Select the name of the user you want to delete.
- 5 Click Finish to delete the user from the system.

### Delete a user group

If a user group no longer exists, you should delete the group from the system as soon as possible to maintain system security.

**Caution:** Deleting a user group will delete every user in that group.

- 1 From the File menu, select New.
- 2 Click the User Administration tab.
- 3 Select Delete User Group and click OK.
- 4 Select the user group you want to delete.
- 5 Click Finish to delete the user group from the system.

### Edit a user

- 1 From the File menu, select New.
- 2 Click the User Administration tab.
- 3 Select Edit User and click OK.
- 4 Select the user you want to edit and click Next.
- 5 Make the necessary changes to the user's profile. You can change anything except the User Name. See "Add a user" for details.
- 6 Click Finish to save the changes you have made.

# Security Administration Workbook

## Overview

The Security Administration Workbook is only available to system administrators. After users and user groups are created, you may set up and maintain access permissions to workbook templates and measures within those workbook templates. That is, you can determine which templates individual users can access, as well as the measures that users can access while manipulating workbooks in the system. Additionally, you can specify and restrict the measures that are available to be added to a given workbook template. The ability to set access permissions in this way provides a high degree of measure security, as users can be restricted to viewing and editing only certain relevant measures.

The Security Administration workbook has several worksheets:

- Workbook Template Rights Worksheet
- Workbook Template Measure Rights Worksheet
- Measure Rights Worksheet
- Dimension Modification Rights
- Hierarchy Modification Rights

Security Template Administration also allows you to modify the label, Admin status, and/or default workbook template associated with each user. You also access this workbook template to modify the labels associated with user groups, workbook templates, and workbook template groups. Using this workbook, you can:

- Assign/modify access rights of each user to all workbook templates. User/template permissions are set in the Workbook Template Rights worksheet.
- Determine which optional measures are to be accessible through individual workbook templates. Template/measure permissions are set in the Workbook Template Measure Rights worksheet.
- Assign/restrict user access to individual measures. User/measure permissions are established in the Measure Rights worksheet.

## Workbook Template Rights Worksheet

The Workbook Template Rights worksheet is for setting and maintaining access permissions of each user to specific workbook templates.

The worksheet contains a checkbox for each available workbook template and user combination. A checkmark in the cell indicates that the user has access rights to that specific template.

To grant a user access rights to a workbook template, put a checkmark in the checkbox in for that workbook template.

To deny a user access rights to that specific workbook template, leave the checkbox blank or clear the checkmark.

After changing a user's profile, the changes must be committed to the database in order for them to take effect.

## Workbook Template Measure Rights Worksheet

The Workbook Template Measure Rights worksheet allows administrators to determine which registered measures will be available for optional inclusion in newly built workbooks.

When a measure is initially registered as a public measure, all templates default to having access to that measure. This means that it is possible for this measure to be added to a workbook template, even if it is not one of the standard measures displayed when a workbook of that type is built. Some new workbook wizards include a dialog that prompts users to select any additional measures to be included in the workbook build. By default, all newly registered measures are included on this list of available additional measures. The other method of inserting new measures into a workbook is via the Insert Measure command. See "Insert measures into an open worksheet" on page 3 for more information.

The Workbook Template Measure Rights worksheet is used to modify template/measure permissions, thus allowing only certain templates to optionally include specified measures in new workbook builds.

This worksheet contains a checkbox for each available workbook template and registered measure combination. A checkmark in the cell indicates that the measure will appear on the additional measures list in the new workbook wizard, and is thus available for inclusion in the initial workbook build.

To make a given measure available in a workbook template, put a checkmark in the checkbox that represents that template/measure intersection.

To prevent a measure from appearing in a specific workbook template, clear the checkbox located at that template/measure intersection.

After changes are made to a template's profile, they must be committed in order for them to take effect.

**Note:** Measures that are registered as private measures will not appear in this worksheet. If there are no public measures available to be displayed in this worksheet, the worksheet will not be built.

## Measure Rights Worksheet

The Measure Rights worksheet allows you to restrict user access to individual measures on a user-by-measure basis. User/measure permissions are initially determined by the system by integrating the current user/template and template/measure settings and applying the following rule: a user cannot have access to any measure that is not available in at least one template to which the user has access.

Permissions can be made even more restrictive on a user by measure basis by using the Measure Rights worksheet to deny users access to measures that they would normally be permitted to edit.

The worksheet contains a checkbox for each available user and registered measure combination. A checkmark in the cell indicates that the user has access rights to and is permitted to view and edit the specified measure. More specifically, that given user has access to at least one template that is permitted to include the specified measure.

You can further restrict a user's access to specific measures by removing checkmarks that are displayed at those associated intersections. Removing the checkmark (by clicking on it) prevents the user from accessing a given measure, even though that measure is normally permitted to be displayed in a particular workbook template to which the user does have access.

After changes are made to a user's profile, they must be committed in order for them to take effect.

**Note:** The Measure Rights worksheet contains only public measures; that is, measures that can be optionally included in a worksheet, depending on choices made in a new workbook wizard. Measures that are registered as private measures will not appear in this worksheet. If there are no public measures available to be displayed in this worksheet, the worksheet will not be built.

## Dimension Modification Rights Worksheet

The Dimension Modification Rights worksheet allows you to determine which dimensions, if any, a user can modify. The worksheet contains a checkbox for each available user and dimension combination. A checkmark in the cell indicates that the user is permitted to modify the specified dimension.

After changes are made to a user's dimension modification rights, they must be committed in order for them to take effect.

## Procedures

**Note:** These tasks are performed through the Security Administration Workbook. This workbook is only available to system administrators.

### **Access User & Template Administration**

- 1 From the main menu, select File > New. The New dialog box is displayed.
- 2 Select the Administration tab to display a list of workbook templates for Administration.
- 3 Highlight Security Administration and click OK.

### **Set or modify users' access to workbook templates**

- 1 From the File menu, select New.
- 2 Click the Administration tab.
- 3 Select Security Administration and click OK.
- 4 On the Workbook Template Rights worksheet, select each template for which a user needs access rights. For templates to which the employee should not have access rights, make sure there is no check mark.
- 5 Changes must be committed to the master database for them to take effect. To commit your changes, select Commit Now from the File menu.
- 6 If you desire, save your workbook by selecting Save from the File menu.
- 7 To close the workbook, select Close from the File menu.

### **Set measure availability for workbook templates**

- 1 From the File menu, select New.
- 2 Click the Administration tab.
- 3 Select Security Administration and click OK.
- 4 On the Workbook Template Measure Rights worksheet, select each registered measure that should be available for inclusion in the associated workbook template. For measures that should not be included in the associated template, make sure there is no check mark.
- 5 Changes must be committed to the master database for them to take effect. To commit your changes, select Commit Now from the File menu.
- 6 If you desire, save your workbook by selecting Save from the File menu.
- 7 To close the workbook, select Close from the File menu.

**Assign or restrict user access to measures**

- 1 From the File menu, select New.
- 2 Click the Administration tab.
- 3 Select Security Administration and click OK.
- 4 On the Measure Rights worksheet, for each measure that a user should have access to, select either Read Only or Read/Write from the drop-down list. For measures to which the user should not have access, make sure Denied is selected.
- 5 Any changes made must be committed to the master database in order for them to take effect. To commit your changes, select Commit Now from the File menu.
- 6 If you desire, save your workbook by selecting Save from the File menu.
- 7 To close the workbook, select Close from the File menu.

**Change a user's ability to modify dimensions**

- 1 From the File menu, select New.
- 2 Click the Administration tab.
- 3 Select Security Administration and click OK.
- 4 On the Dimension Modification Rights worksheet, select each dimension for which the user needs modification rights. For dimensions that the user should not be able to modify, make sure there is no check mark.
- 5 Any changes made must be committed to the master database in order for them to take effect. To commit your changes, select Commit Now from the File menu.
- 6 If you desire, save your workbook by selecting Save from the File menu.
- 7 To close the workbook, select Close from the File menu.

**Change a user's ability to modify hierarchies**

- 1 From the File menu, select New.
- 2 Click the Administration tab.
- 3 Select Security Administration and click OK.
- 4 On the Hierarchy Modification Rights worksheet, select each hierarchy for which the user needs modification rights. For hierarchies that the user should not have be able to modify, make sure there is no check mark.
- 5 Any changes made must be committed to the master database in order for them to take effect. To commit your changes, select Commit Now from the File menu.
- 6 If you desire, save your workbook by selecting Save from the File menu.
- 7 To close the workbook, select Close from the File menu.



# Chapter 4 – Hierarchy maintenance

## Overview

### Hierarchy Maintenance Workbook

Retek Predictive Solutions provide the ability to set up and maintain user-named and user-defined dimensions within hierarchies. Hierarchy Maintenance is the means by which custom-created dimensions within a hierarchy can be established and maintained through the application interface to meet individual business needs.

When Retek Predictive Solutions are installed, implementation scripts define the dimensions and hierarchical structures specific to your organization. For example, the system can be built to recognize that SKUs roll up into styles, that styles roll up into product classes, and so on within the product hierarchy. On occasion, however, you might want to group products according to some ad hoc personal design to suit a particular business need. You can group arbitrary items in a hierarchy to use in functions such as forecasting, replenishment, and measure analysis. These user-defined groupings act as normal dimensional levels; that is, they allow you to roll data up from lower levels of aggregation along the hierarchical paths that you define.

For example, suppose that your experience has shown that the accuracy of forecasts for your top 50 products (A products) reflects the relative accuracy of all forecasts. Therefore, you would like to group elements within a user-defined dimension as the top 50 products by designating them 'A Products'. Then, when you select products in a wizard or look at data in a worksheet, you can change the rollup to your user-defined dimension to see your top 50 products grouped together.

Note that your collection of 50 products may comprise elements from a wide range of product classes or departments, and that your grouping scheme may have little to do with the normal dimensional relationships of these items in the product hierarchy. Note also that the group of items you designate as 'A Products' may change over time as consumer preferences change. From this example, you see that user-defined dimensions can be used to create any ad hoc groupings to provide additional support in analyzing, selecting, or summarizing data in Demand Forecasting. Moreover, the Hierarchy Maintenance interface allows you to change the nature of the groupings as required.

**Note:** The number and names of user-definable dimensions are set by your company when Demand Forecasting is initially installed. The positions within each dimension and their associated labels can be altered and maintained through the hierarchy maintenance process.

Keep in mind that any hierarchy in the Retek Predictive Solutions can have user-defined dimensions within it (if set up by your company at the time of installation). The examples in this section refer to the Product hierarchy, but other hierarchies could be maintained in the same way.

## Hierarchy Maintenance Example

Suppose you wish to designate SKUs in your product hierarchy as either A, B, or C products so that you can group these items together when you view information such as forecasting, replenishment, or measure analysis reports.

To do this, you need to maintain a user-defined dimension that will allow you to map the SKUs to the various positions of your classification scheme (A, B, or C). The user-defined dimension used in the following example is named Product Status. To maintain this user-defined dimension, you use the Hierarchy Maintenance Wizard.

## Hierarchy Maintenance Wizard

The first step in maintaining hierarchies is to access the Hierarchy Maintenance Wizard. In this wizard, you select the SKUs that will be mapped to the various positions of your user-defined dimension. Responses to prompts in the wizard are used to format a new Hierarchy Maintenance Workbook.

## Hierarchy Maintenance Worksheet

The Hierarchy Maintenance worksheet displays the position assignment fields for your selected custom dimension. You can edit the cells associated with your custom dimension as required.

Returning to the example dimension Product Status, you want to classify each selected SKU in your workbook as an A Product, a B Product, or a C Product. This example provides only three positions, or values, in the Product Status dimension. However, you can enter any character string in an individual SKU's Product Status cell, and this new string will be treated as a separate user-defined grouping. If this is the first time a particular SKU has been mapped to the Product Status dimension, the label assigned to that SKU will not yet be defined; the Product Status field is automatically filled with 'Unassigned'.

Assign labels to each product with regard to the Product Status dimension. In the example below, products that were previously 'Unassigned' are now designated as A, B, or C Products.

The screenshot shows a window titled "SKU to Product Status Worksheet" with a "Measure" button in the top right. The main area contains a table with two columns: "SKU" and "Product Status". The table lists the following data:

SKU	Product Status
3001-01 Turtleneck Sweater 20-S	A Product
3001-02 Turtleneck Sweater 20-M	A Product
3001-03 Turtleneck Sweater 20-L	C Product
3041-07 Cashmere Sweater 42-S	B Product
3041-08 Cashmere Sweater 42-M	A Product
3041-09 Cashmere Sweater 42-L	C Product
8031-02 Sports Pique 17-M	C Product
8031-03 Sports Pique 17-L	B Product
8053-05 Sweatshirt 20-M	Unassigned
8053-06 Sweatshirt 20-L	Unassigned

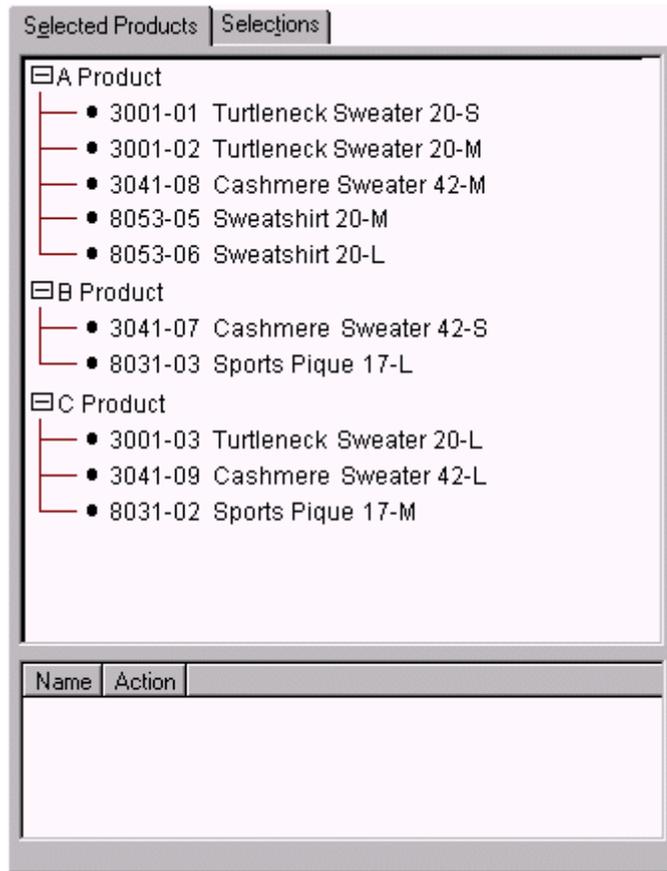
At the bottom of the window, there is a "Product" dropdown menu with a left arrow and a right arrow.

**Note:** The Retek Predictive Solutions system is case-sensitive when a new position name (label) is entered in the Hierarchy Maintenance Workbook. After the workbook has been committed, however, the typing of the group name is not case-sensitive. For example, "B Product" can later be entered as "b product" after the "B Product" group label has been committed.

After making the A, B, or C Product designations for the selected SKUs, you must commit the workbook for any changes to take effect.

For this example, labels have now been assigned to the various positions within the Product Status dimension, and selected products in the product hierarchy have been classified with regard to the custom dimension. Demand Forecasting treats Product Status, a user-defined dimension, as a normal dimensional level within the product hierarchy.

The figure below displays the results when, in a wizard, you access a quick menu and change the rollup to the Product Status dimension. The products shown here are classified according to the position values (A Product, B Product, or C Product) that you assigned while maintaining the Product Status dimension.



## Procedures

### Access Hierarchy Maintenance

- 1 Select Open from the File menu to bypass the Hierarchy Maintenance wizard and open an existing Hierarchy Maintenance workbook.

OR

- 2 Select New from the File menu.
- 3 Select the Administration tab to display the list of Administration templates.
- 4 Select Hierarchy Maintenance and click OK.
- 5 Select the hierarchy for which you want to specify a user-defined dimension (for example, Product or Location). Only the hierarchies that have been set up to contain user-defined dimensions are represented here. Click Next.
- 6 Select the user-defined dimension to be updated. The number and names of available custom dimensions are set at installation. Click Next.
- 7 On the Available side of the selection wizard, choose the items to be mapped to positions within your custom dimension. Click the right arrow button to move them to the Selected side. When you have chosen all items to appear in your workbook, click Finish.

### Maintain a user-defined dimension within a hierarchy

Use this procedure to assign product or location items to custom-defined positions within a specialized dimension. Custom-created dimensions are distinct from those in the standard hierarchical roll-ups established at your system implementation. However, you can use these dimensions like normal Demand Forecasting levels, aggregating data along these new hierarchical paths.

- 1 Select New from the File menu.
- 2 Select the Administration tab to display the list of Administration templates.
- 3 Select Hierarchy Maintenance and click OK.
- 4 Select the hierarchy for which you want to specify a user-defined dimension (for example, Product or Location). Only the hierarchies that have been set up to contain user-defined dimensions are represented here. Click Next.
- 5 Select the user-defined dimension to be updated. The number and names of available custom dimensions are set at installation. Click Next.
- 6 On the Available side of the selection wizard, choose the items to be mapped to positions within your custom dimension. Click the right arrow button to move them to the Selected side. When you have chosen all items to appear in your workbook, click Finish.
- 7 The Hierarchy Maintenance workbook is displayed. In the position assignment field for your custom dimension, assign a value to each product or location position in your workbook. You can enter any text string in a cell; each unique string will be treated as a separate user-defined position within the custom dimension.

- 8 Select Commit Now from the File menu to commit your changes to the master database. If desired, you may also save your workbook by selecting Save from the File menu.
- 9 To close the workbook, select Close from the File menu.

# Chapter 5 – Measure analysis

## Overview

### Measure Analysis Workbook

The Measure Analysis Workbook template allows you to view data associated with any registered measure in the Retek Predictive Solutions applications, such as actual sales data for specified product/location/calendar combinations. You may also use the Measure Analysis workbook to edit values for read-write measures.

Although a common use of the Measure Analysis Workbook is to view actual sales data, the workbook is not restricted to presenting sales data alone. You can view any data loaded into the Retek Predictive Solutions master database, such as selling prices, shipments, orders, etc. The Measure Analysis Wizard provides you with a list of all registered measures from which to select; you simply choose the measures to be displayed in the new workbook.

### Measure Analysis Wizard

The Measure Analysis Wizard guides you through the process of creating a new Measure Analysis workbook, in which you can view data associated with any registered measure(s) in Demand Forecasting.

### Measure Analysis Worksheet

The Measure Analysis workbook displays data associated with selected registered measures, and contains one type of worksheet, the Measure Analysis worksheet. A separate worksheet will exist for each distinct product/location intersection associated with the measures selected in the wizard.

The Measure Analysis worksheet allows you to view the chosen measure data for the selected products, locations, and time periods. Each Measure Analysis worksheet is displayed at a different dimensional intersection, depending on the measure selections made in the wizard. This dimensional intersection is shown in the worksheet title bar.

The screenshot shows a software window titled "[Main/Pure Branch] [Unit Code/Shade] [Week] Worksheet". It contains a table with the following data:

Product	Calendar	Final Level Forecast	POS
1010/00 Pullover Sweater - Saffron 2XL	02/07/98		
34172/0 Lord & Taylor - Atlanta #14		166.00	152.00
34173/0 Lord & Taylor - Dallas #213		145.00	157.00
34174/0 Lord & Taylor - Detroit #419		179.00	168.00

Below the table, there is a "Location" field with a dropdown arrow.

The example above shows a Measure Analysis worksheet that displays Final Level Forecast data and POS data for three locations. The location/product/calendar dimensional intersection of this worksheet, as shown in the title bar, is [Main/Pure Branch][Unit Code/Shade][Week]. The Final Level Forecast measure, because it is registered as a read/write measure, can be edited in this worksheet. POS values cannot be changed, as this measure is registered as read only.

## Procedures

### Access Measure Analysis

- 1 Select Open from the File menu to bypass the Measure Analysis wizard and open an existing Measure Analysis workbook.

OR

- 1 Select New from the File menu.
- 2 On the Analysis tab, select Measure Analysis and click OK.

### Review and edit sales or other registered measure data

- 1 To open an existing Measure Analysis workbook, select Open from the File menu, double-click on the workbook to be opened, and go to step 9.

-OR-

- 1 To open a new workbook, select New from the File menu.
- 2 On the Analysis tab, select Measure Analysis and click OK.
- 3 The Measure Analysis Wizard opens and prompts you to select the registered measures to be displayed in the new workbook. Use Ctrl-Click and/or Shift-Click to select multiple measures. Click Next.

- 4 Select the dimensional level at which you want to view measure data. Click Next.

**Note:** This screen only appears if there is more than one level possible for one of your selected measures. A separate wizard screen will be displayed for every measure chosen in step 3 if multiple aggregation levels are available.)

**Tip:** Selecting a pre-aggregated level (a level other than base level) allows you to view aggregated sales data faster than if you select the base level and later aggregate data from within the workbook itself. Building the workbook with pre-aggregated data can save time and lessen the need for data transfers later.

- 5 Select all calendar periods for which you want to view data. Click Next.
- 6 Select the locations whose measure data you want to view. Click Next.
- 7 Select the products whose measure data you want to view. Click Next.
- 8 Click Finish to open the Measure Analysis workbook.
- 9 On the Measure Analysis Worksheet(s), view the stored data associated with the measures, products, locations, and calendar periods you selected. Make any changes as required.
- 10 Commit your changes to the master database by selecting Commit Now from the File menu. If desired, save your workbook by selecting a Save option from the File menu.
- 11 To close the workbook, select Close from the File menu.



# Chapter 6 – Workbook auto build maintenance

## Overview

The Workbook Auto Build feature allows users to set up workbook builds to take place on a regular basis during nightly batch runs. Workbooks to be built in this way are added to the auto build queue. Because the workbook build process is automated, users are spared the processing time required to regularly enter the same wizard selections each time a new workbook is built. And because the build process occurs overnight, users are spared the wait time associated with constructing new workbooks.

The Workbook Auto Build feature works through the Workbook Auto Build Maintenance Wizard.

## Workbook Auto Build Maintenance Wizard

The Workbook Auto Build Maintenance wizard steps you through the processes of adding and/or deleting workbooks from the auto build queue.

## Procedures

### **Accessing the Workbook Auto Build Maintenance workbook**

- 1 Select New from the File menu.
- 2 Select the Administration tab.
- 3 Highlight Auto Workbook Maintenance and click OK.

### **Add a workbook to the auto build queue**

Workbooks in this queue are designated to be built automatically on a specified regular basis as part of the nightly batch run.

- 1 Select New from the File menu.
- 2 Select the Administration tab.
- 3 Highlight Auto Workbook Maintenance and click OK.
- 4 From the task list, select Add Workbook and click Next.
- 5 Select a workbook template type and click Next.
- 6 Select an owner for the workbook and click Next.
- 7 Fill in the workbook Build Label, the Build Frequency (in days) with which the workbook should be built, and the Next Build Date.
- 8 Specify the Saved Access for the workbook: select User, Group, or World.
- 9 Select the group that owns the workbook. You can choose from the list of groups to which you belong.
- 10 Click Next to initialize the wizard for the workbook template selected in step 5 above. The choices you make are saved under the name you specified for the Build Label.

**Delete a workbook from the auto build queue**

- 1 Select New from the File menu.
- 2 Select the Administration tab.
- 3 Highlight Auto Workbook Maintenance and click OK.
- 4 From the task list, select Delete Workbooks and click Next.
- 5 Select the workbook or workbooks to delete from the auto build queue.
- 6 Click Finish to delete the workbooks from the Auto Workbook Build queue.

## Chapter 7 – Translation administration

### Overview

All of the Retek Predictive Solutions can be presented in multiple languages. Every product, location, and calendar position can be displayed in multiple languages, as can messages presented through the client. Translation administration is the process by which administrators maintain the translation tables for system text, including workbook template labels, template group labels, user group labels, wizard instructions, pick list options, and error messages.

The Translation Administration workbook contains worksheets for translating text used in measure labels, workbook template names, template group names, user group labels, and general areas (wizard instructions, pick list options, error messages, etc.).

The worksheets contained in the Translation Administration workbook include:

- General Translations worksheet
- Measure Translations worksheet
- Template Translations worksheet
- Template Group Translations worksheet
- User Group Translations worksheet

### General Translations Worksheet

The General Translations worksheet allows you to view and edit the translations of text strings found throughout the Retek Predictive Solutions. Translations into each of the system's alternative languages are supported for all wizard instructions, pick list options, system warnings and error messages, menu options, etc.

### Measure Translations Worksheet

The Measure Translations worksheet allows you to view and edit the translations of measure labels. Translations are supported for each of the system's allowable alternative languages.

### Template Translations Worksheet

The Template Translation worksheet allows you to view and edit the translations of workbook template names. Translations are supported for each of the system's allowable alternative languages.

## Template Group Translations Worksheet

The Template Group Translations worksheet allows you to view and edit the translations of template group names. Translations are supported for each of the system's allowable alternative languages. Translations in this worksheet affect the labels on the tabs that appear in the File > New dialog; for example (in English), Administration, Analysis, and Predict.

## User Group Translations Worksheet

The User Group Translations Worksheet allows you to view and edit the translations of user group labels. Translations are supported for each of the system's allowable alternative languages. The list of user groups includes the Administration, Default, and Internal user groups, plus any other user group names set up by the system administrator. For products in the Retek Predictive Planning Suite, the list of user groups also includes the various planning roles.

## Procedures

### Accessing the Translation Administration workbook

- 1 Select New from the File menu.
- 2 Select the Administration tab.
- 3 Highlight Translation Administration and click OK.

### Edit the foreign language translations of labels and system text

- 1 Select New from the File menu.
- 2 Select the Administration tab.
- 3 Highlight Translation Administration and click OK.
- 4 Maximize the appropriate worksheet.
  - To translate measure labels, maximize the R\_TRANS\_MEAS worksheet.
  - To translate workbook template names, maximize the R\_TRANS\_WBT worksheet.
  - To translate template group names, maximize the R\_TRANS\_WBTG Translations worksheet.
  - To translate user group labels, maximize the R\_TRANS\_GRP worksheet.
  - For all other translations, such as wizard instructions, list options, error messages, menu choices, etc., maximize the R\_TRANS\_MSG worksheet.
- 5 At the intersection of the language and the text value to be translated, enter the correct translated text. Repeat this step as required for all text strings to be edited.
- 6 On the File menu, select Commit Now.
- 7 On the File menu, select Close. Select a close option from the Close dialog.

**Process for using the General Translations worksheet**

- Enter the correct translated text at the intersection of the language and the string value to be translated.

**Process for using the Measure Translations worksheet**

- Enter the correct translated text at the intersection of the language and the measure label to be translated.

**Process for using the Template Translations worksheet**

- Enter the correct translated text at the intersection of the language and the workbook template name to be translated.

**Process for using the Template Group Translations worksheet**

- Enter the correct translated text at the intersection of the language and the template group label to be translated.

**Process for using the User Group Translation worksheet**

- Enter the correct translated text at the intersection of the language and the user group label to be translated.



## Chapter 8 – Batch processes and utilities

### Using shell scripts to run batch processes

Running Acumate procedures written in the MSPL language is strongly discouraged in RPAS 11. All MSPL procedures remaining in RPAS 11 should be considered deprecated. Instead, batch processes should be written using shell scripts that use the RPAS 11 binaries found in the \$RPAS\_HOME/bin/ directory or application-specific scripts that should be located in the [DOM]/scripts/ directory. Any log files generated by shell scripts will be in the [DOM]/scripts/err/ directory.

#### A sample shell script

The following is a sample shell script that loads the product and location hierarchies into a domain. It is assumed that this script is invoked from the [DOM]/scripts/ directory.

```
1  #!/bin/ksh
2  loadHier -d .. -load prod > ./err/loadhier.prod.log
3  loadHier -d .. -load loc >> ./err/loadhier.loc.log
```

Line 1 defines the shell that will execute the script. In this example, it is defined to be the Korn shell. Therefore, this script will always be executed from the Korn shell even if the user's shell is different.

Lines 2 and 3 call the loadHier utility to load the latest product and location hierarchy information. Depending on the batch process to be performed by the shell script, lines 2 and 3 can be replaced by one or more lines to call one or more RPAS 11 utilities.

The remainder of this chapter describes the RPAS 11 utilities that are involved in the most commonly used batch processes.

## RPAS Utilities

### alertmgr

Use the alertmgr utility to:

- find alerts
- register and unregister alerts
- add expressions to alerts
- create and label alert categories.

Usage:

```
alertmgr -version
```

```
alertmgr -d pathToDomain -findAlerts {-loglevel level}
```

```
alertmgr -d pathToDomain -register alertName {-category catName}
{-categoryLabel label} {-expression \"expr\"} {-loglevel level}
```

```
alertmgr -d pathToDomain -unregister alertName {-loglevel level}
```

```
alertmgr -d pathToDomain -addExpression alertName
{-expression \"expr\"} {-loglevel level}
```

Argument	Description
-d pathToDomain	Specifies the directory in which to run the utility.
-version	Use this argument to get the version information. It does not require -d domainPath.
-findAlerts	Finds all the alerts in the specified domain.
-register alertName	Use this argument to register an alert. Requires -category, -categoryLabel, and -expression. <b>Important:</b> alertName must be the name of a registered Boolean measure.
-unregister alertName	Use this argument to unregister an alert. alertName must be the name of a registered Boolean measure.
-addExpression	Use this argument to add an expression to the alert. Use -expression to specify the expression.
-category catName	Use this argument to specify a category for the alert.
-categoryLabel label	Use this argument to specify a label for the alert category.
-expression \"expr\"	Use this in conjunction with -addExpression and -register. expr can be any valid RPAS 11 expression.
-loglevel level	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.

## domainprop

Use the domainprop utility to manipulate the properties of a domain. You can specify password properties, lock user accounts, and determine whether or not a daemon is currently managing a domain.

Usage:

```
domainprop -version
```

```
domainprop -d pathToDomain -expirePassword {days}
  {-passwordHistory {oldPasswordCount}} {-property
  propertyname=value} {-lockAccount {failedLogins}} {-daemonPort}
```

Argument	Description
-d pathToDomain	Specifies the domain you wish to manipulate.
-version	Use this argument to get the version information, it doesn't require -d domainPath
-expirePassword	Used to set or view the number of days a password is valid. If a number follows the argument it sets the number of days a password is valid for; otherwise it prints the current setting.
-passwordHistory	Used to set or view the number of previous passwords that are kept to ensure that a user does not repeat his password too often. If a number follows -passwordHistory, the property is set to that number; otherwise the current setting is printed.
-property propertyname=value	Used to specify the property to be changed.
-lockAccount	Used to set or view the number of failed login attempts that can occur before the account is locked out. If a number follows -lockAccount, the property is set to this value; otherwise the current setting is printed.
-daemonPort	Prints a message indicating whether or not the domain is currently being managed by a domain daemon. If the domain is not currently being managed, the port of the last daemon to manage the domain is printed.

## domainversion

Use the domainversion utility to get version information for a specified domain.

Usage:

```
domainversion -d pathToDomain
```

```
domainversion -code
```

Argument	Description
-d pathToDomain	Specifies the path to the domain for which you want to get version information.
-code	Use this argument to get version information that RPAS Libraries expect.

## exportData

Use exportData to export measure data from Acumate databases into text files. Each line exported contains the position name for the exported dimension followed by the value in the cell for each array being exported. Note that more than one array may be exported and more than one dimension in each array can be exported.

The utility may be invoked by specifying all parameters on the command line or by specifying an array that contains a list of the parameters.

The parameters specify what arrays and dimensions are exported and how to format the data. It is best to specify the arrays first. An array specification begins with -array followed by the array information. This includes the array name, formatting string, NA cell value, and NA cell value formatting string. The formatting string for both the cell value and NA value is based on the C language printf function formats. Please see the documentation on the printf function if you are not familiar with the possible values. The -array parameter can be repeated as needed to export more than one array into the same export file. Remember that the order the arrays appear in the -array parameter is the order they will appear in the export file.

After the arrays have been specified, the next thing to do is specify the dimensions to be exported within the arrays. The -dim parameter is used to specify a dimension in an array. The -dim parameter is followed by the dimension name, a convert option, the formatting string (just like an array), and the order the dimension appears in the export file. Because arrays are not required to contain identical dimensions, it is important to list all dimensions in all arrays with the -dim parameter. This makes it possible to track dimensions across arrays and line the data up correctly. If a dimension in an array is not to be in the export file, simply set the last value of this parameter to 0. The conversion option specifies either the number of characters to be removed from the position name or it specifies an array that contains the real position name. If an array name is given, this array must be a vector. The function will go to this array and use the original position name to jump to the cell of the same position name. It will then get the cell value and use that as the position name in the export.

The `-wide` parameter causes the data to be exported wide meaning the innermost dimension will go across the row instead of each cell on a separate line. This is most useful when the innermost dimension is time. This format puts all time data on one row of output with breaks for each of the other exported dimensions. The `-range` parameter can be used in conjunction with wide format (`-wide`) to specify a range along the innermost dimension. Only values in the range will be considered for export. In future versions ranges could be expanded to include the column format.

The `-skipNA` parameter is used for the NA suppression option. This option controls whether data is exported based on it having NA's in the export row. The choices for the `-skipNA` parameter are ANYNA, ALLNA, ALWAYS, or ARRAYNA. The ANYNA value will cause a row of data not to be exported if any cell contains a NA value. The ALLNA value will cause a row of data not to be exported only if all values in the row are NA. The ALWAYS value will export data regardless of whether it contains NAs. The ARRAYNA value will cause a row of data to not be exported if the value in the given array name is NA. If the ARRAYNA value is set then the `-naArray` parameter must be given. This parameter is followed by the array name to be used with the ARRAYNA value.

If all parameters are contained in an array then after the export file name and source database name the `--params` parameter is used to specify the database name and array name that contains all the parameters needed for the export.

Usage:

```
exportData -version
```

```
exportData -d domainPath -out outputFile -params db array
```

```
exportData -d domainPath -out outputFile -meas \"measSpec\"  
{-wb wbName} {options}
```

```
exportData -d domainPath -out outputFile -array \"arraySpec\" {options}
```

Argument	Description
<code>-version</code>	Prints the RPAS version, revision, and build information.
<code>-d domainPath</code>	Specifies the domain containing the data you wish to export.
<code>-out outputFile</code>	Specifies the file that will contain the exported data. The <code>outputFile</code> is relative to the domain, unless the full path is specified.
<code>-params db array</code>	Instead of specifying all parameters on the command line, this parameter allows the parameters to be read from an array. <code>db</code> specifies the name of a Gem file where the array of parameters is stored. <code>array</code> specifies the name of an array in the specified database that has the above parameters

Argument	Description
-meas	Specifies the measure to export. <code>measSpec</code> must be quoted, and the format is <code>"measName cellFormat naValue naFormat"</code> . The <code>-meas</code> argument can be repeated to export multiple measure arrays to the same output file. Measures are exported at the base intersection.
-array	Specifies the array to export. <code>arraySpec</code> must be quoted, and the format is <code>"dbName arrayName cellFormat naValue naFormat"</code> . <code>dbName</code> can be a path to the database (relative paths are relative to the domain root). Both <code>cellFormat</code> and <code>naFormat</code> use <code>printf</code> format commands. Please see the documentation on the <code>printf</code> function if you are not familiar with the possible values. The <code>-array</code> argument can be repeated to export multiple arrays to the same output file. The order in which arrays are listed is the order in which they will be exported.

Option	Description
-dim <code>"dimSpec"</code>	Specifies the dimension to be exported. <code>dimSpec</code> must be quoted, and the format is <code>"dimName conversion format order"</code> . <i>conversion</i> is either a count of the number of characters to strip from the start of the position name or the name of an array to be used to translate the position name before writing to the output file. <i>format</i> is a <code>printf</code> -style format for the position names. Please see the documentation on the <code>printf</code> function if you are not familiar with the possible values. <i>order</i> indicates the order the dimension is listed in the output file. If the value is 0, then the dimension is not exported. The <code>-dim</code> parameter can be repeated.
-skipNA always allna anyna arrayna	Controls whether a line of data is exported based on having NAs in a cell. <i>always</i> exports data regardless of NAs. <i>allna</i> does not export if all columns are NA (default). <i>anyna</i> does not export if any column is NA. <i>arrayna</i> does not export if cell value in an array is NA (requires <code>-naArray</code> ).
-naArray arrayName	When <i>arrayna</i> is specified using the <code>-skipNA</code> parameter, this option specifies the export array that is checked to determine if data is exported.

Option	Description
-index arrayName	Controls whether arrays are indexed by looking at a specified array. Only export the non-NA cells in the given array and each cell in the other arrays that have the same position names. If another array is at a higher dimension level, translate the given arrays cell index to the other arrays.
-range start:end	Used in conjunction with the -wide parameter, specifies a range along the innermost dimension. Only values in the range are considered for export.
-append	Specifies that output is appended at end of output file. The default is to overwrite output file.
-wide	Exports data in innermost dimension across instead of down.
-time	Specifies a YYYYMMDD format for dates.

## inithier

The inithier utility can be used to configure hierarchies and dimensions in a domain. The primary way in which it does this is by importing data from arrays created by the asetup.init\_hparm procedure. Specify the `-import` flag to cause it to import hierarchy definitions created by `init_hparm`. When the `-import` flag is used, this utility will also set the `prerange_threshold` and `sparse_create` domain properties that can be specified in the `init_hparm` procedure.

The inithier utility can also be used to enable and disable position security for a hierarchy. To enable position security, use the `-h` argument with the name of the hierarchy along with the `-securityDim` argument with the name of the dimension for which position security is enabled. Specifying `-noSecurity` will disable position level security for the hierarchy.

Usage:

```
inithier -version
```

```
inithier -d pathToDomain -import { -loglevel level }
```

```
inithier -d pathToDomain -h hierarchyName (-securityDim dimName |  
-noSecurity) { -loglevel level }
```

Argument	Description
<code>-version</code>	Use this argument to get the version information. It does not require <code>-d domainPath</code> .
<code>-d domainPath</code>	Specifies the directory in which to create the domain. The path must be an absolute path, and it will be created if it does not already exist.
<code>-import</code>	Use this argument to import hierarchy definitions created by <code>init_hparm</code> . Using <code>-import</code> also sets the <code>prerange_threshold</code> and <code>sparse_create</code> domain properties that can be specified in the <code>init_hparm</code> procedure.
<code>-h hierarchyName</code>	Specifies the name of the hierarchy for which position-level security is enabled or disabled. Use <code>-h</code> with either <code>-securityDim</code> or <code>-noSecurity</code> .
<code>-securityDim dimName</code>	Specifies the name of the dimension for which position-level security is enabled.
<code>-noSecurity</code>	Use this argument to disable position-level security for the hierarchy specified using the <code>-h</code> argument.
<code>-loglevel level</code>	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.

## listDb

Use the listDb utility to list the contents of a database.

Usage:

```
listDb -version
```

```
listDb -db dbName {-loglevel level}
```

Argument	Description
-version	Use this argument to get the version information.
-db dbName	Specifies the database for which you want to list the contents.
-loglevel level	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.

## loadHier

The loadHier utility can be used to load and refresh a hierarchy

Usage:

```
loadHier -version
```

```
loadHier -d domainPath -load hiername {-purgeAge purgeage}
        {-checkParents} {-noClean} {-loglevel level}
```

Argument	Description
-version	Use this argument to get the version information. It does not require -d domainPath.
-d domainPath	Specifies the domain in which to load the hierarchy.
-load hierName	Specifies the name of the hierarchy to load and refresh.
-purgeAge purgeage	Specifies the purgeage during loadHier. If not specified, loadHier gets purgeage from domain.
-checkParents	Use this argument to check the parents while loading.
-noClean	If specified input files and the meta data used during load process are not cleaned. It is used only for debugging purposes.
-loglevel level	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.

## loadMeasure

Use the loadMeasure utility to load a measure or apply staged loads for a measure. You must specify the measure name and the path to the domain containing the measure.

Usage:

```
loadmeasure -d pathToDomain -measure measureName {-logdirectory
directoryName} {-applyloads} {-loglevel level}
```

Argument	Description
-d pathToDomain	Specifies the domain in which to load the measure.
-measure measureName	Specifies the name of the measure to load. The name must be lowercase.
-logdirectory directoryName	Specifies the location of the output error log. The default location is pathToDomain/scripts/err.
-applyloads	Use this argument to apply any staged loads for the named measure.
-loglevel level	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.

## mace

The mace utility allows you to evaluate rule groups or expressions in order to manipulate measures. The most commonly used commands for batch processes will be:

```
mace -d domainPath -run -group groupName
```

OR

```
mace -d domainPath -run -expression "temporary expression"
```

The first will cause an entire rule group to be evaluated. The second will evaluate a single expression.

The mace utility can also be used to:

- create rules and rule groups
- add rules to rule groups
- add expressions to rules
- delete rules not contained in a rule group
- remove any or all rule groups
- validate expressions

- print a list of rules or rule groups.

Usage:

```
mace -version
mace -d domainPath -find string
mace -d domainPath -newGroup groupName
mace -d domainPath -newRule
mace -d domainPath -addRule groupName:ruleName
mace -d domainPath -addExpression ruleName -expression exprString
mace -d domainPath -check -expression expString
mace -d domainPath -run (-group groupName | -expression expString)
    {-debugRuleEngine}
mace -d domainPath -resolve groupName -measures measureList {
    -debugRuleEngine}
mace -d domainPath -transit workbookName -group groupList
    {-debugRuleEngine}
mace -d domainPath -print (-rule ruleList | -group groupList | allGroups)
mace -d domainPath -removeGroup ruleGroup
mace -d domainPath -purgeRules
mace -d domainPath -removeAllRuleData
mace -d domainPath -validate (general | calc) -ruleGroup groupName
mace -d domainPath -validate refresh -ruleGroup groupName
    -calcRuleGroup calcGroupName
```

Argument	Description
-version	Use this argument to get the version information. It does not require -d domainPath.
-d domainPath	Specifies the domain in which to load the measure.
-find string	Use this argument to search all expressions for the specified string, printing all the rules and rule groups that have these expressions.
-newGroup groupName	Use this argument to create a new rule group with the specified name.
-newRule	Use this argument to create a new empty rule.

Argument	Description
–addRule groupName:ruleName	Use this argument to add the specified rule to the specified rule group.
–addExpression ruleName	Use this argument to add an expression to the specified rule.
–expression exprString	Use the argument to specify the expression. This argument is used in conjunction with the –addExpression, –check, and –run arguments.
–check	Use this argument to validate the specified expression.
–run	Use this argument to evaluate the specified expression or rule group.
–group groupName	Use this argument to specify the rule group to evaluate using the –run argument.
–resolve groupName	Use this argument to order (does not evaluate) expressions within rule group. Requires a comma-separated list of edited measures.
–measures measureList	Use this argument to specify the measures to resolve.
–transit workbookName	Use this argument to run a calc engine by transitting over a list of rule groups. Requires the name of an existing workbook and a comma-separated list of rule-group names.
–group groupList	Use this argument to specify a list of group names, separated by commas. Use this argument in conjunction with the –transit and –print arguments.
–print	Use this argument to print all the specified rules and rule groups. The ruleList is a comma-separated list of rule names. The groupList is a comma-separated list of group names.  If "true" is supplied for either ruleList or groupList, all rules or rule groups are printed.
–rule ruleList	Use this argument to specify a list of rule names, separated by commas. Use this argument in conjunction with the –print argument.

Argument	Description
-allGroups	Use this argument in conjunction with the -print argument to print all rule groups.
-debugRuleEngine	Use this argument to generate a file "mace.log" in the working directory for logging RuleEngine specific debug information.
-addGroup	Use this argument to create a new rule group with the specified name,
-removeGroup	Use this argument to remove specified group and non-shared rules in it.
-purgeRules	Use this argument to remove all rules not contained in any rule groups.
-removeAllRuleData	Use this argument to remove all rule groups and all rules.
-validate	Use this argument to validate rule groups. If you need to validate a calc rule group, use the calc param. If you need to validate a refresh rule group, use the refresh param along with the -calcRuleGroup param to specify the corresponding calc rule group. For all other types of rule group, use the general param.
-loglevel level	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.

## printArray

Use printArray to print the contents of an array.

Usage:

```
printArray -version
```

```
printArray -array db.array -specs {-maxpos num}
```

```
printArray -array db.array {-cell "dim1:pos1,dim2:pos2,..."
  {-format "formatString"}}
```

```
printArray -array db.array -slice "dim1:pos1,dim2:pos2,..."
  {-format "formatString"} {-cellsprow num} {-noposnames}
```

```
printArray -array db.array -allpopulatedcells {-format "formatString"}
  {-cellsprow num} {-noposnames}
```

Argument	Description
-version	Prints the RPAS version, revision, and build information.
-array db.array	Specifies the array you want to print. You must specify the full path to the database containing the array. Do not specify the .gem suffix.
-specs	Prints the specifications of the array and positions along each dimension.
-cell	Identifies a single cell. Must not contain spaces. Specify using the format "dim1:pos1,dim2:pos2,..."
-slice	Identifies a single 1-D slice. Must not contain spaces. Specify using the format "dim1:pos1,dim2:pos2,..."
-allpopulatedcells	Print all populated cells including the nvalue of the array.
-format	If -format is specified, any cells with numeric values are interpreted as dates. formatString determines how dates are interpreted, and can include: %Y - 4 digit year %m - month number (01 to 12) %d - numeric day of month (01 to 31) %H - 24 hour clock (00 to 23) %M - minute (00 to 59) %S - seconds (00 to 61) %s - milliseconds
-maxpos	Used in conjunction with -specs, prints only the first <i>n</i> positions for each dimension.
-cellsprow	Specifies how many cells should be printed in each row.
-noposnames	Suppresses the output of position names.

## printMeasure

Use the printMeasure utility to print measure information.

Usage:

```
printMeasure -version
```

```
printMeasure -d pathToDomain -m measure {-wb workbookName}
    {-specs} {-listDataIntersections} {-printData aggType.intersection}
    {-loglevel level}
```

```
printMeasure -list
```

Argument	Description
-version	Use this argument to get the version information. It does not require -d domainPath.
-d pathToDomain	Specifies the domain containing the measure you want to print.
-m measure	Specifies the measure you want to print.
-wb workbookName	Specifies the workbook associated with the measure you want to print. If a workbook is not specified, the domain measure information is printed.
-specs	
-listDataIntersections	
-list	It doesn't require -d domainPath.
-printData aggType.intersection	Prints out the nob's, nod's and sparse format of the measure array at the specified intersection and agg type.
-loglevel level	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.

## refreshHier

Use the refreshHier utility to refresh an already loaded or generated hierarchy. You must specify a path to the domain and the name of master array. Note that since the loadHier utility is calling the refreshHier utility automatically; you do not need to run the refreshHier utility after invoking the loadHier utility.

Usage:

```
refreshHier -version
```

```
refreshHier -d domainPath -array master_array {-purgeAge purgeage}
{-loglevel level}
```

Argument	Description
-version	Use this argument to get the version information. It does not require -d domainPath.
-d domainPath	Specifies the domain in which to load the hierarchy.
-array master_array	Refreshes hierarchy using specified master_array.
-purgeAge purgeage	Specifies the purgeage during refreshHier If this argument is not specified, refreshHier gets purgeage from domain.
-loglevel level	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.

## reshapeArrays

The reshapeArrays utility can be used to make arrays conform to the current hierarchies in the domain. Any positions added to dimensions as a result of running loadHier will be added to arrays that have this dimension. Any positions removed from dimensions will be removed from the arrays.

Usage:

```
reshapeArrays -version
```

```
reshapeArrays -d domainPath -registered {-purge}
```

```
reshapeArrays -d domainPath -db dbName {-array arrayName} {-purge}
```

Argument	Description
-version	Use this argument to get the version information.
-d domainPath	Specifies the domain containing the arrays to be reshaped.
-registered	Use this argument to reshape all registered arrays. You must specify either -registered or -db, but not both.
-db dbName	If you specify -db, all arrays in the specified database are reshaped. You must specify either -registered or -db, but not both. dbName can specify either a full or relative path to the database. If the path is relative, it is relative to the root of the domain.
-array arrayName	Specifies which arrays in a database are to be reshaped. This argument can be repeated to reshape multiple arrays. If -array is not specified, all arrays in the specified database are reshaped.
-purge	If -purge is not specified, the original database will be copied to dbName.bak.

Using -db will cause all arrays in a single database to be reshaped. dbName may be a full or relative path. If it is relative, it must be relative to the root of the domain. If -array is specified, a single array will be reshaped. -array can be repeated on the same command line to reshape more than one array. Using -registered will cause all registered arrays (currently just all measure data arrays) to be reshaped. Either -db or -registered is required, but they are exclusive. If -purge is not specified, the original database will be copied to dbName.bak. Otherwise no backup copy will be made.

## rpasversion

Use the `rpasversion` utility to determine which version of RPAS is running in a particular location.

Usage:

```
rpasversion -l pathToLibrary
```

## updateArray

The `updateArray` utility moves data from a source array to a destination array. The destination array must contain the superset of dimensions in both source arrays. The source array's dimensions may be at the same or higher level (as mapped by the dimension dictionary). If a dimension in the source array is at a higher level, then the results are spread across the lower level dimension in the destination. If there are extra dimensions in the destination array, then the results are replicated across these extra dimensions. The NA value of the destination array remains unchanged.

To limit the scope of the update, a mask array and an innermost range may be specified. If a mask array is given, then the update is limited to cells in the source array for which the corresponding mask cell is on. If an innermost range is given for source or destination array, then the update is limited to cells that are within the start and end of this range on the innermost dimension. If the source and destination arrays are not in the same domain, then the measure store associated with the source domain is used to find hierarchy information.

Usage:

```
updateArray -destArray dbPath.arrayName {-srcArray dbPath.arrayName}
  {-destDomain domainPath {-srcDomain domainPath} {-maskDomain
  domainPath} {-maskArray dbPath.arrayName} {-updateMethod
  method} {-srcRange first:last} {-destRange first:last} {-srcScalar
  scalarCell} {-version} {-loglevel level}
```

OR

```
updateArray -argFile filename {-version} {-loglevel level}
```

Argument	Description
<code>-destArray dbPath.arrayName</code>	Required argument. Specifies the destination array. <code>dbPath</code> is relative to <code>destDomain</code> .
<code>-srcArray dbPath.arrayName</code>	Optional argument. Default is no source array. <b>Note:</b> This parameter cannot be used with <code>-srcScalar scalarCell</code> .
<code>-destDomain domainPath</code>	Optional argument. Default is current working directory.
<code>-srcDomain domainPath</code>	Optional argument. Default is current working directory.

Argument	Description
<code>-maskDomain domainPath</code>	Optional argument. Default is current working directory.
<code>-updateMethod method</code>	Optional argument. Default is OVERLAY. The following update methods are available: SKIPNA – omit NA cells in source. SKIPPOP – omit populated cells in source. OVERLAYNA – update NA cells in destination. OVERLAYPOP – update populated cells in destination. OVERLAY – update all cells in destination with source.
<code>-srcRange first:last</code>	Optional argument. Default is no range. Defines range along innermost dimension of source array.
<code>-destRange first:last</code>	Optional argument. Default is no range. Defines range along innermost dimension of destination array.
<code>-srcScalar scalarCell</code>	Optional argument. Default is NA cell. Format for scalar cell is one of: NUMERIC: numeric value STRING: literal value BOOL: Boolean value DATE: date value NA. <b>Note:</b> This parameter cannot be used with <code>-srcArray dbPath.arrayName</code> .
<code>-loglevel level</code>	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.
<code>-version</code>	Use this argument to get the version information.

## usermgr

Use the usermgr utility to add a user, remove a user, or print information about a user in a specified domain.

Usage:

```
usermgr -version
```

```
usermgr -d domainPath -add userName -label label -password psw
-group grp{-admin} {-loglevel level}
```

```
usermgr -d domainPath -remove userName {-loglevel level}
```

```
usermgr -d domainPath -list {-loglevel level}
```

```
usermgr -d domainPath -print -user username {-loglevel level}
```

```
usermgr -d domainPath -print -group groupname {-loglevel level}
```

Argument	Description
-version	Use this argument to get the version information. It does not require -d domainPath.
-d domainPath	Specifies the path to a domain that you want to add, remove or get information about a user.
-add userName	Use this argument to add a user with a specified name. Use the other arguments specified in the usage to add those attributes for that user.
-label label	Use this argument to specify the label of the user that you are adding to the domain.
-password psw	Use this argument to specify the password of the user that you are adding to the domain.
-group grp	Use this argument to specify the group of the user that you are adding to the domain.
-admin	Use this argument to specify that the user you are adding to the domain has administrative rights.
-remove userName	Use this argument to remove the user with the specified name from the domain.
-list	Use this argument to list all the users registered to the specified domain.
-print	Use this argument to print the specified user or group information.
-user username	Use this argument to specify the user name in the specified domain that you want to print. This argument is only applicable to -print option.
-group groupname	Use this argument to specify the group in the specified domain name that you want to print. This argument is only applicable to -print option.

Argument	Description
<code>-loglevel level</code>	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.

## wbatch

Use the wbatch utility to do the following:

- Run auto workbook builds
- Run deferred commits
- Refresh scheduled workbooks.

Usage:

```
wbatch -d pathToDomain -build (-wbqName name) {-loglevel level}
```

```
wbatch -d pathToDomain -scheduleRefresh wbName {-loglevel level}
```

```
wbatch -d pathToDomain -unscheduleRefresh wbName {-loglevel level}
```

```
wbatch -d pathToDomain -refresh (-refreshWbName name)
{-loglevel level}
```

```
wbatch -d pathToDomain -scheduleCommit wbName {-loglevel level}
```

```
wbatch -d pathToDomain -unscheduleCommit wbName {-loglevel level}
```

```
wbatch -d pathToDomain -commit (-commit wbName name)
{-loglevel level}
```

Argument	Description
<code>-d pathToDomain</code>	Specifies the domain containing the workbooks.
<code>-version</code>	Use this argument to get the version information. It does not require <code>-d domainPath</code> .
<code>-build</code>	Runs auto workbook build. The name is the internal workbook name on the auto build queue.
<code>-commit</code>	Runs all deferred commits. The wbnName is the internal workbook name, e.g., t1. If a name is not supplied, all will be processed.
<code>-refresh</code>	Refreshes all scheduled workbooks. The wbnName is the internal workbook name, e.g., t1. If a name is not supplied, all will be processed.
<code>-scheduleRefresh</code>	Schedules a workbook to be refreshed later.
<code>-unscheduleRefresh</code>	Removes a workbook from refresh_later queue.
<code>-scheduleCommit</code>	Schedules a workbook to be committed later.
<code>-unscheduleCommit</code>	Removes a workbook from commit_later queue.

Argument	Description
-loglevel level	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.

## wbmgr

Use the the wbmgr utility to to inspect or remove the existing workbooks. Do not assume that manual removal of the workbook directories will remove the workbook metadata in the domain.

Usage:

```
wbmgr -version
wbmgr -d pathToDomain -list -all {-loglevel level}
wbmgr -d pathToDomain -list -user userName {-loglevel level}
wbmgr -d pathToDomain -print -wbList wb1,wb2,... {-loglevel level}
wbmgr -d pathToDomain -remove -all {-loglevel level}
wbmgr -d pathToDomain -remove -user userName {-loglevel level}
wbmgr -d pathToDomain -remove -user userName -wbList wb1,wb2,...
{-loglevel level}
```

Argument	Description
-version	Use this argument to get the version information. It does not require -d domainPath.
-d pathToDomain	Specifies the domain containing the workbooks.
-list -all	Lists all workbooks in the domain.
-list -user userName	Lists all workbooks belonging to the user.
-print -wbList wb1,wb2,...	Prints detailed information about workbooks in the list.
-remove -all	Removes all workbooks from the domain.
-remove -user userName	Removes all workbooks from the domain belonging to the specified user.
-remove -user userName -wbList wb1,wb2	Removes all the workbooks in the specified list for the specified user.
-loglevel level	Use this argument to set the logger verbosity level. Possible values: all, profile, debug, information, warning, error, or none.

## Logging batch processes

RPAS batch processes may run for a long time. Therefore, it is sometimes difficult to know the step currently being performed. Fortunately, the RPAS server code provides a large amount of detailed output messages from its processes, to help the system administrator troubleshoot, benchmark, and estimate job completion times. The batch processing shell scripts direct those messages to output files (log and error files) located in [DOM]/scripts/err. These output files typically use the following naming convention:

batchProcess.date&timestamp.fileType

where:

BatchProcess = The name of the shell script or the corresponding batch process.

data&timestamp = The date and time when the script is executed in the format yyymmddhhmmss.

fileType = The type of the file that can be “log” or “err” to indicate whether it is a log file or an error file.

## Log files

Log files usually include a time stamped message that indicates the step being currently executed. Here is the output from a typical RDF forecast batch process job:

```

ACUMATE (TM)
Copyright Kenan Systems Corporation. 1992, 1993
ACUMATE is a trademark of Kenan Systems Corp.
WELCOME TO ACUMATE ES1.31, (ADM), AT 15:02:27 ON 29-Oct-97
ACUMATE COMMAND?
WARNING: CHECKPOINT_ON_AT_OPEN
ACUMATE Database, THIS_WB has checkpointing active.
WARNING: PREV_LOGOFF_FAILED
ACUMATE COMMAND? 15:02:29 Open fmaint and faprvc for write access.
-----Some output is deleted here-----
INFORMATION: COMPRESS_STATISTICS
During compression 3,452 bytes were moved.
INFORMATION: COMPRESS_COMPLETE
37,360 bytes (10 x 4,096 byte blocks) now in use, was 37,360.
----- Finished Forecasting-----
ACUMATE COMMAND? ACUMATE logged out - Goodbye JIM(ADM), at 15:03:06 on 29-Oct-97

```

## Configuration tools log files

For the RPAS configuration tools, information is logged in the files **stderr.txt** and **stdout.txt**, which are located in the **bin** sub-directory of the Tools directory. If you experience a problem with the configuration tools, you should send these two files to Retek Customer Care along with a description of the problem.

## Error files

Error files are usually generated during data loading. These files include a list of bad records followed by the total number of records read and related information. Here is part of the output from a typical data loading batch job.

```
Loading array TEMP in nonoverlay mode. Zero values are loaded.
```

```
Skipping cell with invalid position:
```

```
INFO 1
DAY 1996D364
SKU SKU_00726828
STR STR_0107
```

```
Skipping cell with invalid position:
```

```
INFO 1
DAY 1996D364
SKU SKU_00726828
STR STR_0201
```

```
Skipping cell with invalid position:
```

```
INFO 1
DAY 1996D364
SKU SKU_00726828
STR STR_4008
```

```
Skipping cell with invalid position:
```

```
INFO 1
DAY 1996D364
SKU SKU_00726828
STR STR_4009
```

```
Skipping cell with invalid position:
```

```
INFO 1
DAY 1997D6
SKU SKU_00726828
STR STR_0107
```

Skipping cell with invalid position:

INFO 1

DAY 1997D6

SKU SKU\_00726828

STR STR\_0201

Array -- TEMP. Load time: 0:02

LoadComplete -- Records read: 4240, Total cell updates:  
4240

New cells created: 4028

Cells with invalid positions: 212

Cell updates: 0

# Glossary

## aggregate

To summarize data at a lower hierarchy level into a single category at a higher hierarchy level.

To roll-up worksheet data.

See also aggregation method.

## aggregation method

The method used to aggregate data, or to provide a summary view of lower-level data at a higher level of aggregation. A measure's aggregation method determines how the system populates aggregate level cells based on the component values of base-level cells.

In dialogs that prompt you to specify an aggregation method, the choices and their meanings are as follows:

- ? : Aggregate by displaying the first lower level value if they are all the same; otherwise, display a '?'.
- ? of Populated: Aggregate by displaying the first non-NA lower level value if they are all the same; otherwise, display a '?'.
- Avg: Aggregate by displaying the average of all lower-level values.
- First: Aggregate by displaying the first of all lower-level values.
- Last: Aggregate by displaying the last of all lower-level values.
- Last of Populated: Aggregate by displaying the last of all non-NA lower-level values.
- Logical Count: Aggregate by counting the logical cells at the lower level and displaying this value in the aggregate cell.
- Logical Count of Populated: Aggregate by counting the logical cells at the lower level if there is at least one populated cell.
- Max: Aggregate by displaying the maximum of all lower-level values.
- Min: Aggregate by displaying the minimum of all lower-level values.
- Period End Avg: Aggregate by displaying the period-ending average.
- Period End Total: Aggregate by displaying the period-ending total, or total value present at period end.
- Period Start Avg: Aggregate by displaying the period-starting average.
- Period Start Total: Aggregate by displaying the period-starting total, or total value present at period start.
- Pop Count: Aggregate by counting the populated cells at the lower level and displaying this value in the aggregate cell.

- Total: Aggregate by summing up all lower-level values.

## alert

A notice displayed to system users that a forecasted value is above or below user defined limits (an exception).

## Alert Manager window

A window that displays the alerts assigned to you.

This dialog provides a list of all identified instances in which a monitored measure's values fall outside a set of defined limits. You may pick an alert from this list and have RCS automatically build a workbook containing the measure values that triggered the alert.

## attribute

A piece of information associated with a given dimension that helps to further describe the positions contained in that dimension. For example, positions in the SKU dimension of the product hierarchy could be described by the attributes COLOR, SIZE, and LABEL. Positions can be described by any number of attributes; LABEL is the only required attribute. Attributes can be displayed in the grid, if desired, and attributes can be used to sort positions within a dimension.

## auto build queue

The automatic workbook build queue that specifies the Retek Predictive Solutions workbooks to be automatically built during user-defined batch runs. Workbooks are added to and deleted from this queue through the Workbook Auto Build Maintenance wizard.

## axis

On a Demand Forecasting grid, a row (x-axis), column (y-axis), or slice (pages). Each axis is used to display one dimension of an item.

## chart

An alternative to displaying data in a grid. In the Retek Predictive Solutions, available options for displaying data in chart form include pie charts, bar charts, line charts, and others.

## cloning measures

Creating copies of a selected measure's properties and calculations for the specified selections in a category.

## commit

Transferring saved workbook data to the master database, allowing other users to access and use the data.

**collapse**

Removing from view the wizard list items displayed for a hierarchy level below the level selected.

**column**

On a grid, an axis or display area that runs vertically (y-axis).

**custom measure**

A measure that is created and registered by system administrators. System users can then insert the custom measure in workbooks, or use the measure in generating alerts.

**derived calculation**

A calculation that defines a derived measure in terms of other dependent measures.

**derived measures**

Measures that are not stored. Their values are derived from one or more other measures.

**dimension**

A quality of an item (such as a product, location, or time) that can be displayed on an axis of a grid. For example, product, location, or time.

**display area**

One of three portions of a worksheet that contain the measures and hierarchy tiles.

**display order**

The order in which the attributes of a dimension are displayed on a specific axis of grid. Users define which attributes to display and their display order. Display order is independent of sort order.

**exception**

A forecast value that is greater than or less than a user-defined limit.

**expand**

To display worksheet data for a hierarchy level below the level selected.

**grid**

A structure used by the Retek Predictive Solutions to display multidimensional arrays of data.

## hierarchies

Structures used to define subordinate relationships among items in a dimension, such as product, location, time, or other.

## hierarchy tile

Hierarchies are the structures used by an organization to describe the relationships that exist between the many dimensions. Typically, any dimension will belong to one of these hierarchies (there may be others, but these are the most common): Product, Location, or Calendar (or Time). The Measure hierarchy consists of the measures, or metrics on the worksheet. These hierarchies are represented on the worksheet by hierarchy tiles, or named gray rectangles that represent each hierarchy. The hierarchy tiles you will see in Retek Predictive Solutions include:



## imported measure

Measures that are stored and also specify import properties for loading data.

## import properties

The measure attributes that specify where and how data will be imported from an external source.

## mask

A filter that allows specified combinations of workbook items (cells) to be hidden.

## master database

The main data repository where the application data for all the Retek Predictive Solutions resides. To manipulate the data in the database, the appropriate product, location, and time information is extracted from the database to a workbook. The workbook is a temporary repository that you can use to manipulate and analyze the data. The data in a workbook is committed, or written, back to the master database through a commit function. For example, planning data viewed on TopPlan worksheets is read from and written to the master database.

Also referred to as the master cube.

## measure

Any item of data that can be represented on a grid in worksheets. In the Retek Planning Solutions, measures also specify exactly one role, version, metric, and unit of measure. For example, the measure for Planners Working Plan Sales Value is expressed as PI Wp Sales V.

**measure description**

The description of the measure that can be viewed in a workbook. This description may contain relationships and calculations.

**measure function**

Internal functions that can be used to simplify building calculations for a measure.

**measure identifier**

The combination of role, version, metric, and units that uniquely specifies a single measure.

**measure profile**

A worksheet-specific set of visible measures that is saved under a unique name. Measure profiles allow you to quickly change the measures and measure attributes displayed in a workbook, by enabling you to select an entire block of desired measures in one quick step.

**measure properties**

Administrator-defined properties that specify measure attributes.

**metric**

A measure definition with the role, version, and units omitted, such as Sales, Markdowns, Gross Margin.

**multidimensional**

Capable of containing and displaying three or more dimensions of data.

**new measure**

A measure with undefined properties and calculations.

**node**

A row or column of data.

**on change calculation**

The calculation that is mapped to another measure. The other measure identifier will always be on the left side of the expression.

**ordering**

Defining the order in which calculations should be solved.

## parent

For any cell at a given dimensional level, the cell at the next higher dimensional level into which the original cell's data values aggregate. Along a particular path of aggregation, a cell's value can only roll up into one parent.

For example, at the Month level, January, February, and March sales figures could roll up into the parent cell Quarter1.

## percent contribution

A measure attribute that specifies whether the measure displays actual data values, or whether the measure displays the percentage of total that each measure position represents relative to the next higher visible dimension in the grid. The Percent Contribution attribute can take on one of two values: None or Parent.

- None: A measure with a percent contribution attribute value of 'None' displays actual numeric data values for the measure in question (such as Sales Units).
- Parent: For the same metric, a measure with a percent contribution attribute value of 'Parent' displays for each position the percentage of total that the position represents relative to the next higher visible dimension in the grid.

Also referred to as percent of parent.

## pivot

To change the locations (relative to each other) of two or more hierarchy tiles on the same axis of a grid. This changes the display order of the data for the tiles.

## point labels

Labels that display the data value corresponding to each marker (series or point) in a chart. In bar graphs, the value of each series appears in a point label above the bar. In line graphs, the value of each point appears in a point label above the corresponding point marker. You can toggle the display of point markers in your chart by selecting the Point Labels option on the Chart F/X quick menu.

## quick menu

A menu that contains functions specific to the screen location where the user is working. Clicking the right mouse button displays a quick menu. Also known as a context menu.

## ranging

To specify ranges of positions in a hierarchy over which you want to apply an alert. For example, you might want only one subclass of products, and not the entire product hierarchy, to be monitored by a particular alert.

## register (a measure)

To store the measure in a standard way on the system server.

## role

An element in a grouping scheme that specifies a default base intersection for a group of measures. Roles are typically defined in order to separate related measures into groups associated with distinct user classes. The role-assignment process allows for the partitioning of measures such that users of a particular user class are only given visibility to measures associated with that class.

When a measure is registered, it must be associated with a valid role component. Certain application server dialogs, such as the Show/Hide Measure dialog and the Insert Measure dialog, require you to designate the measure you want to work with. You do this by specifying all the component attributes (role, version, units-of-measure, and metric) that make up a measure's complete definition.

Certain Retek applications (such as Demand Forecasting and JMI) require only the selection of the default role value 'None.' Planning applications, such as TopPlan and KeyPlan, require you to make a role selection from the list provided. For more information on the options available, see the Operations Guides for the applications, or contact your system administrator.

## roll down

To move to a lower level of a hierarchy.

## roll up

To move to a higher level of a hierarchy.

## rotate

To change the location of one hierarchy tile and its measure from one axis (y-column, x-row, or page-slice) to another.

## row

On a grid, an axis or a display area that runs horizontally (x-axis).

## scaling factor

A multiplier associated with an individual measure that is applied to each edited data value to speed the process of data entry. Data values entered for measures associated with a scaling factor are scaled to an internal value that is recognized by the server (but not seen on the client display). A scaling factor can be specified as a prefix or a suffix:

- **Prefix:** A character string that appears before each data value for a selected measure. For example, the prefix '\$' could be specified for a measure to indicate monetary data.
- **Suffix:** A character string that appears after each data value for a selected measure. For example, the suffix 'k' could be specified for a measure associated with a scaling factor of 1000; then, entering the value '6' in a cell would result in the display of '6k'.

### selection set

The set of wizard selections made when the user proceeds normally through the workbook build process. A set of such choices can be saved and later applied during the auto build process, thus eliminating the need for the user to be present to enter choices on each wizard dialog when the workbook auto build is initialized.

### slice

On a grid, an axis or a display area that is shown by paging through worksheets.

### sort order

On a grid, the order by which displayed dimensions are listed. Users define which attributes to sort by and which to prioritize. Sort order is independent of display order.

### spread

To allocate data obtained from a single group at a higher hierarchy level into groups in a lower level, in specified ratios or proportions.

### stored measure

A stored measure is identical to an imported measure, except that no import properties are specified. If the measure is read/write, the user will be able to commit data. If read-only, the measure may be imported internally from another source.

### unhide (show)

To return to view a worksheet or a worksheet measure that was previously hidden.

## units

The units that define how data will be processed and displayed.

In dialogs that prompt you to specify the units for measures, the choices and their meanings are as follows:

- Check = checkbox (Boolean)
- C = cost
- C% = cost value % variance or contribution
- D = date
- Select = pick list
- Stores = number of stores
- V = retail value
- V% = retail value % variance or contribution
- Text = text
- True-False = true-false (Boolean)
- U = units
- U% = units % variance or contribution
- No Units = used within Retek TopPlan for ratios, Average Unit Retail (AUR)
- X = none

## unused measure

A measure with no relationships (that is, with no measures referencing it in their calculations).

## user group

A subset of application users to which a given user belongs. Users must be assigned to a user group. Assigning users to groups provides a level of security into workbooks that users create and save. When users save a workbook, they assign one of three access permissions to the workbook: allow any user to open and edit the workbook, allow only those users in their same group to open and edit the workbooks, or allow no other users to open and edit the workbook.

Users are typically assigned to groups based on similarities in job functions. Users in the same group can be given access to workbooks that belong to that group alone.

User groups are defined in the User Account Management workbook, and viewed in the Groups Worksheet of the User & Template Administration workbook.

## version

An element in a grouping scheme that allows for partitioning of measures based on workflow or data source. Versions are typically defined in order to allow for the maintenance of distinct measure values along a workflow timeline. For example, an original plan value for sales can be defined pre-season and later compared to a current plan value for the same measure in-season.

When a measure is registered, it must be associated with a valid version component. Certain application server dialogs, such as the Show/Hide Measure dialog and the Insert Measure dialog, require you to designate the measure you want to work with. You do this by specifying all the component attributes (role, version, units-of-measure, and metric) that make up a measure's complete definition.

Certain Retek applications (such as Demand Forecasting and JMI) require only the selection of the default version value 'None.' Planning applications, such as TopPlan and KeyPlan, require you to make a version selection from the list provided. For more information on the options available, see the Operations Guides for the applications, or contact your system administrator.

## watch measure

A custom measure that is used as the basis for an alert. Watch measures are created using the Measure Maintenance dialog, and associated with alerts using the Alert Builder wizard.

## wizard

A set of screens that guide you through the process of creating a new workbook or performing other actions in an application, by asking you various questions and having you select values.

## workbook

The framework used for displaying data and user functions. Workbooks are task-specific and may contain one or more worksheets. Users can define the format of their workbooks.

See also workbook template, worksheet.

## workbook template

The framework for creating a workbook. You build each new workbook from an existing workbook template, such as Pre-Season Financial Plan or Forecasting Administration. Several workbook templates are supplied with the Retek Predictive Solutions, and are available for selection when you choose File > New to create a new workbook.

## worksheet

A multidimensional spreadsheet used to display workbook-specific information. Worksheet data can also be displayed in chart format.

**ZOOM**

When working with a grid, the zoom feature enlarges the grid contents of the active window for easier viewing, or reduces the size of the contents in order to fit as much data on the terminal display as possible.



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