Retek® Predictive Application Server 11.0

Administrator's Guide

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Customer Support hours:

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

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

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

When contacting Customer Support, please provide:

- Product version and program/module name.

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

- Detailed step by step instructions to recreate.

- Exact error message received.

- Screen shots of each step you take.

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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.
- View logon and logoff status information for users.
- 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

- User and Template 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 system 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 system to deferred calculation mode

Click the Edit menu and select Manual Calculation.

Return the system 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 specific measures or worksheets

1   From the File menu, select Refresh.

2   On the Refresh dialog box, choose which data you want to refresh. You can refresh data for entire worksheets, or for subsets of measures that appear on those worksheets.

3   Click OK.

Refresh the data for all worksheets and measures in the workbook

1   From the File menu, select Refresh.

2   Click the Refresh All button.

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

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 Role list box, select the appropriate role attribute for the measure you want to insert. You can select more than one role attribute by using <Ctrl+Click>.

   Note: The Role attribute is only required for products in the Retek Predictive Planning Suite. For other applications, the system default (None) should be used.

3   From the Version list box, select the desired version attribute for the measure. You can select more than one version by using <Ctrl+Click>.

   Note: The Version attribute is only required for products in the Retek Predictive Planning Suite. For other applications, the system default (None) should be used.

4   From the Units list box, select the desired units attribute for the measure. You can select more than one units attribute by using <Ctrl+Click>.

5   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).

6   Select the desired measure(s) in the Measures list box.

7   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, and so on.

The DomainDaemon is installed in the same directory as the Acumate executable. The system administrators can start, stop and monitor the DomainDaemon processes using scripts that are provided in this directory.

Common Commands

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.

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

```
(/opt/acu25/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:

```
(/opt/acu25/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:

```
(/opt/acu25/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

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.

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 Measure Administration workbook. The Measure Security sheet has been moved from the User and Template Administration workbook into the new Measure Administration workbook. When the Measure Administration workbook is opened, you are asked to select the set of measures you want to work with. After the workbook is opened, click on the Measure Security tab to see the Measure Security sheet. This sheet 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 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.

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, set the securitydim position in the info dimension of the meta.dim_hier array for the hierarchy. For example,

```
update meta.dim_hier(hier: prod info: securitydim) with
"styl";
```

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 User and Template 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 is 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.

User account management

Overview

User account management is the process by which administrators add and/or delete authorized system users, create and/or delete user groups, and change user passwords. These tasks are performed through completion of the User Account Management wizard. The following procedures are discussed in this area:

- Access the User Account Management Wizard

- Add a user

- Add a user group

- Delete a user

- Delete a user group

- Change a user's password

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

Procedures

Access the User Account Management Wizard

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.

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 a 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.

User Account Management Wizards

Overview

The User Account Management wizard allows system administrators to add and delete new users and user groups. In addition, administrators can access the User Account Management wizard to change the password of any authorized user.

Procedures

Accessing the User Account Management Wizards

1   Select New from the File menu.

2   Select the Administration tab.

3   Highlight User Account Management and click OK.

Add a Workbook

Adds a single workbook, corresponding to a single user, to the workbook auto build queue. Choosing this option displays a dialog that asks for the workbook template type (for example, Measure Analysis, Forecast Approval, etc.). This is followed by a dialog that prompts you to enter the workbook name, the frequency (in days) with which the workbook should be automatically built, and the date of the next build. If you are an administrative user, the next dialog prompts you to select the owner of the new workbook. If you are not an administrator, you are automatically designated as the new workbook's owner.   Finally, you are asked to choose a selection set to apply during the system's next attempt to build the workbook. If the <NEW SET> option is chosen, you are next asked to enter a name for your new selection set, and after pressing Finish you automatically enter the wizard for the selected template. The selections made on these screens are saved under your specified selection set name and will be applied each time the workbook is automatically built.

Add Multiple Workbooks (for administrators only)

Adds a set of workbooks, each built from the same template and each corresponding to a different area of responsibility, to the workbook auto build queue. This option allows administrators to specify separate workbooks for different users, all of whom belong to the same user group, but who may be responsible for different business areas. Choosing this option displays a dialog that asks for the workbook template type (for example, Measure Analysis, Forecast Approval, etc.). The next dialog prompts you to enter the frequency (in days) with which the workbook should be automatically built, as well as the next build date. You must next choose the user group for whom the workbooks are to be built, as well as the appropriate areas of responsibility for the users in that selected group. Finally, you are asked to choose a selection set to apply during the system's next attempt to build the workbook. If the <NEW SET> option is chosen, you are next asked to enter a name for your new selection set, and after pressing Finish you automatically enter the wizard for the selected template. The selections made on these screens are saved under your specified selection set name and will be applied each time the workbook is automatically built.

Edit Workbook Settings

Creates the Auto Build Administration workbook, which allows you to edit the build information associated with workbooks in the auto build queue. Completion of the wizard results in the construction of the Auto Build Administration Workbook, which contains the Auto Build Queue Information worksheet.

Delete Workbooks

Allows you to remove workbooks from the auto build queue. Choosing this option prompts you to select one or more workbooks to be deleted from the automatic workbook build queue. A subsequent dialog prompts you to confirm the deletions. Pressing Finish on the final screen results in deletion of the selected workbooks from the queue and closes the wizard.

Field Descriptions

Frequency

The number of days that elapse between automatic workbook builds. After a workbook is built automatically as part of the nightly batch process, this field is used to update the Next Build Date measure.

Next Build Date

The next date on which the workbook is scheduled to be built automatically.

Owner

The user to whom the workbook is assigned. Click in this field to produce a pick list of available system users.

Template

The workbook template associated with the automatically built workbook. The template may be a standard Retek template or may be a custom-defined template. Click in this field to produce a pick list of available templates.

Wizard Selection Set

The named and saved collection of selections made in a workbook template's wizard dialogs. Saved sets of wizard responses are applied by the system to the associated template as it attempts to automatically build a new workbook. Click in this field to produce a pick list of available selection sets.

Workbook Name

The name under which the workbook will be saved.

User and Template Administration Workbook

Overview

The User and Template 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 User and Template Administration workbook has several worksheets:

- Template Access Rights Worksheet
- Template Measures Worksheet
- Measure Access Rights Worksheet
- Users Worksheet
- Groups Worksheet
- Templates Worksheet
- Template Groups Worksheet

User and Workbook 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 Template Access Rights worksheet.

- Determine which optional measures are to be accessible through individual workbook templates. Template/measure permissions are set in the Template Measures worksheet.

- Assign/restrict user access to individual measures. User/measure permissions are established in the Measure Access Rights worksheet.

- View information about users' use of the system, such as last logon/logoff dates and times, and the User ID associated with each user's label. This user information is on the Users worksheet.

- Modify the label and/or Admin status associated with each user. The Admin status of a user determines whether the user is permitted to save workbook styles at the Admin level, thus affecting new workbooks created by all other users of the system. This information is on the Users worksheet.

- Specify a default template to be automatically loaded whenever a given user logs onto the system. This information is on the Users worksheet.

- Modify the labels associated with specified user groups. This information is on the Groups worksheet.

- Access the Templates worksheet to view the label and file name associated with each workbook template. This worksheet can be used to modify the workbook template labels as necessary.

- Access the Template Groups worksheet to view the label and directory name associated with each workbook template group. This worksheet can be used to modify the workbook template group labels as required.

Template Access Rights Worksheet

The Template Access 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.

Template Measures Worksheet

The Template Measures 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. New workbook wizards typically 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 Template Measures 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 Access Rights Worksheet

The Measure Access 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 Access 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 Access 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.

Users Worksheet

The Users Worksheet allows you to view a list of current authorized users and the user ID associated with each user's label. You can also view a user's Admin status, as well as information about the user's use of the domain, such as last logon/logoff dates and times.

The label associated with a given user can be edited in the Users worksheet, as can the Admin status assigned to each user. Additionally, administrators can specify a default template for each user, if desired.

Groups Worksheet

On the Groups Worksheet, you can view any groups to which at least one user has been assigned. When new users are created, they must be assigned to an existing group. Assigning users to groups builds an intermediate level of security into workbooks created and committed by users.

When users save a workbook, they assign one of three access rights options to it:

- Allow any user to open and edit the workbook

- Allow only those users in their same group to open and edit the workbook

- Allow no other users to open and edit the workbook.

Thus, users in the same group can be given access to workbooks that belong to that group alone.

Users are typically assigned to groups based on similarities in job functions. In the Retek Predictive Planning Suite, the user group corresponds to the user's planning role.

The Groups Worksheet only lists the groups to which one or more users have been assigned. You can have many more groups in existence, all of which will be displayed in the Group drop-down list when you create a new user.

Templates Worksheet

The Templates Worksheet allows you to view the label and file name associated with each workbook template. This worksheet can be used to modify the workbook template labels as necessary.

Template Groups Worksheet

On the Template Groups Worksheet, you can view the label and directory name associated with each workbook template group. This worksheet can be used to modify the workbook template group labels as necessary.

The Template Groups Worksheet lists all available workbook template groups for which at least one workbook template exists.

Procedures

Note: These tasks are performed through the User and Template 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 User & Template 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 User and Template Administration and click OK.

4   On the Template Access 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 desired, 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 User and Template Administration and click OK.

4   On the Template Measures 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 desired, save your workbook by selecting Save from the File menu.

7   To close the workbook, select Close from the File menu.

View user information, such as user ID and logon/logoff status

1   From the File menu, select New.

2   Click the Administration tab.

3   Select User & Template Administration and click OK.

4   Maximize the Users worksheet if it is not already displayed.

5   View the system use information about any system user. If necessary, make appropriate changes to the user's Admin Status, Default Template, or Label measures.

6   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.

7   If desired, save your workbook by selecting Save from the File menu.

8   To close the workbook, select Close from the File menu.

View a Groups worksheet

For a group to be displayed in the Groups worksheet, it must contain at least one user. The Groups worksheet can also be used to modify group labels.

1   From the File menu, select New.

2   Click the Administration tab.

3   Select User and Template Administration and click OK..

4   Maximize the Groups worksheet if it is not already displayed.

5   View the Groups information on the worksheet. If necessary, use the scroll bars to display all Groups information.

6   To modify the label for any group, click on the appropriate field and edit the label as necessary.

7   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.

8   If desired, save your workbook by selecting Save from the File menu.

9   To close the workbook, select Close from the File menu.

Change the label for a user group

For a group to be displayed in the Groups worksheet, it must contain at least one user. The Groups worksheet can also be used to modify group labels.

1   From the File menu, select New.

2   Click the Administration tab.

3   Select User and Template Administration and click OK.

4   Maximize the Groups worksheet if it is not already displayed.

5   View the Groups information on the worksheet. If necessary, use the scroll bars to display all Groups information.

6   To modify the label for any group, click on the appropriate field and edit the label as necessary.

7   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.

8   If desired, save your workbook by selecting Save from the File menu.

9   To close the workbook, select Close from the File menu.

Change a workbook template label

1   From the File menu, select New.

2   Click the Administration tab.

3   Select User and Template Administration and click OK.

4   Maximize the Templates worksheet if it is not already displayed.

5   Click on the cell containing the label you want to change, then type a new label name in the cell.

6   Any changes made must be committed to the master database in order for them to take effect. To commit the workbook changes, select Commit Now from the File menu.

7   If desired, save your workbook by selecting Save from the File menu.

8   To close the workbook, select Close from the File menu.

Change a template group label

1   From the File menu, select New.

2   Click the Administration tab.

3   Select User and Template Administration and click OK.

4   Maximize the Template Groups worksheet if it is not already displayed.

5   Click on the cell containing the label you want to change.

6   Type a new label name in the cell.

7   Any changes made must be committed in order for them to take effect. To commit the workbook changes, select Commit Now from the File menu.

8   If desired, save your workbook by selecting Save from the File menu.

9   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 User and Template Administration and click OK.

4   On the Measure Access Rights worksheet, select each measure for which the user needs access rights. For measures to which the user should not have access, 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 desired, save your workbook by selecting Save from the File menu.

7   To close the workbook, select Close from the File menu.

Specify a user's default template

1   From the File menu, select New.

2   Click the Administration tab.

3   Select User and Template Administration and click OK.

4   On the Users worksheet, click the Default Template measure (drop-down list) for a specific user, to display a list of workbook templates.

5   Select the appropriate default workbook template from the list.

6   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.

7   If desired, save your workbook by selecting Save from the File menu.

8   To close the workbook, select Close from the File menu.

Note: The default template and its associated worksheet settings are loaded automatically when the user logs on to the system.

Field Descriptions

User Worksheet

Admin Status

This checkbox specifies whether a particular user should have Admin status. Admin status determines whether the user is permitted to save system-wide default formats for workbooks at the Admin level, known as Admin formats, that affect new workbooks created by all other users of the system. A checkmark in this field indicates that the user can perform the menu option Format > Save Format > Admin, which creates new system-wide default styles for workbook templates.

Formats are methods of arranging and displaying worksheet information that can be made consistent from one workbook build to the next. For example, the display order of measures in a particular template, the color selection of read/write cells, and the choice of outline view vs. block view for new workbooks can all be saved as part of a template's format. Any user can save User level, or personal, workbook Formats by selecting Save Format > User from the Format menu. A user with Admin status can, however, also opt to create a system-wide format that affects all other system users who access that particular template.

Note: Giving a user 'Admin Status' does not give that user access to the System Administration workbooks. A user is assigned access to these workbooks by an established administrator; the administrator provides this access in the Template Access Rights Worksheet. Because of this distinction, it is possible for a System Administrator (who regularly assigns system-wide access rights) to NOT have Admin Status.

Default Template

The default workbook template and associated worksheet settings that are to be loaded automatically when the user logs on to any of the Retek Predictive Solutions. If a default template is specified, this default workbook and worksheet are built automatically at logon.

Label

The descriptive tag associated with each user. The Label is usually longer and more descriptive than the User ID. Values for this measure are initially created when the user is added to the system; labels can later be edited as necessary in this worksheet.

User ID

The user identification associated with each authorized user. The User ID, along with the user's password, is entered each time the user logs onto the system.

Last Logoff Date

The last date that the user logged off successfully.

Last Logoff Time

The last time that the user logged off successfully.

Last Logon Date

The last date that the user logged on successfully.

Last Logon Time

The last time that the user logged on successfully.

Logoff Success

A checkbox that identifies whether the user logged off successfully during the last use of the system. If the user successfully logged off the system, a checkmark will be displayed in this box. If a power outage or some other type of system failure occurred during the user's last session, then the box will be blank, indicating that the logoff was not successful.

Groups Worksheet

Label

A descriptive tag applied to each group. The label for each group is first entered when you add a user group, and it can be modified in this worksheet.

Templates Worksheet

File Name

The name of the procedure file associated with each template. This field is read-only. This file is accessed when the workbook template is selected from the File > New dialog box.

Label

The descriptive, modifiable name of the template. This label is displayed on the workbook template list that is displayed when you create a new workbook from the File > New dialog box.

Templates Groups Worksheet

Directory Name

The name of the directory that contains the procedure files pertinent to this workbook template group. This directory and the files within it are accessed when the workbook template group is selected in the File > New dialog.

Label

The descriptive, modifiable name of the workbook template group. These labels are displayed on the selection tabs accessed when you create a new workbook using the File > New dialog.

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 be comprised of 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.

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.
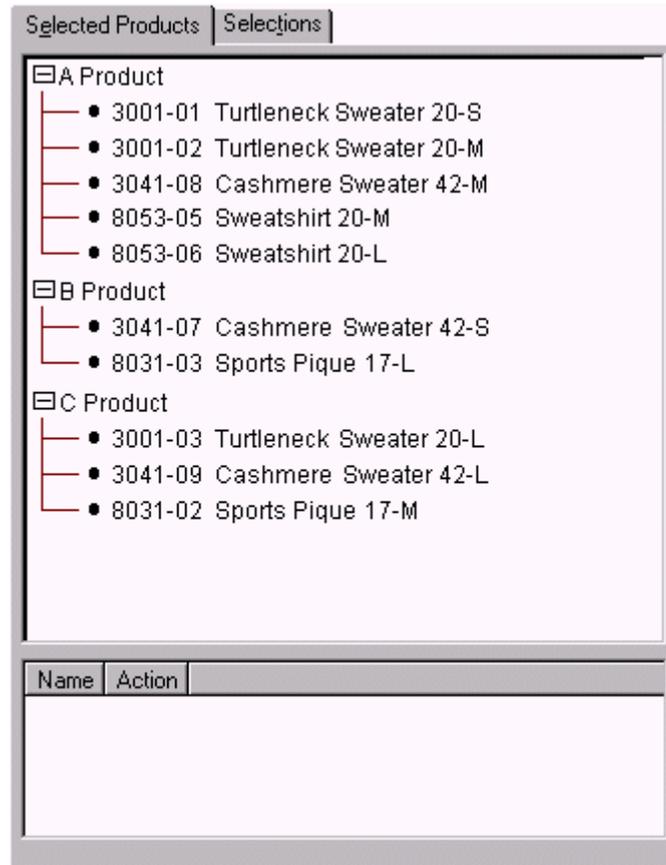
Procedures

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 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

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 .. –h prod –l –u adm:adm >
./err/loadhier.prod.log

3  loadHier –d .. –h loc –l –u adm:adm >>
./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.

Hierarchy loading process

Loading hierarchies is usually a batch process that is run from a shell script called `run_hierload.sh`, which contains the following procedure calls:

```
loadHier -d .. -h prod -l -u adm:adm
loadHier -d .. -h loc -l -u adm:adm
reshapeArrays -d .. -db ../data/sales
reshapeArrays -d .. -db ../data/salesloads
```

These are the steps in the hierarchy loading batch process:

1   Update the product and location hierarchies by running the loadHier utility twice. First, the utility runs with argument `prod` to update the product hierarchy and next with argument `loc` to update the location hierarchy..

2   Rebuild data arrays with new hierarchy contents/elements by running the reshapeArrays utility twice. First, the utility runs on the sales database, and then on the salesloads database. The reshapeArrays utility checks all the arrays in the argument database against the current dimension definitions and revises them accordingly.

The loadHier utility can be used to load or refresh a hierarchy. Usage of the utility is:

```
loadHier -d domainPath -h hierName (-l | -r ) {-c} {-u
user:password}
```

Parameter	Description
–d domainPath	The directory containing the domain.
–h hierName	The name of the hierarchy to load or refresh.
–l	Load the named hierarchy.
–r	Refresh the named hierarchy.
–c	Check parents while doing the load.
–u	Specify the acumate user and password, defaults to adm.

The –d and –h parameters are required. Use either the –l parameter to specify a hierarchy load or the –r parameter to specify a hierarchy refresh. The –c parameter is optional. If present, the structure of the hierarchy is validated during the load. The –u parameter can be used to indicate the Acumate user and password to use when performing the load or refresh.

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 of the utility is:

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

    {-purge} {-version} {-debug}
```

<div align="center">OR</div>

```
reshapeArrays –d domainPath –registered  {-purge} {-
version} {-debug}
```

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.

Data loading process

Loading the data into a domain is usually a batch process that is run from a shell script called `run_dataload.sh.` This shell script contains a series of RPAS 11 utilities, such as the following:

```
loadMeasure –d .. –m csal –l –u adm:adm

loadMeasure –d .. –m psal –l –u adm:adm

loadMeasure –d .. –m rsal –l –u adm:adm

mace –d .. –run –group post_data_load
```

This process consists of loading the domain's measures, one at a time, from a text file, using each measure's attribute. In this example, the three measures *csal*, *psal*, and *rsal* are loaded from their corresponding text files. The mace utility is then used to execute a rule group called post_data_load.

The loadMeasure utility can be used to load data into a measure or to apply any staged data loads for the measure. Usage of the utility is:

```
loadMeasure –d domainPath –m measName (–l | –a ) {–u
user:password}
```

Parameter	Description
–d domainPath	The directory containing the domain
–m measName	The name of the measure to load (should be lowercase)
–l	Load the named measure
–a	Apply any staged loads for the named measure
–u	Specify the acumate user and password, defaults to adm

The –d and –m parameters are required. Use either the –l parameter to load data into a measure or the –a parameter to apply any staged loads. The –u parameter can be used to indicate the Acumate user that will be running the load process.

The mace utility allows you to evaluate rule groups or expressions in order to manipulate measures. This utility contains many functions (see its usage line by running mace with no arguments), but the most commonly used for batch processes will be:

```
mace –d path_to_domain –run –group ruleGroupName
```

<div align="center">OR</div>

```
mace –d path_to_domain –run –expression "temporary
expression"
```

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

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 yyyymmddhhmmss.

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 faprv 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
```

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:

| Product | Location | Calendar | Measure |

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 Pl 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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