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# PeopleSoft EnterpriseOne Forecast Management 8.11 PeopleBook

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**November 2004**

PeopleSoft EnterpriseOne Forecast Management 8.11 PeopleBook

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# About This PeopleBook Preface

PeopleBooks provide you with the information that you need to implement and use PeopleSoft applications.

This preface discusses:

- PeopleSoft application prerequisites.
- PeopleSoft application fundamentals.
- Documentation updates and printed documentation.
- Additional resources.
- Typographical conventions and visual cues.
- Comments and suggestions.
- Common elements in PeopleBooks.

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**Note.** PeopleBooks document only page elements, such as fields and check boxes, that require additional explanation. If a page element is not documented with the process or task in which it is used, then either it requires no additional explanation or it is documented with common elements for the section, chapter, PeopleBook, or product line. Elements that are common to all PeopleSoft applications are defined in this preface.

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## PeopleSoft Application Prerequisites

To benefit fully from the information that is covered in these books, you should have a basic understanding of how to use PeopleSoft applications.

You might also want to complete at least one PeopleSoft introductory training course, if applicable.

You should be familiar with navigating the system and adding, updating, and deleting information by using PeopleSoft menus, and pages, forms, or windows. You should also be comfortable using the World Wide Web and the Microsoft Windows or Windows NT graphical user interface.

These books do not review navigation and other basics. They present the information that you need to use the system and implement your PeopleSoft applications most effectively.

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## PeopleSoft Application Fundamentals

Each application PeopleBook provides implementation and processing information for your PeopleSoft applications. For some applications, additional, essential information describing the setup and design of your system appears in a companion volume of documentation called the application fundamentals PeopleBook. Most PeopleSoft product lines have a version of the application fundamentals PeopleBook. The preface of each PeopleBook identifies the application fundamentals PeopleBooks that are associated with that PeopleBook.

The application fundamentals PeopleBook consists of important topics that apply to many or all PeopleSoft applications across one or more product lines. Whether you are implementing a single application, some combination of applications within the product line, or the entire product line, you should be familiar with the contents of the appropriate application fundamentals PeopleBooks. They provide the starting points for fundamental implementation tasks.

---

## Documentation Updates and Printed Documentation

This section discusses how to:

- Obtain documentation updates.
- Order printed documentation.

### Obtaining Documentation Updates

You can find updates and additional documentation for this release, as well as previous releases, on the PeopleSoft Customer Connection website. Through the Documentation section of PeopleSoft Customer Connection, you can download files to add to your PeopleBook Library. You'll find a variety of useful and timely materials, including updates to the full PeopleSoft documentation that is delivered on your PeopleBooks CD-ROM.

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**Important!** Before you upgrade, you must check PeopleSoft Customer Connection for updates to the upgrade instructions. PeopleSoft continually posts updates as the upgrade process is refined.

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### See Also

PeopleSoft Customer Connection, <https://www.peoplesoft.com/corp/en/login.jsp>

### Ordering Printed Documentation

You can order printed, bound volumes of the complete PeopleSoft documentation that is delivered on your PeopleBooks CD-ROM. PeopleSoft makes printed documentation available for each major release shortly after the software is shipped. Customers and partners can order printed PeopleSoft documentation by using any of these methods:

- Web
- Telephone
- Email

#### Web

From the Documentation section of the PeopleSoft Customer Connection website, access the PeopleBooks Press website under the Ordering PeopleBooks topic. The PeopleBooks Press website is a joint venture between PeopleSoft and MMA Partners, the book print vendor. Use a credit card, money order, cashier's check, or purchase order to place your order.

#### Telephone

Contact MMA Partners at 877 588 2525.

## Email

Send email to MMA Partners at [peoplesoftpress@mmapartner.com](mailto:peoplesoftpress@mmapartner.com).

## See Also

PeopleSoft Customer Connection, <https://www.peoplesoft.com/corp/en/login.jsp>

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## Additional Resources

The following resources are located on the PeopleSoft Customer Connection website:

| Resource                                                   | Navigation                                                                                                                                                                                 |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application maintenance information                        | Updates + Fixes                                                                                                                                                                            |
| Business process diagrams                                  | Support, Documentation, Business Process Maps                                                                                                                                              |
| Interactive Services Repository                            | Interactive Services Repository                                                                                                                                                            |
| Hardware and software requirements                         | Implement, Optimize + Upgrade, Implementation Guide, Implementation Documentation & Software, Hardware and Software Requirements                                                           |
| Installation guides                                        | Implement, Optimize + Upgrade, Implementation Guide, Implementation Documentation & Software, Installation Guides and Notes                                                                |
| Integration information                                    | Implement, Optimize + Upgrade, Implementation Guide, Implementation Documentation and Software, Pre-built Integrations for PeopleSoft Enterprise and PeopleSoft EnterpriseOne Applications |
| Minimum technical requirements (MTRs) (EnterpriseOne only) | Implement, Optimize + Upgrade, Implementation Guide, Supported Platforms                                                                                                                   |
| PeopleBook documentation updates                           | Support, Documentation, Documentation Updates                                                                                                                                              |
| PeopleSoft support policy                                  | Support, Support Policy                                                                                                                                                                    |
| Prerelease notes                                           | Support, Documentation, Documentation Updates, Category, Prerelease Notes                                                                                                                  |
| Product release roadmap                                    | Support, Roadmaps + Schedules                                                                                                                                                              |
| Release notes                                              | Support, Documentation, Documentation Updates, Category, Release Notes                                                                                                                     |
| Release value proposition                                  | Support, Documentation, Documentation Updates, Category, Release Value Proposition                                                                                                         |
| Statement of direction                                     | Support, Documentation, Documentation Updates, Category, Statement of Direction                                                                                                            |

| Resource                    | Navigation                                                |
|-----------------------------|-----------------------------------------------------------|
| Troubleshooting information | Support, Troubleshooting                                  |
| Upgrade documentation       | Support, Documentation, Upgrade Documentation and Scripts |

## Typographical Conventions and Visual Cues

This section discusses:

- Typographical conventions.
- Visual cues.
- Country, region, and industry identifiers.
- Currency codes.

### Typographical Conventions

This table contains the typographical conventions that are used in PeopleBooks:

| Typographical Convention or Visual Cue | Description                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Bold</b>                            | Indicates PeopleCode function names, business function names, event names, system function names, method names, language constructs, and PeopleCode reserved words that must be included literally in the function call.                                                                                                      |
| <i>Italics</i>                         | Indicates field values, emphasis, and PeopleSoft or other book-length publication titles. In PeopleCode syntax, italic items are placeholders for arguments that your program must supply.<br><br>We also use italics when we refer to words as words or letters as letters, as in the following: Enter the letter <i>O</i> . |
| KEY+KEY                                | Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For ALT+W, hold down the ALT key while you press the W key.                                                                                                         |
| Monospace font                         | Indicates a PeopleCode program or other code example.                                                                                                                                                                                                                                                                         |
| “ ” (quotation marks)                  | Indicate chapter titles in cross-references and words that are used differently from their intended meanings.                                                                                                                                                                                                                 |

| Typographical Convention or Visual Cue | Description                                                                                                                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| . . . (ellipses)                       | Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax.                                                                                       |
| { } (curly braces)                     | Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe (   ).                                                                                         |
| [ ] (square brackets)                  | Indicate optional items in PeopleCode syntax.                                                                                                                                              |
| & (ampersand)                          | When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object.<br><br>Ampersands also precede all PeopleCode variables. |

## Visual Cues

PeopleBooks contain the following visual cues.

### Notes

Notes indicate information that you should pay particular attention to as you work with the PeopleSoft system.

---

**Note.** Example of a note.

---

If the note is preceded by *Important!*, the note is crucial and includes information that concerns what you must do for the system to function properly.

---

**Important!** Example of an important note.

---

### Warnings

Warnings indicate crucial configuration considerations. Pay close attention to warning messages.

---

**Warning!** Example of a warning.

---

### Cross-References

PeopleBooks provide cross-references either under the heading “See Also” or on a separate line preceded by the word *See*. Cross-references lead to other documentation that is pertinent to the immediately preceding documentation.

## Country, Region, and Industry Identifiers

Information that applies only to a specific country, region, or industry is preceded by a standard identifier in parentheses. This identifier typically appears at the beginning of a section heading, but it may also appear at the beginning of a note or other text.

Example of a country-specific heading: “(FRA) Hiring an Employee”

Example of a region-specific heading: “(Latin America) Setting Up Depreciation”

## **Country Identifiers**

Countries are identified with the International Organization for Standardization (ISO) country code.

## **Region Identifiers**

Regions are identified by the region name. The following region identifiers may appear in PeopleBooks:

- Asia Pacific
- Europe
- Latin America
- North America

## **Industry Identifiers**

Industries are identified by the industry name or by an abbreviation for that industry. The following industry identifiers may appear in PeopleBooks:

- USF (U.S. Federal)
- E&G (Education and Government)

## **Currency Codes**

Monetary amounts are identified by the ISO currency code.

---

# **Comments and Suggestions**

Your comments are important to us. We encourage you to tell us what you like, or what you would like to see changed about PeopleBooks and other PeopleSoft reference and training materials. Please send your suggestions to:

PeopleSoft Product Documentation Manager PeopleSoft, Inc. 4460 Hacienda Drive Pleasanton, CA 94588

Or send email comments to [doc@peoplesoft.com](mailto:doc@peoplesoft.com).

While we cannot guarantee to answer every email message, we will pay careful attention to your comments and suggestions.

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# **Common Elements Used in PeopleBooks**

## **Address Book Number**

Enter a unique number that identifies the master record for the entity. An address book number can be the identifier for a customer, supplier, company, employee, applicant, participant, tenant, location, and so on. Depending on the application, the field on the form might refer to the address book number as the customer number, supplier number, or company number, employee or applicant id, participant number, and so on.

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>As If Currency Code</b> | Enter the three-character code to specify the currency that you want to use to view transaction amounts. This code allows you to view the transaction amounts as if they were entered in the specified currency rather than the foreign or domestic currency that was used when the transaction was originally entered.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Batch Number</b>        | Displays a number that identifies a group of transactions to be processed by the system. On entry forms, you can assign the batch number or the system can assign it through the Next Numbers program (P0002).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Batch Date</b>          | Enter the date in which a batch is created. If you leave this field blank, the system supplies the system date as the batch date.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Batch Status</b>        | <p>Displays a code from user-defined code (UDC) table 98/IC that indicates the posting status of a batch. Values are:</p> <p><i>Blank:</i> Batch is unposted and pending approval.</p> <p><i>A:</i> The batch is approved for posting, has no errors and is in balance, but it has not yet been posted.</p> <p><i>D:</i> The batch posted successfully.</p> <p><i>E:</i> The batch is in error. You must correct the batch before it can post.</p> <p><i>P:</i> The system is in the process of posting the batch. The batch is unavailable until the posting process is complete. If errors occur during the post, the batch status changes to E.</p> <p><i>U:</i> The batch is temporarily unavailable because someone is working with it, or the batch appears to be in use because a power failure occurred while the batch was open.</p> |
| <b>Branch/Plant</b>        | Enter a code that identifies a separate entity as a warehouse location, job, project, work center, branch, or plant in which distribution and manufacturing activities occur. In some systems, this is called a business unit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Business Unit</b>       | Enter the alphanumeric code that identifies a separate entity within a business for which you want to track costs. In some systems, this is called a branch/plant.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Category Code</b>       | Enter the code that represents a specific category code. Category codes are user-defined codes that you customize to handle the tracking and reporting requirements of your organization.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Company</b>             | Enter a code that identifies a specific organization, fund, or other reporting entity. The company code must already exist in the F0010 table and must identify a reporting entity that has a complete balance sheet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Currency Code</b>       | Enter the three-character code that represents the currency of the transaction. PeopleSoft EnterpriseOne provides currency codes that are recognized by the International Organization for Standardization (ISO). The system stores currency codes in the F0013 table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Document Company</b>    | <p>Enter the company number associated with the document. This number, used in conjunction with the document number, document type, and general ledger date, uniquely identifies an original document.</p> <p>If you assign next numbers by company and fiscal year, the system uses the document company to retrieve the correct next number for that company.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

If two or more original documents have the same document number and document type, you can use the document company to display the document that you want.

**Document Number**

Displays a number that identifies the original document, which can be a voucher, invoice, journal entry, or time sheet, and so on. On entry forms, you can assign the original document number or the system can assign it through the Next Numbers program.

**Document Type**

Enter the two-character UDC, from UDC table 00/DT, that identifies the origin and purpose of the transaction, such as a voucher, invoice, journal entry, or time sheet. PeopleSoft EnterpriseOne reserves these prefixes for the document types indicated:

*P*: Accounts payable documents.

*R*: Accounts receivable documents.

*T*: Time and pay documents.

*I*: Inventory documents.

*O*: Purchase order documents.

*S*: Sales order documents.

**Effective Date**

Enter the date on which an address, item, transaction, or record becomes active. The meaning of this field differs, depending on the program. For example, the effective date can represent any of these dates:

- The date on which a change of address becomes effective.
- The date on which a lease becomes effective.
- The date on which a price becomes effective.
- The date on which the currency exchange rate becomes effective.
- The date on which a tax rate becomes effective.

**Fiscal Period and Fiscal Year**

Enter a number that identifies the general ledger period and year. For many programs, you can leave these fields blank to use the current fiscal period and year defined in the Company Names & Number program (P0010).

**G/L Date** (general ledger date)

Enter the date that identifies the financial period to which a transaction will be posted. The system compares the date that you enter on the transaction to the fiscal date pattern assigned to the company to retrieve the appropriate fiscal period number and year, as well as to perform date validations.

# PeopleSoft EnterpriseOne Forecast Management Preface

This preface discusses:

- PeopleSoft application fundamentals.
- Pages with deferred processing.
- Common elements in this PeopleBook.

---

## PeopleSoft Application Fundamentals

The PeopleSoft Forecast Management PeopleBook provides you with implementation and processing information for the PeopleSoft Forecast Management system. However, additional, essential information describing the setup and design of the system resides in companion documentation. The companion documentation consists of important topics that apply to many or all PeopleSoft applications across the Financials, Enterprise Service Automation, and Supply Chain Management product lines. You should be familiar with the contents of these PeopleBooks. The following companion PeopleBooks contain information that applies specifically to PeopleSoft Engineer to Order.

- PeopleSoft Inventory Management
- PeopleSoft Product Data Management
- PeopleSoft Shop Floor Management
- PeopleSoft Requirements Planning
- PeopleSoft Job Cost
- PeopleSoft Capital Asset Management
- PeopleSoft Quality Management
- PeopleSoft Sales Order Management
- PeopleSoft Procurement
- PeopleSoft Contract Billing, Service Billing

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## Pages With Deferred Processing

Several pages in PeopleSoft Forecast Management operate in deferred processing mode. Most fields on these pages are not updated or validated until you save the page or refresh it by clicking a button, link, or tab. This delayed processing has various implications for the field values on the page—for example, if a field contains a default value, any value you enter before the system updates the page overrides the default. Another implication is that the system updates quantity balances or totals only when you save or otherwise refresh the page.

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## About These PeopleBooks

A companion PeopleBook called About These PeopleBooks contains general information, including:

- Related documentation, common page elements, and typographical conventions for PeopleBooks.
  - Information about using PeopleBooks and managing the PeopleBooks Library.
  - A glossary of useful PeopleSoft terms that are used in PeopleBooks.
- 

## Common Elements Used in this PeopleBook

The common elements used in this PeopleBook include:

|                               |                                                                                                                                                                                                                                                            |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Actual Amount</b>          | The number of units multiplied by the unit price.                                                                                                                                                                                                          |
| <b>Actual Data</b>            | The number of periods of actual data that the system uses to calculate the best-fit forecast.                                                                                                                                                              |
| <b>Actual Quantity</b>        | The quantity of units affected by the transaction.                                                                                                                                                                                                         |
| <b>Actual Type</b>            | A user defined code that indicates one of the following: <ol style="list-style-type: none"> <li>1. The forecasting method used to calculate the numbers displayed about the item;</li> <li>2. The actual historical information about the item.</li> </ol> |
| <b>Actuals Consolidation</b>  | Specifies whether the system uses weekly or monthly planning when creating actuals.                                                                                                                                                                        |
| <b>Actuals Forecast Type</b>  | The forecast type identifies the sales order history used as the basis for the forecast calculations, or actuals.                                                                                                                                          |
| <b>Address</b>                | Specifies whether the system considers the address book numbers as part of the hierarchy or if the system retrieves the address book numbers from the business unit associated with the forecast.                                                          |
| <b>Address Number</b>         | A number that identifies an entry in the Address Book system, such as employee, applicant, participant, customer, supplier, tenant, or location.                                                                                                           |
| <b>Adjusted Amount</b>        | The current amount of the forecasted units for a planning period.                                                                                                                                                                                          |
| <b>Adjusted Quantity</b>      | The quantity of units forecasted for production during a planning period.                                                                                                                                                                                  |
| <b>Alpha Factor</b>           | A smoothing constant that the system uses to calculate the smoothed average for the general level of magnitude of sales.                                                                                                                                   |
| <b>Alpha Name</b>             | The text that names or describes an address.                                                                                                                                                                                                               |
| <b>Amounts or Quantity</b>    | Specifies whether the system calculates the best fit forecast using amounts or quantities.                                                                                                                                                                 |
| <b>Begin Extract Date</b>     | The beginning date from which the system processes records.                                                                                                                                                                                                |
| <b>Best Fit Forecast Type</b> | Specifies the forecast type that is generated as a result of the best fit calculation.                                                                                                                                                                     |

|                                                         |                                                                                                                                        |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Beta Factor</b>                                      | A smoothing constant that the system uses to calculate the smoothed average for the trend component of the forecast.                   |
| <b>Bypass Forcing</b>                                   | A code that indicates whether to bypass the Forecast Forcing program.                                                                  |
| <b>Calculated Percent Over Last Year</b>                | Specifies which type of forecast to run.                                                                                               |
| <b>Category Codes Address Book</b>                      | Specifies from where the system retrieves the address book category codes.                                                             |
| <b>Change Amount</b>                                    | The amount of the future change in unit price.                                                                                         |
| <b>Change Type</b>                                      | A field that tells the system whether the number in the New Price field is an amount or a percentage.                                  |
| <b>Commodity Class</b>                                  | A code that represents an item property type or classification, such as commodity type, planning family, or so forth.                  |
| <b>Company</b>                                          | A code that identifies a specific organization, fund, or other reporting entity.                                                       |
| <b>Effective Date</b>                                   | A date that indicates when a component part goes into effect on a bill of material or when a rate schedule is in effect.               |
| <b>Eight Periods Prior</b>                              | Specifies the weight to assign to eight periods prior for calculating a moving average.                                                |
| <b>Eleven Periods Prior</b>                             | Specifies the weight to assign to 11 periods prior for calculating a moving average.                                                   |
| <b>End Extract Date</b>                                 | Specifies the ending date that the system uses when creating actuals.                                                                  |
| <b>Expiration Date</b>                                  | A date that indicates when a component part is no longer in effect on a bill of material, or when a rate schedule is no longer active. |
| <b>Exponential Smoothing</b>                            | Specifies which type of forecast to run.                                                                                               |
| <b>Exponential Smoothing with Trend and Seasonality</b> | Specifies which type of forecast to run.                                                                                               |
| <b>Fiscal Date Pattern</b>                              | Specifies the fiscal date pattern that the system uses when creating actuals.                                                          |
| <b>Fiscal Year</b>                                      | Designates a specific fiscal year.                                                                                                     |
| <b>Five Periods Prior</b>                               | Specifies the weight to assign to five periods prior for calculating a moving average.                                                 |
| <b>Flexible Method</b>                                  | Specifies which type of forecast to run.                                                                                               |
| <b>Forecast Amount</b>                                  | The current amount of the forecasted units for a planning period.                                                                      |
| <b>Forecast Length</b>                                  | The number of periods to forecast.                                                                                                     |
| <b>Forecast Quantity</b>                                | The quantity of units forecasted for production during a planning period.                                                              |
| <b>Forecast Summary Code</b>                            | The summary code that the system uses to create summarized forecast records.                                                           |
| <b>Forecast Type</b>                                    | The detail forecast type used to summarize the forecast.                                                                               |
| <b>Four Periods Prior</b>                               | Specifies the weight assigned to four periods prior for calculating a moving average.                                                  |

|                                  |                                                                                                                                                    |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>From Date</b>                 | The date from which the system begins the summary forecast.                                                                                        |
| <b>Hierarchy Direction</b>       | Specifies the direction in which to force the changes made to the summary forecast.                                                                |
| <b>Image Processing</b>          | Specifies whether the system writes before or after image processing.                                                                              |
| <b>Large Customer Summary</b>    | Specifies whether the system creates summary records for large customers when creating actuals.                                                    |
| <b>Large Customers</b>           | Specifies whether to create forecasts for large customers.                                                                                         |
| <b>Last Year to This Year</b>    | Specifies which type of forecast to run.                                                                                                           |
| <b>Least Squares Regression</b>  | Specifies which type of forecast to run.                                                                                                           |
| <b>Level 1</b>                   | The first key position of the forecasting hierarchy.                                                                                               |
| <b>Level 10</b>                  | The tenth key position of the forecasting hierarchy.                                                                                               |
| <b>Linear Approximation</b>      | Specifies which type of forecast to run.                                                                                                           |
| <b>Linear Smoothing</b>          | Specifies which type of forecast to run.                                                                                                           |
| <b>Master Planning Family</b>    | A user defined code that represents an item property type or classification, such as commodity type or planning family.                            |
| <b>Mean Absolute Deviation</b>   | Specifies whether the system uses the Mean Absolute Deviation formula or the Percent of Accuracy formula to calculate the best-fit forecast.       |
| <b>Mode</b>                      | Specifies whether the system runs the summary forecast in proof or final mode.                                                                     |
| <b>Moving Average</b>            | Specifies which type of forecast to run.                                                                                                           |
| <b>Negative Values</b>           | Specifies whether the system displays negative values.                                                                                             |
| <b>Nine Periods Prior</b>        | Specifies the weight to assign to nine periods prior for calculating a moving average.                                                             |
| <b>Number of Periods</b>         | Specifies the number of periods.                                                                                                                   |
| <b>One Period Prior</b>          | Specifies the weight to assign to one period prior for calculating a moving average.                                                               |
| <b>Percent</b>                   | The percent of increase or decrease used to multiply by the sales history from last year.                                                          |
| <b>Percent Over Last Year</b>    | Specifies which type of forecast to run.                                                                                                           |
| <b>Percent Over Prior Period</b> | Specifies the percent of increase or decrease for the system to use.                                                                               |
| <b>Period 1</b>                  | Time Series Column 01.                                                                                                                             |
| <b>Period 52</b>                 | Time Series Column 52.                                                                                                                             |
| <b>Periods to Include</b>        | Specifies the number of periods to include.                                                                                                        |
| <b>Planner Number</b>            | The address number of the material planner for this item.                                                                                          |
| <b>Price</b>                     | The list or base price to be charged for one unit of this item. In sales order entry, all prices must be set up in the Item Base Price File table. |

|                                      |                                                                                                                                                              |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Qty %</b>                         | A number that represents the percent of the forecast that has been consumed by the actual sales.                                                             |
| <b>Quantities and Amounts</b>        | Specifies whether the system forces the changes made to quantities or amounts or both.                                                                       |
| <b>Quantity</b>                      | A flag to display the Quantity or the Amount data in records.                                                                                                |
| <b>Ratio Calculations</b>            | Specifies whether the system calculates the parent/child ratios using the original or the adjusted forecast values.                                          |
| <b>Revised Flag</b>                  | Specifies whether the system resets the revised flag for the records changed when you set the Hierarchy Direction processing option to 1 or 2.               |
| <b>Seasonality</b>                   | Specifies whether the system includes seasonality in the calculation.                                                                                        |
| <b>Second Degree Approximation</b>   | Specifies which type of forecast to run.                                                                                                                     |
| <b>Seven Periods Prior</b>           | Specifies the weight to assign to seven periods prior for calculating a moving average.                                                                      |
| <b>Ship To or Sold To Address</b>    | Specifies whether the system uses the Ship To address on which to base large customer summaries, or the Sold To address, when creating actuals.              |
| <b>Six Periods Prior</b>             | Specifies the weight to assign to six periods prior for calculating a moving average.                                                                        |
| <b>Start Date</b>                    | The date on which the system starts the forecasts.                                                                                                           |
| <b>Summary Code</b>                  | Specifies which summary code the system uses when running the summary.                                                                                       |
| <b>Summary or Detail</b>             | Specifies whether the system creates summarized forecast records, detail forecast records, or both.                                                          |
| <b>Supply Demand Inclusion Rules</b> | The version of the Supply/Demand Inclusion Rules program that the system uses when extracting sales actuals.                                                 |
| <b>Ten Periods Prior</b>             | The weight to assign to 10 periods prior for calculating a moving average.                                                                                   |
| <b>Three Periods Prior</b>           | The weight to assign to three periods prior for calculating a moving average.                                                                                |
| <b>Thru Date</b>                     | Specifies the date from which the system ends the summary forecast.                                                                                          |
| <b>Transaction Type</b>              | The transaction type to which the system processes outbound interoperability transactions.                                                                   |
| <b>Twelve Periods Prior</b>          | Specifies the weight to assign to 12 periods prior for calculating a moving average.                                                                         |
| <b>Two Periods Prior</b>             | The weight to assign to two periods prior for calculating a moving average.                                                                                  |
| <b>Unit Of Measure</b>               | A user defined code that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).                                   |
| <b>Use Active Sales Orders</b>       | Specifies whether the system uses both the Sales Order Detail table and the Sales Order History table when creating actuals, or uses only the history table. |
| <b>Weekly</b>                        | A flag to display weekly or monthly records.                                                                                                                 |
| <b>Weekly Forecasts</b>              | Specifies weekly or monthly forecasts.                                                                                                                       |

|                                |                                                                             |
|--------------------------------|-----------------------------------------------------------------------------|
| <b>Weighted Moving Average</b> | Specifies which type of forecast to use.                                    |
| <b>YR</b>                      | A number that identifies the year that the system uses for the transaction. |

# CHAPTER 1

## Getting Started with PeopleSoft EnterpriseOne Forecast Management

This chapter discusses:

- Forecast Management overview
- Forecast Management integrations
- Forecast Management implementation

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### Forecast Management Overview

Effective management of distribution and manufacturing activities begins with understanding and anticipating market needs. Forecasting is the process of projecting past sales demand into the future.

Implementing a forecasting system enables you to quickly assess current market trends and sales so that you can make informed decisions about your operations.

You can use forecasts to make planning decisions about:

- Customer orders
- Inventory
- Delivery of goods
- Work load
- Capacity requirements
- Warehouse space
- Labor
- Equipment
- Budgets
- Budgets
- Development of new products
- Work force requirements

## Forecast Management Integrations

The Forecast Management system is one of many systems that make up the Supply Chain Management module. You can use the Supply Chain Management module to coordinate your inventory, raw material, and labor resources to deliver products according to a managed schedule.

Supply Chain Management is fully integrated, and ensures that information is current and accurate across your business operations. It is a closed-loop manufacturing system that formalizes the activities of company and operations planning, as well as the execution of those plans.

The Forecast Management system generates demand projections that you use as input for the PeopleSoft EnterpriseOne planning and scheduling systems. The planning and scheduling systems calculate material requirements for all component levels--from raw materials to complex subassemblies.

### Resource Requirements Planning

Resource Requirements Planning (RRP) uses forecasts to estimate the time and resources that are needed to make a product.

### Master Production Schedule

Master Production Schedule (MPS) plans and schedules the products that your company expects to manufacture. Forecasts are one MPS input that helps determine demand before you complete your production plans.

### Material Requirements Planning

Material Requirements Planning (MRP) is an ordering and scheduling system that breaks down the requirements of all MPS parent items to the component levels. You can also use forecasts as input for lower-level MRP components that are service parts with independent demand, which is demand not directly or exclusively tied to production of a particular product at a particular branch or plant.

### Distribution Requirements Planning

Distribution Requirements Planning (DRP) is a management system that plans and controls the distribution of finished goods. You can use forecasts as input for DRP so that you can more accurately plan the demand that you supply through distribution.

## Forecast Management Implementations

This section provides an overview of the steps that are required to implement Forecast Management.

In the planning phase of your implementation, take advantage of all PeopleSoft sources of information, including the installation guides and troubleshooting information. A complete list of these resources appears in the preface in *About These PeopleBooks* with information about where to find the most current version of each.

### Global Implementation Steps

This table lists the global implementation steps for Forecast Management.

| Step                                       | Reference                                                                                                                                                           |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Set up global user defined code tables. | <i>PeopleSoft EnterpriseOne Product Data Management 8.11 PeopleBook</i> , "Setting Up Product Data Management,"<br>Defining Document Type Constants for Work Orders |

| Step                                                                             | Reference                                                                                                                                                       |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. Set up fiscal date patterns, companies, and business units.                   | <i>PeopleSoft EnterpriseOne Financial Management Solutions Application Fundamentals 8.11 PeopleBook</i> , “Setting Up an Organization”                          |
| 3. Set up system next numbers.                                                   | <i>PeopleSoft EnterpriseOne Financial Management Solutions Application Fundamentals 8.11 PeopleBook</i> , “Setting Up System Next Numbers”                      |
| 4. Set up accounts.                                                              | <i>PeopleSoft EnterpriseOne Financial Management Solutions Application Fundamentals 8.11 PeopleBook</i> , “Setting Up Accounts”                                 |
| 5. Set up general accounting constants.                                          | <i>PeopleSoft EnterpriseOne General Accounting 8.11 PeopleBook</i> , “Setting Up the General Accounting System,” Setting Up Constants for General Accounting    |
| 6. Set up multicurrency processing, including currency codes and exchange rates. | <i>PeopleSoft EnterpriseOne Multicurrency Processing 8.11 PeopleBook</i> , “Setting Up General Accounting for Multicurrency Processing”                         |
| 7. Set up ledger type rules.                                                     | <i>PeopleSoft EnterpriseOne General Accounting 8.11 PeopleBook</i> , “Setting Up the General Accounting System,” Setting Up Ledger Types for General Accounting |
| 8. Enter address book records.                                                   | <i>PeopleSoft EnterpriseOne Address Book 8.11 PeopleBook</i> , “Entering Address Book Records”                                                                  |
| 9. Set up default location and printers.                                         | PeopleSoft EnterpriseOne Tools 8.94: Foundation PeopleBook                                                                                                      |
| 10. Set up branch/plant constants.                                               | <i>PeopleSoft EnterpriseOne Inventory Management 8.11 PeopleBook</i> , “Entering Item Inventory Information,” Entering Branch/Plant Information                 |
| 11. Set up manufacturing and distribution AAIs.                                  | <i>PeopleSoft EnterpriseOne Inventory Management 8.11 PeopleBook</i> , “Setting Up the Inventory Management System,” Setting Up AAIs in Distribution Systems    |
| 12. Set up document types.                                                       | <i>PeopleSoft EnterpriseOne Inventory Management 8.11 PeopleBook</i> , “Setting Up the Inventory Management System,” Setting Up Document Type Information       |
| 13. Set up shop floor calendars.                                                 | <i>PeopleSoft EnterpriseOne Shop Floor Management 8.11 PeopleBook</i> , “Setting Up Shop Floor Management,” Setting Up a Shop Floor Calendar                    |
| 14. Set up manufacturing constants.                                              | <i>PeopleSoft EnterpriseOne Product Data Management 8.11 PeopleBook</i> , “Setting Up Product Data Management,” Setting Up Manufacturing Constants              |

## Forecast Management Implementation Steps

This table lists the implementation steps for Forecast Management.

| Step                               | Reference                                                                                     |
|------------------------------------|-----------------------------------------------------------------------------------------------|
| 1. Set up Forecast Management.     | <a href="#">Chapter 4, “Setting Up PeopleSoft EnterpriseOne Forecast Management,” page 33</a> |
| 2. Set up Sales Order History.     | <a href="#">Chapter 4, “Setting Up PeopleSoft EnterpriseOne Forecast Management,” page 33</a> |
| 3. Set up Forecast Generation.     | <a href="#">Chapter 6, “Working with Detail Forecasts,” page 65</a>                           |
| 4. Set up Summary Forecasts.       | <a href="#">Chapter 7, “Working with Summary Forecasting,” page 87</a>                        |
| 5. Set up Planning Bill Forecasts. | <a href="#">Chapter 8, “Working with Planning Bill Forecasts,” page 117</a>                   |

## CHAPTER 2

# Understanding Forecast Management

This chapter discusses:

- Description of Forecast Management.
- Features of Forecast Management.
- Tables used by Forecast Management.

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## Description of Forecast Management

Effective management of distribution and manufacturing activities begins with understanding and anticipating market needs. Forecasting is the process of projecting past sales demand into the future. Implementing a forecasting system enables you to quickly assess current market trends and sales so that you can make informed decisions about your operations.

You can use forecasts to make planning decisions about:

- Customer orders
- Inventory
- Delivery of goods
- Work load
- Capacity requirements
- Warehouse space
- Labor
- Equipment
- Budgets
- Development of new products
- Work force requirements

Forecast Management generates the following types of forecasts:

- Detail forecasts, which are based on individual items.
- Summary (or aggregated) forecasts, which are based on larger product groups, such as a product line.
- Planning bill forecasts, which are based on groups of items in a bill of material format and reflect how an item is sold, not how an item is built.

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## Features of Forecast Management

You can use Forecast Management to:

- Generate forecasts.
- Enter forecasts manually.
- Maintain forecasts that are generated by the system and entered manually.
- Create unique forecasts by large customer.
- Summarize sales order history data in weekly or monthly time periods.
- Generate forecasts that are based on any or all of 12 different formulas that address a variety of forecast situations that you might encounter.
- Calculate which of the 12 formulas provides the best-fit forecast.
- Define the hierarchy that the system uses to summarize sales order histories and detail forecasts.
- Create multiple hierarchies of address book category codes and item category codes, which you can use to sort and view records in the detail forecast tables.
- Review and adjust both forecasts and sales order actuals at any level of the hierarchy.
- Integrate the detail forecast records into MPS, MRP, and DRP generations.
- Force changes made at any component level to both higher levels and lower levels.
- Set a bypass flag to prevent changes that are generated by the force program being made to a level.
- Store and display original and adjusted quantities and amounts.
- Attach descriptive text to a forecast at the detail and summary levels.

Flexibility is a key feature of PeopleSoft Forecast Management. The most accurate forecasts consider quantitative information, such as sales trends and past sales order history, as well as qualitative information, such as changes in trade laws, competition, and government. The system processes quantitative information and enables you to adjust it with qualitative information. When you aggregate, or summarize, forecasts, the system uses changes that you make at any level of the forecast to automatically update all of the other levels.

You can perform simulations that are based on the initial forecast to compare different situations. After you accept a forecast, the system updates your manufacturing and distribution plan with any changes that you have made.

The system writes zero or negative detail records. For example, if the quantities or amounts in Refresh Actuals (R3465), Forecast Generation (R34650), or Forecast Revisions (P3460) are zero or negative, the system creates zero or negative records in the Forecast File table (F3460).

---

## Tables Used by Forecast Management

The tables that are used by Forecast Management must identify data and processing information to support the forecasting process.

| Form Name and Number                    | Description                                                                                                                                                    |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Business Unit Master (F0006)            | Identifies branch, plant, warehouse, or business unit information, such as company, description, and assigned category codes.                                  |
| Address Book Master (F0101)             | Stores all of the address information pertaining to customers, vendors, employees, prospects, and others.                                                      |
| Forecast Summary File (F3400)           | Contains the summary forecasts that are generated by the system and the summarized sales order history that is created by the Refresh Actuals program (R3465). |
| Forecast Summary Work File (F34006)     | Connects the summary records from the Forecast Summary File table (F3400) to the detail records in the Forecast File table (F3460).                            |
| Forecast Prices (F34007)                | Stores price information for item, branch, customer, and forecast type combinations.                                                                           |
| Forecast File (F3460)                   | Contains the detail forecasts that are generated by the system and the sales order history that is created by the Refresh Actuals program (R3465).             |
| Category Code Key Position File (F4091) | Stores the summary constants that you set up for each product hierarchy.                                                                                       |
| Item Master (F4101)                     | Stores basic information about each defined inventory item, such as item number, description, category codes, and unit of measure.                             |
| Item Branch File (F4102)                | Defines and maintains warehouse or plant-level information, such as costs, quantities, physical locations, and branch-level category codes.                    |
| Sales Order Detail File (F4211)         | Provides sales order demand by the requested date. The system uses this table to update the Sales Order History File table (F42119) for forecast calculations. |
| Sales Order History File (F42119)       | Contains past sales data, which provide the basis for the forecast calculations.                                                                               |



## CHAPTER 3

# Understanding Forecast Levels and Methods

You can generate both detail (single item) forecasts and summary (product line) forecasts that reflect product demand patterns. The system analyzes past sales to calculate forecasts by using 12 forecasting methods. The forecasts include detail information at the item level, and higher-level information about a branch or the company as a whole.

This chapter discusses:

- Forecast performance evaluation criteria.
- Forecasting methods.
- Forecast evaluations.
- Demand patterns.

---

## Forecast Performance Evaluation Criteria

Depending on your selection of processing options and on trends and patterns in the sales data, some forecasting methods perform better than others for a given historical data set. A forecasting method that is appropriate for one product might not be appropriate for another product. You might find that a forecasting method that provides good results at one stage of a product's life cycle remains appropriate throughout the entire life cycle.

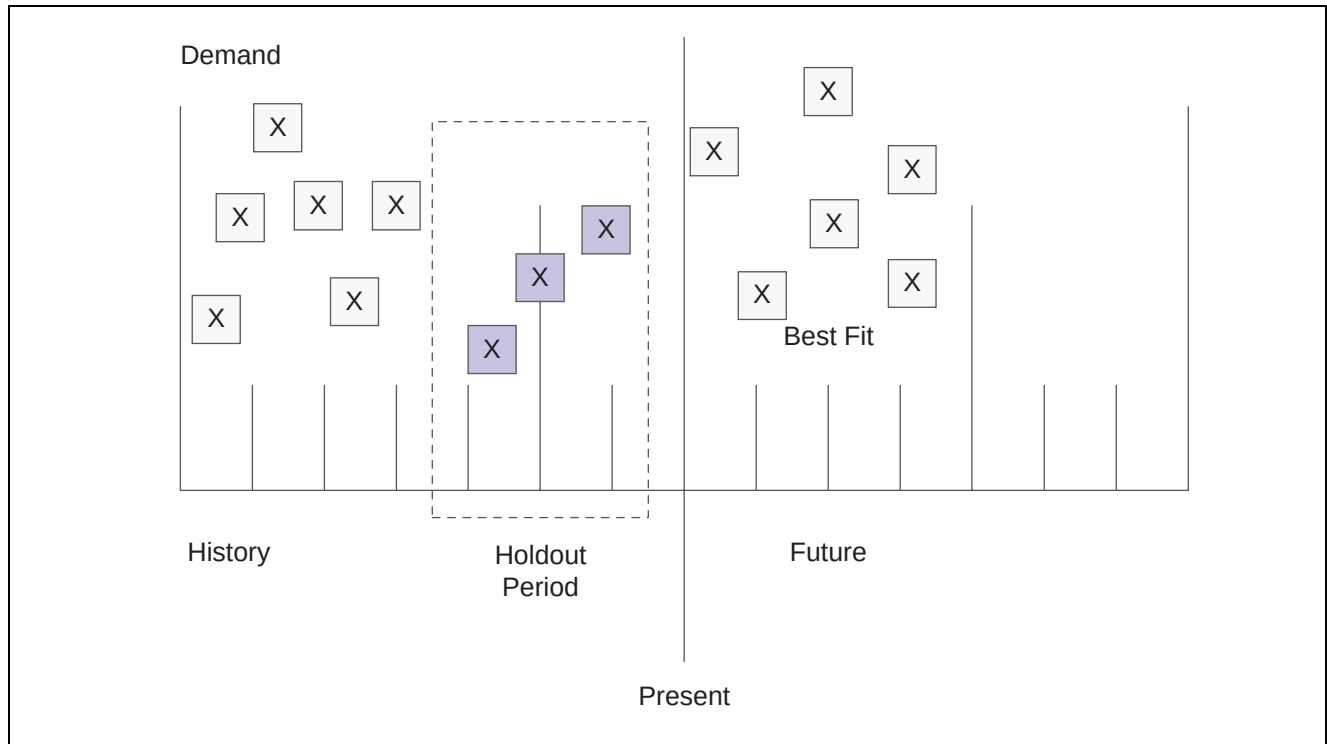
You can select between two methods to evaluate the current performance of the forecasting methods:

- Percent of Accuracy (POA)
- Mean Absolute Deviation (MAD)

Both of these performance evaluation methods require historical sales data for a period of time you specify. This period of time is called a holdout period or period of best fit. The data in this period is used as the basis for recommending which forecasting method to use in making the next forecast projection. This recommendation is specific to each product and can change from one forecast generation to the next.

### Best Fit

The system recommends the best fit forecast by applying the selected forecasting methods to past sales order history and comparing the forecast simulation to the actual history. When you generate a best fit forecast, the system compares actual sales order histories to forecasts for a specific time period and computes how accurately each different forecasting method predicted sales. Then the system recommends the most accurate forecast as the best fit.



Best fit forecast

The system uses the following sequence of steps to determine the best fit:

1. Use each specified method to simulate a forecast for the holdout period.
2. Compare actual sales to the simulated forecasts for the holdout period.
3. Calculate the Percent of Accuracy (POA) or the Mean Absolute Deviation (MAD) to determine which forecasting method most closely matches the past actual sales. The system uses either POA or MAD, based on the processing options that you select.
4. Recommend a best-fit forecast by the POA that is closest to 100 percent (over or under) or the MAD that is closest to zero.

## Forecasting Methods

Forecast Management uses 12 methods for quantitative forecasting and indicates which method provides the best fit for your forecasting situation.

This section discusses:

- Method 1 - Percent Over Last Year.
- Method 2 - Calculated Percent Over Last Year.
- Method 3 - Last Year to This Year.
- Method 4 - Moving Average.
- Method 5 - Linear Approximation.
- Method 6 - Least Square Regression.

- Method 7 - Second Degree Approximation.
- Method 8 - Flexible Method.
- Method 9 - Weighted Moving Average.
- Method 10 - Linear Smoothing.
- Method 11 - Exponential Smoothing.
- Method 12 - Exponential Smoothing with Trend and Seasonality.

Specify the method that you want to use in the processing options for the Forecast Generation program (R34650). Most of these methods provide limited control. For example, the weight placed on recent historical data or the date range of historical data that is used in the calculations can be specified by you.

---

**Note.** The examples in the guide show the calculation procedure for each of the available forecasting methods, given an identical set of historical data.

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The method examples in the guide use part or all of the following data set, which is historical data for the years 1996 and 1997. The forecast projection goes into the year 1998.

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1996 | 125 | 123 | 115 | 137 | 122 | 130 | 141 | 128 | 118 | 123 | 139 | 133 |
| 1997 | 128 | 117 | 115 | 125 | 122 | 137 | 140 | 129 | 131 | 114 | 119 | 137 |

This sales history data is stable with small seasonal increases in July and December. This pattern is characteristic of a mature product that might be approaching obsolescence.

## Method 1 - Percent Over Last Year

This method uses the Percent Over Last Year formula to multiply each forecast period by the specified percentage increase or decrease.

To forecast demand, this method requires the number of periods for the best fit plus one year of sales history. This method is useful to forecast demand for seasonal items with growth or decline.

### Example: Method 1 - Percent Over Last Year

The Percent Over Last Year formula multiplies sales data from the previous year by a factor you specify and then projects that result over the next year. This method might be useful in budgeting to simulate the affect of a specified growth rate or when sales history has a significant seasonal component.

Forecast specifications: multiplication factor. For example, specify 110 in the processing option to increase the previous year's sales history data by 10 percent.

Required sales history: one year for calculating the forecast, plus the number of time periods that are required for evaluating the forecast performance (periods of best fit) that you specify.

This table is history used in the forecast calculation;

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1997 | 128 | 117 | 115 | 125 | 122 | 137 | 140 | 129 | 131 | 114 | 119 | 137 |

Forecast, 110% Over Last Year

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1998 | 141 | 129 | 127 | 138 | 134 | 151 | 154 | 142 | 144 | 125 | 131 | 151 |

January 1998 equals  $128 \times 1.1 = 140.8$  rounded to 141

February 1998 equals  $117 \times 1.1 = 128.7$  rounded to 129

March 1998 equals  $115 \times 1.1 = 126.5$  rounded to 127

## Method 2 - Calculated Percent Over Last Year

This method uses the Calculated Percent Over Last Year formula to compare the past sales of specified periods to sales from the same periods of the previous year. The system determines a percentage increase or decrease, and then multiplies each period by the percentage to determine the forecast.

To forecast demand, this method requires the number of periods of sales order history plus one year of sales history. This method is useful to forecast short-term demand for seasonal items with growth or decline.

### Example: Method 2 - Calculated Percent Over Last Year

The Calculated Percent Over Last Year formula multiplies sales data from the previous year by a factor that is calculated by the system, and then it projects that result for the next year. This method might be useful in projecting the affect of extending the recent growth rate for a product into the next year while preserving a seasonal pattern that is present in sales history.

Forecast specifications: range of sales history to use in calculating the rate of growth. For example, specify *n* equals 4 in the processing option to compare sales history for the most recent four periods to those same four periods of the previous year. Use the calculated ratio to make the projection for the next year.

Required sales history: one year for calculating the forecast plus the number of time periods that are required for evaluating the forecast performance (periods of best fit).

This table is history used in the forecast calculation, given  $n = 4$ :

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 1996 | None | None | None | None | None | None | None | None | 118 | 123 | 139 | 133 |
| 1997 | 128  | 117  | 115  | 125  | 122  | 137  | 140  | 129  | 131 | 114 | 119 | 137 |

Calculation of Percent Over Last Year, Given  $n = 4$

1996 equals  $118 + 123 + 139 + 133 = 513$

1997 equals  $131 + 114 + 119 + 137 = 501$

ratio % =  $(501/513) \times 100\% = 97.66\%$

This table is Forecast, 97.66% Over Last Year:

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1998 | 125 | 114 | 112 | 122 | 119 | 134 | 137 | 126 | 128 | 111 | 116 | 134 |

January 1998 equals  $128 \times 0.9766 = 125.00$  rounded to 125

February 1998 equals  $117 \times 0.9766 = 114.26$  rounded to 114

March 1998 equals  $115 \times 0.9766 = 112.31$  rounded to 112

## Method 3 - Last Year to This Year

This method uses last year's sales for the following year's forecast.

To forecast demand, this method requires the number of periods best fit plus one year of sales order history. This method is useful to forecast demand for mature products with level demand or seasonal demand without a trend.

### Example: Method 3 - Last Year to This Year

The Last Year to This Year formula copies sales data from the previous year to the next year. This method might be useful in budgeting to simulate sales at the present level. The product is mature and has no trend over the long run, but a significant seasonal demand pattern might exist.

Forecast specifications: none.

Required sales history: one year for calculating the forecast plus the number of time periods that are required for evaluating the forecast performance (periods of best fit).

This table is history used in the forecast calculation:

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1997 | 128 | 117 | 115 | 125 | 122 | 137 | 140 | 129 | 131 | 114 | 119 | 137 |

This table is Forecast, Last Year to This Year:

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1998 | 128 | 117 | 115 | 125 | 122 | 137 | 140 | 129 | 131 | 114 | 119 | 137 |

January 1998 equals January 1997 equals 128

February 1998 equals February 1997 equals 117

March 1998 equals March 1997 equals 115

## Method 4 - Moving Average

This method uses the Moving Average formula to average the specified number of periods to project the next period. You should recalculate it often (monthly, or at least quarterly) to reflect changing demand level.

To forecast demand, this method requires the number of periods best fit plus the number of periods of sales order history. This method is useful to forecast demand for mature products without a trend.

### Example: Method 4 - Moving Average

Moving Average (MA) is a popular method for averaging the results of recent sales history to determine a projection for the short term. The MA forecast method lags behind trends. Forecast bias and systematic errors occur when the product sales history exhibits strong trend or seasonal patterns. This method works better for short-range forecasts of mature products than for products that are in the growth or obsolescence stages of the life cycle.

Forecast specifications:  $n$  equals the number of periods of sales history to use in the forecast calculation. For example, specify  $n = 4$  in the processing option to use the most recent four periods as the basis for the projection into the next time period. A large value for  $n$  (such as 12) requires more sales history. It results in a stable forecast, but is slow to recognize shifts in the level of sales. Conversely, a small value for  $n$  (such as 3) is quicker to respond to shifts in the level of sales, but the forecast might fluctuate so widely that production cannot respond to the variations.

Required sales history:  $n$  plus the number of time periods that are required for evaluating the forecast performance (periods of best fit).

This table is history used in the forecast calculation:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | None | 131 | 114 | 119 | 137 |

Calculation of Moving Average, Given  $n = 4$

$$(131 + 114 + 119 + 137) / 4 = 125.25 \text{ rounded to } 125$$

This table is Moving Average Forecast, Given  $n = 4$ :

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1998 | 125 | 124 | 126 | 128 | 126 | 126 | 127 | 127 | 126 | 126 | 126 | 126 |

January 1998 equals  $(131 + 114 + 119 + 137) / 4 = 125.25$  rounded to 125

February 1998 equals  $(114 + 119 + 137 + 125) / 4 = 123.75$  rounded to 124

March 1998 equals  $(119 + 137 + 125 + 124) / 4 = 126.25$  rounded to 126

### Method 5 - Linear Approximation

This method uses the Linear Approximation formula to compute a trend from the number of periods of sales order history and to project this trend to the forecast. You should recalculate the trend monthly to detect changes in trends.

This method requires the number of periods of best fit plus the number of specified periods of sales order history. This method is useful to forecast demand for new products, or products with consistent positive or negative trends that are not due to seasonal fluctuations.

#### Example: Method 5 - Linear Approximation

Linear Approximation calculates a trend that is based upon two sales history data points. Those two points define a straight trend line that is projected into the future. Use this method with caution because long-range forecasts are leveraged by small changes in just two data points.

Forecast specifications:  $n$  equals the data point in sales history that is compared to the most recent data point to identify a trend. For example, specify  $n=4$  to use the difference between December 1997 (most recent data) and August 1997 (four periods before December) as the basis for calculating the trend.

Minimum required sales history:  $n$  plus 1 plus the number of time periods that are required for evaluating the forecast performance (periods of best fit).

This table is history used in the forecast calculation:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | 129 | 131 | 114 | 119 | 137 |

Calculation of Linear Approximation, Given  $n = 4$

$$(137 - 129) / 4 = 2.0$$

This table is Linear Approximation Forecast, Given  $n = 4$ :

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1998 | 139 | 141 | 143 | 145 | 147 | 149 | 151 | 153 | 155 | 157 | 159 | 161 |

January 1998 = December 1997 + (Trend)which equals  $137 + (1 \times 2) = 139$

February 1998 = December 1997 + (Trend)which equals  $137 + (2 \times 2) = 141$

March 1998 = December 1997 + (Trend)which equals  $137 + (3 \times 2) = 143$

## Method 6 - Least Squares Regression

The Least Squares Regression (LSR) method derives an equation describing a straight-line relationship between the historical sales data and the passage of time. LSR fits a line to the selected range of data so that the sum of the squares of the differences between the actual sales data points and the regression line are minimized. The forecast is a projection of this straight line into the future.

This method requires sales data history for the period that is represented by the number of periods best fit plus the specified number of historical data periods. The minimum requirement is two historical data points. This method is useful to forecast demand when a linear trend is in the data.

### Example: Method 6 - Least Squares Regression

Linear Regression, or Least Squares Regression (LSR), is the most popular method for identifying a linear trend in historical sales data. The method calculates the values for  $a$  and  $b$  to be used in the formula:

$$Y = a + bX$$

This equation describes a straight line, where  $Y$  represents sales and  $X$  represents time. Linear regression is slow to recognize turning points and step function shifts in demand. Linear regression fits a straight line to the data, even when the data is seasonal or better described by a curve. When sales history data follows a curve or has a strong seasonal pattern, forecast bias and systematic errors occur.

Forecast specifications:  $n$  equals the periods of sales history that will be used in calculating the values for  $a$  and  $b$ . For example, specify  $n = 4$  to use the history from September through December 1997 as the basis for the calculations. When data is available, a larger  $n$  (such as  $n = 24$ ) would ordinarily be used. LSR defines a line for as few as two data points. For this example, a small value for  $n$  ( $n = 4$ ) was chosen to reduce the manual calculations that are required to verify the results.

Minimum required sales history:  $n$  periods plus the number of time periods that are required for evaluating the forecast performance (periods of best fit).

This table is history used in the forecast calculation:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | None | 131 | 114 | 119 | 137 |

This table is the calculation of Linear Regression Coefficients, Given  $n = 4$ :

| Month and Year      | X               | Y                | XY                 | X <sup>2</sup>    |
|---------------------|-----------------|------------------|--------------------|-------------------|
| Sep 1997            | 1               | 131              | 131                | 1                 |
| Oct 1997            | 2               | 114              | 228                | 4                 |
| Nov 1997            | 3               | 119              | 357                | 9                 |
| Dec 1997            | 4               | 137              | 548                | 16                |
| Totals ( $\Sigma$ ) | $\Sigma X = 10$ | $\Sigma Y = 501$ | $\Sigma XY = 1264$ | $\Sigma X^2 = 30$ |

$$b = (n\Sigma XY - \Sigma X \Sigma Y) / (n\Sigma X^2 - (\Sigma X)^2)$$

$$b = [4(1264) - (10 \times 501)] / [4(30) - (10)^2]$$

$$b = (5056 - 5010) / (120 - 100)$$

$$b = 46 / 20 = 2.3$$

$$a = (\Sigma Y / n) - b(\Sigma X / n)$$

$$a = (501 / 4) - [(2.3)(10 / 4)] = 119.5$$

This table is Linear Regression Forecast, Given  $Y = 119.5 - 2.3 X$ , where  $X = 1 \geq \text{Sep 1997}$

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1998 | 131 | 133 | 136 | 138 | 140 | 143 | 145 | 147 | 149 | 152 | 154 | 156 |

$$\text{January 1998 equals } 119.5 + (5 \times 2.3) = 131$$

$$\text{February 1998 equals } 119.5 + (6 \times 2.3) = 133.3 \text{ or } 133$$

$$\text{March 1998 equals } 119.5 + (7 \times 2.3) = 135.6 \text{ rounded to } 136$$

## Method 7 - Second Degree Approximation

To project the forecast, this method uses the Second Degree Approximation formula to plot a curve that is based on the number of periods of sales history.

This method requires the number periods best fit plus the number of periods of sales order history times three. This method is not useful to forecast demand for a long-term period.

### Example: Method 7 - Second Degree Approximation

Linear Regression determines values for  $a$  and  $b$  in the forecast formula  $Y = a + bX$  with the objective of fitting a straight line to the sales history data. Second Degree Approximation is similar, but this method determines values for  $a$ ,  $b$ , and  $c$  in the following forecast formula:

$$Y = a + bX + cX^2$$

The objective of this method is to fit a curve to the sales history data. This method is useful when a product is in the transition between life cycle stages. For example, when a new product moves from introduction to growth stages, the sales trend might accelerate. Because of the second order term, the forecast can quickly approach infinity or drop to zero (depending on whether coefficient  $c$  is positive or negative). This method is useful only in the short term.

Forecast specifications: the formula find  $a$ ,  $b$ , and  $c$  to fit a curve to exactly three points. You specify  $n$ , the number of time periods of data to accumulate into each of the three points. In this example,  $n = 3$ . Therefore, actual sales data for April through June is combined into the first point, Q1. July through September are added together to create Q2, and October through December sum to Q3. The curve is fitted to the three values Q1, Q2, and Q3.

Required sales history:  $3 \times n$  periods for calculating the forecast plus the number of time periods that are required for evaluating the forecast performance (periods of best fit).

This table is history used in the forecast calculation:

| Year | Jan  | Feb  | Mar  | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1997 | None | None | None | 125 | 122 | 137 | 140 | 129 | 131 | 114 | 119 | 137 |

$$Q0 = (\text{Jan}) + (\text{Feb}) + (\text{Mar})$$

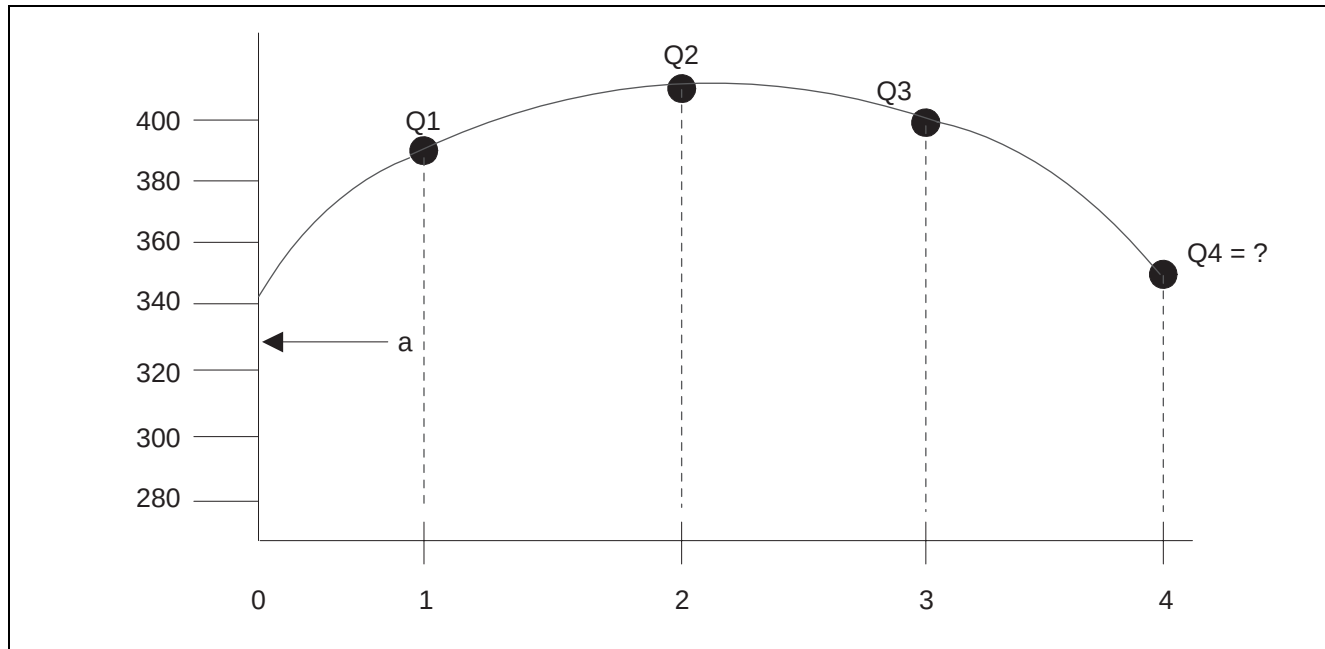
$$Q1 = (\text{Apr}) + (\text{May}) + (\text{Jun}) \text{ which equals } 125 + 122 + 137 = 384$$

$$Q2 = (\text{Jul}) + (\text{Aug}) + (\text{Sep}) \text{ which equals } 140 + 129 + 131 = 400$$

$$Q3 = (\text{Oct}) + (\text{Nov}) + (\text{Dec}) \text{ which equals } 114 + 119 + 137 = 370$$

The next step involves calculating the three coefficients  $a$ ,  $b$ , and  $c$  to be used in the forecasting formula  $Y = a + bX + cX^2$ .

Q1, Q2, and Q3 are shown on the following graph, where time is plotted on the horizontal axis. Q1 represents total historical sales for April, May, and June and is plotted at  $X = 1$ ; Q2 corresponds to July through September; Q3 corresponds to October through December; and Q4 represents January through March 1998.



Plotting Q1, Q2, Q3, and Q4 for second degree approximation

Three equations describe the three points on the graph:

- (1)  $Q1 = a + bX + cX^2$  where  $X = 1$  ( $Q1 = a + b + c$ )
- (2)  $Q2 = a + bX + cX^2$  where  $X = 2$  ( $Q2 = a + 2b + 4c$ )
- (3)  $Q3 = a + bX + cX^2$  where  $X = 3$  ( $Q3 = a + 3b + 9c$ )

Solve the three equations simultaneously to find  $b$ ,  $a$ , and  $c$ :

1. Subtract equation 1 (1) from equation 2 (2) and solve for  $b$ :  
 $(2) - (1) = Q2 - Q1 = b + 3c$   
 $b = (Q2 - Q1) - 3c$
2. Substitute this equation for  $b$  into equation (3):  
 $(3) Q3 = a + 3[(Q2 - Q1) - 3c] + 9c = Q3 - 3(Q2 - Q1)$
3. Finally, substitute these equations for  $a$  and  $b$  into equation (1):  
 $(1)[Q3 - 3(Q2 - Q1)] + [(Q2 - Q1) - 3c] + c = Q1$   
 $c = [(Q3 - Q2) + (Q1 - Q2)] / 2$

The Second Degree Approximation method calculates  $a$ ,  $b$ , and  $c$  as follows:

$$a = Q3 - 3(Q2 - Q1) = 370 - 3(400 - 384) = 370 - 3(16) = 322$$

$$b = (Q2 - Q1) - 3c = (400 - 384) - (3 \times -23) = 16 + 69 = 85$$

$$c = [(Q3 - Q2) + (Q1 - Q2)] / 2 = [(370 - 400) + (384 - 400)] / 2 = -23$$

This is a calculation of second degree approximation forecast:

$$Y = a + bX + cX^2 = 322 + 85X + (-23)(X^2)$$

When  $X = 4$ ,  $Q4 = 322 + 340 - 368 = 294$ . The forecast equals  $294 / 3 = 98$  per period.

When  $X = 5$ ,  $Q5 = 322 + 425 - 575 = 172$ . The forecast equals  $172 / 3 = 58.33$  rounded to 57 per period.

When  $X = 6$ ,  $Q6 = 322 + 510 - 828 = 4$ . The forecast equals  $4 / 3 = 1.33$  rounded to 1 per period.

This is the Forecast, Last Year to This Year:

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1998 | 98  | 98  | 98  | 57  | 57  | 57  | 1   | 1   | 1   | NA  | NA  | NA  |

## Method 8 - Flexible Method

This method enables you to select the best fit number of periods of sales order history that starts  $n$  months before the forecast start date, and to apply a percentage increase or decrease multiplication factor with which to modify the forecast. This method is similar to Method 1, Percent Over Last Year, except that you can specify the number of periods that you use as the base.

Depending on what you select as  $n$ , this method requires periods best fit plus the number of periods of sales data that is indicated. This method is useful to forecast demand for a planned trend.

### Example: Method 8 - Flexible Method

The Flexible Method (Percent Over  $n$  Months Prior) is similar to Method 1, Percent Over Last Year. Both methods multiply sales data from a previous time period by a factor specified by you, and then project that result into the future. In the Percent Over Last Year method, the projection is based on data from the same time period in the previous year. You can also use the Flexible Method to specify a time period, other than the same period in the last year, to use as the basis for the calculations.

Forecast specifications:

- Multiplication factor. For example, specify 110 in the processing option to increase previous sales history data by 10 percent.
- Base period. For example,  $n = 4$  causes the first forecast to be based on sales data in September 1997.

Minimum required sales history: the number of periods back to the base period plus the number of time periods that is required for evaluating the forecast performance (periods of best fit).

This table is history used in the forecast calculation:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | None | 131 | 114 | 119 | 137 |

This is Forecast, 110% Over  $n = 4$  months prior:

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1998 | 144 | 125 | 131 | 151 | 159 | 138 | 144 | 166 | 174 | 152 | 158 | 182 |

## Method 9 - Weighted Moving Average

The Weighted Moving Average formula is similar to Method 4, Moving Average formula, because it averages the previous month's sales history to project the next month's sales history. However, with this formula, you can assign weights for each of the prior periods.

This method requires the number of weighted periods selected plus the number of periods best fit data. Similar to Moving Average, this method lags behind demand trends, so PeopleSoft does not recommend it for products with strong trends or seasonality. This method is useful to forecast demand for mature products with demand that is relatively level.

### Example: Method 9 - Weighted Moving Average

The Weighted Moving Average (WMA) method is similar to Method 4, Moving Average (MA). However, you can assign unequal weights to the historical data when using the Weighted Moving Average. The method calculates a weighted average of recent sales history to arrive at a projection for the short term. More recent data is usually assigned a greater weight than older data, so WMA is more responsive to shifts in the level of sales. However, forecast bias and systematic errors occur when the product sales history exhibits strong trends or seasonal patterns. This method works better for short range forecasts of mature products than for products in the growth or obsolescence stages of the life cycle.

Forecast specifications:

- The number of periods of sales history ( $n$ ) to use in the forecast calculation. For example, specify  $n = 4$  in the processing option to use the most recent four periods as the basis for the projection into the next time period. A large value for  $n$  (such as 12) requires more sales history. Such a value results in a stable forecast, but it is slow to recognize shifts in the level of sales. Conversely, a small value for  $n$  (such as 3) responds more quickly to shifts in the level of sales, but the forecast might fluctuate so widely that production cannot respond to the variations.
- The weight that is assigned to each of the historical data periods. The assigned weights must total 1.00. For example, when  $n = 4$ , assign weights of 0.50, 0.25, 0.15, and 0.10 with the most recent data receiving the greatest weight.

Minimum required sales history:  $n$  plus the number of time periods that are required for evaluating the forecast performance (periods of best fit).

This table is history used in the forecast calculation:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | None | 131 | 114 | 119 | 137 |

This is the calculation of Moving Average, Given  $n = 4$ :

$$[(131 \times 0.10) + (114 \times 0.15) + (119 \times 0.25) + (137 \times 0.50)] / (0.10 + 0.15 + 0.25 + 0.50) = 128.45 \text{ rounded to } 128$$

This is the Weighted Moving Average Forecast, Given  $n = 4$ :

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1998 | 128 | 128 | 128 | 129 | 129 | 129 | 129 | 129 | 129 | 129 | 129 | 129 |

January 1998 equals  $[(131 \times 0.10) + (114 \times 0.15) + (119 \times 0.25) + (137 \times 0.50)] / (0.10 + 0.15 + 0.25 + 0.50) = 128.45 \text{ rounded to } 128$

February 1998 equals  $[(114 \times 0.10) + (119 \times 0.15) + (137 \times 0.25) + (128 \times 0.50)] / 1 = 127.5 \text{ rounded to } 128$

March 1998 equals  $[(119 \times 0.10) + (137 \times 0.15) + (128 \times 0.25) + (128 \times 0.50)] / 1 = 128.45 \text{ rounded to } 128$

## Method 10 - Linear Smoothing

This method calculates a weighted average of past sales data. In the calculation, this method uses the number of periods of sales order history (from 1 to 12) that is indicated in the processing option. The system uses a mathematical progression to weigh data in the range from the first (least weight) to the final (most weight). Then the system projects this information to each period in the forecast.

This method requires the month's best fit plus the sales order history for the number of periods that are specified in the processing option.

### Example: Method 10 - Linear Smoothing

This method is similar to Method 9, Weighted Moving Average (WMA). However, instead of arbitrarily assigning weights to the historical data, a formula is used to assign weights that decline linearly and sum to 1.00. The method then calculates a weighted average of recent sales history to arrive at a projection for the short term. Like all linear moving average forecasting techniques, forecast bias and systematic errors occur when the product sales history exhibits strong trend or seasonal patterns. This method works better for short-range forecasts of mature products than for products in the growth or obsolescence stages of the life cycle.

Forecast specifications:

$n$  equals the number of periods of sales history to use in the forecast calculation. For example, specify  $n$  equals 4 in the processing option to use the most recent four periods as the basis for the projection into the next time period. The system automatically assigns the weights to the historical data that decline linearly and sum to 1.00. For example, when  $n$  equals 4, the system assigns weights of 0.4, 0.3, 0.2, and 0.1, with the most recent data receiving the greatest weight.

Minimum required sales history:  $n$  plus the number of time periods that are required for evaluating the forecast performance (periods of best fit).

This table is history used in the forecast calculation:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | None | 131 | 114 | 119 | 137 |

Here are the Calculation of Weights, Given  $n = 4$ :

$$(n^2 + n) / 2 = (16 + 4) / 2 = 10$$

| Month        | Weight  |
|--------------|---------|
| September    | 1 / 10  |
| October      | 2 / 10  |
| November     | 3 / 10  |
| December     | 4 / 10  |
| Total Weight | 10 / 10 |

This is the calculation of Moving Average, Given  $n = 4$ :

$$[(131 * 0.1) + (114 * 0.2) + (119 * 0.3) + (137 * 0.4)] / (0.1 + 0.2 + 0.3 + 0.4) = 126.4 \text{ rounded to } 126.$$

This table is Linear Smoothing Forecast, Given  $n = 4$ :

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1998 | 126 | 127 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 |

## Method 11 - Exponential Smoothing

This method calculates a smoothed average, which becomes an estimate representing the general level of sales over the selected historical data periods.

This method requires sales data history for the time period that is represented by the number of periods best fit plus the number of historical data periods that are specified. The minimum requirement is two historical data periods. This method is useful to forecast demand when no linear trend is in the data.

### Example: Method 11 - Exponential Smoothing

This method is similar to Method 10, Linear Smoothing. In Linear Smoothing, the system assigns weights that decline linearly to the historical data. In Exponential Smoothing, the system assigns weights that exponentially decay. The equation for Exponential Smoothing forecasting is:

$$\text{Forecast} = \alpha (\text{Previous Actual Sales}) + (1 - \alpha) (\text{Previous Forecast})$$

The forecast is a weighted average of the actual sales from the previous period and the forecast from the previous period. Alpha is the weight that is applied to the actual sales for the previous period.  $(1 - \alpha)$  is the weight that is applied to the forecast for the previous period. Values for alpha range from 0 to 1 and usually fall between 0.1 and 0.4. The sum of the weights is 1.00 ( $\alpha + (1 - \alpha) = 1$ ).

You should assign a value for the smoothing constant, alpha. If you do not assign a value for the smoothing constant, the system calculates an assumed value that is based on the number of periods of sales history that is specified in the processing option.

Forecast specifications:

- $\alpha$  equals the smoothing constant that is used to calculate the smoothed average for the general level or magnitude of sales. Values for alpha range from 0 to 1.
- $n$  equals the range of sales history data to include in the calculations. Generally, one year of sales history data is sufficient to estimate the general level of sales. For this example, a small value for  $n$  ( $n = 4$ ) was chosen to reduce the manual calculations that are required to verify the results. Exponential Smoothing can generate a forecast that is based on as little as one historical data point.

Minimum required sales history:  $n$  plus the number of time periods that are required for evaluating the forecast performance (periods of best fit).

This table is history used in the forecast calculation:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | None | 131 | 114 | 119 | 137 |

This table is the calculation of Exponential Smoothing, Given  $n = 4$ ,  $\alpha = 0.3$ :

| Month                     | Calculation                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| October Smoothed Average* | = September Actual<br>$= \alpha (\text{September Actual}) + (1 - \alpha) \text{September Smoothed Average}$<br>$= 1 * (131) + (0) (0) = 131$ |
| November Smoothed Average | $= 0.3 (\text{October Actual}) + (1 - 0.3) \text{October Smoothed Average}$<br>$= 0.3 (114) + 0.7 (131) = 125.9 \text{ rounded to } 126$     |
| December Smoothed Average | $= 0.3 (\text{November Actual}) + 0.7 (\text{November Smoothed Average})$<br>$= 0.3 (119) + 0.7 (126) = 123.9 \text{ or } 124$               |
| January Forecast          | $= 0.3 (\text{December Actual}) + 0.7 (\text{December Smoothed Average})$<br>$= 0.3 (137) + 0.7 (124) = 127.9 \text{ or } 128$               |
| February Forecast         | = January Forecast                                                                                                                           |
| March Forecast            | = January Forecast                                                                                                                           |

\* Exponential Smoothing is initialized by setting the first smoothed average equal to the first specified actual sales data point. In effect,  $\alpha = 1.0$  for the first iteration. For subsequent calculations, alpha is set to the value that is specified in the processing option.

This table is Exponential Smoothing Forecast, Given  $\alpha = 0.3$ ,  $n = 4$ :

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1998 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 |

## Method 12 - Exponential Smoothing with Trend and Seasonality

This method calculates a trend, a seasonal index, and an exponentially smoothed average from the sales order history. The system then applies a projection of the trend to the forecast and adjusts for the seasonal index.

This method requires the number of periods best fit plus two years of sales data, and is useful for items that have both trend and seasonality in the forecast. You can enter the alpha and beta factor, or have the system calculate them. Alpha and beta factors are the smoothing constant that the system uses to calculate the smoothed average for the general level or magnitude of sales (alpha) and the trend component of the forecast (beta).

### Example: Method 12 - Exponential Smoothing with Trend and Seasonality

This method is similar to Method 11, Exponential Smoothing, in that a smoothed average is calculated. However, Method 12 also includes a term in the forecasting equation to calculate a smoothed trend. The forecast is composed of a smoothed average that is adjusted for a linear trend. When specified in the processing option, the forecast is also adjusted for seasonality.

Forecast specifications:

- alpha equals the smoothing constant that is used in calculating the smoothed average for the general level or magnitude of sales. Values for alpha range from 0 to 1.
- beta equals the smoothing constant that is used in calculating the smoothed average for the trend component of the forecast. Values for beta range from 0 to 1.
- Whether a seasonal index is applied to the forecast.

---

**Note.** alpha and beta are independent of one another. They do not have to sum to 1.0.

---

Minimum required sales history: one year plus the number of time periods that are required to evaluate the forecast performance (periods of best fit). When two or more years of historical data is available, the system uses two years of data in the calculations.

Method 12 uses two Exponential Smoothing equations and one simple average to calculate a smoothed average, a smoothed trend, and a simple average seasonal index.

An exponentially smoothed average:

$$A_t = \alpha (D_t / S_{t-L}) + (1 - \alpha) (A_{t-1} + T_{t-1})$$

An exponentially smoothed trend:

$$T_t = \beta (A_t - A_{t-1}) + (1 - \beta) T_{t-1}$$

A simple average seasonal index:

$$S_t = \left[ (D_{t-L} + D_{t-2L}) / \sum_{n=(t-2L)}^{n=(t-1)} D_n \right] \times L$$

The forecast is then calculated by using the results of the three equations:

$$F_{t+m} = (A_t + T_t m) S_{t-L+m}$$

where:

- $L$  is the length of seasonality ( $L$  equals 12 months or 52 weeks).
- $t$  is the current time period.
- $m$  is the number of time periods into the future of the forecast.
- $S$  is the multiplicative seasonal adjustment factor that is indexed to the appropriate time period.

This table lists history used in the forecast calculation:

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 1996 | 125 | 123 | 115 | 137 | 122 | 130 | 141 | 128 | 118 | 123 | 139 | 133 | 1534  |
| 1997 | 128 | 117 | 115 | 125 | 122 | 137 | 140 | 129 | 131 | 114 | 119 | 137 | 1514  |

Calculation of Linear and Seasonal Exponential Smoothing, Given alpha = 0.3, beta = 0.4

Initializing the Process:

January 1997 Seasonal Index,  $S_I =$

$$S_1 = (125 + 128 / 1534 + 1514) \times 12 = 0.083005 \times 12 = 0.9961$$

January 1997 Smoothed Average\*,  $A_1$ =

$$A_1 = (\text{January 1997 Actual}) / (\text{January Seasonal Index})$$

$$A_1 = 128 / 0.9960$$

$$A_1 = 128.51$$

January 1997 Smoothed Trend\*,  $T_1$ =

$T_1 = 0$  insufficient information to calculate first smoothed trend

February 1997 Seasonal Index,  $S_2$ =

$$S_2 = (123 + 117 / 1534 + 1514) \times 12 = 0.07874 \times 12 = 0.9449$$

February 1997 Smoothed Average,  $A_2$ =

$$A_2 = \alpha(D_2 / S_2) + (1 - \alpha)(A_1 + T_1)$$

$$A_2 = 0.3(117 / 0.9449) + (1 - 0.3)(128.51 + 0) = 127.10$$

February 1997 Smoothed Trend,  $T_2$ =

$$T_2 = \beta(A_2 - A_1) + (1 - \beta)T_1$$

$$T_2 = 0.4(127.10 - 128.51) + (1 - 0.4) \times 0 = -0.56$$

March 1997 Seasonal Index,  $S_3$ =

$$S_3 = (115 + 115 / 1534 + 1514) \times 12 = 0.07546 \times 12 = 0.9055$$

March 1997 Smoothed Average,  $A_3$ =

$$A_3 = \alpha(D_3 / S_3) + (1 - \alpha)(A_2 + T_2)$$

$$A_3 = 0.3(115 / 0.9055) + (1 - 0.3)(127.10 - 0.56) = 126.68$$

March 1997 Smoothed Trend,  $T_3$ =

$$T_3 = \beta(A_3 - A_2) + (1 - \beta)T_2$$

$$T_3 = 0.4(126.68 - 127.10) + (1 - 0.4) \times -0.56 = -0.50$$

(Continue through December 1997)

December 1997 Seasonal Index,  $S_{12}$ =

$$S_{12} = (133 + 137 / 1534 + 1514) \times 12 = 0.08858 \times 12 = 1.0630$$

December 1997 Smoothed Average,  $A_{12}$ =

$$A_{12} = \alpha (D_{12}/S_{12}) + (1 - \alpha) (A_{11} + T_{11})$$

$$A_{12} = 0.3 (137/1.0630) + (1 - 0.3) (124.64 - 1.121) = 125.13$$

December 1997 Smoothed Trend,  $T_{12}$ =

$$T_{12} = \beta (A_{12} - A_{11}) + (1 - \beta) T_{11}$$

$$T_{12} = 0.4 (125.13 - 124.64) + (1 - 0.4) \times -1.121 = -0.477$$

Calculation of linear and seasonal exponentially smoothed forecast is calculated as follows:

$$F_{t+m} = (A_t + T_t m) S_{t-L+m}$$

\* Calculations for Exponential Smoothing with Trend and Seasonality are initialized by setting the first smoothed average equal to the deseasonalized first actual sales data. The trend is initialized at zero for the first iteration. For subsequent calculations, alpha and beta are set to the values that are specified in the processing options.

This table shows exponential smoothing with trend and seasonality forecast where alpha = 0.3, beta = 0.4

| Year | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1998 | 124.16 | 117.33 | 112.01 | 127.10 | 117.91 | 128.52 | 134.73 | 122.74 | 118.45 | 121.77 | 121.77 | 126.92 |

## Forecast Evaluations

This section discusses:

- Mean Absolute Deviation
- Percent of Accuracy

You can select forecasting methods to generate as many as 12 forecasts for each product. Each forecasting method might create a slightly different projection. When thousands of products are forecast, a subjective decision is impractical regarding which forecast to use in your plans for each product.

The system automatically evaluates performance for each forecasting method that you select and for each product that you forecast. You can select between two performance criteria: Mean Absolute Deviation (MAD) and Percent of Accuracy (POA). MAD is a measure of forecast error. POA is a measure of forecast bias. Both of these performance evaluation techniques require actual sales history data for a period of time specified by you. The period of recent history used for evaluation is called a holdout period or periods of best fit.

To measure the performance of a forecasting method, the system:

- Uses the forecast formulas to simulate a forecast for the historical holdout period.
- Makes a comparison between the actual sales data and the simulated forecast for the holdout period.

When you select multiple forecast methods, this same process occurs for each method. Multiple forecasts are calculated for the holdout period and compared to the known sales history for that same period of time. The forecasting method that produces the best match (best fit) between the forecast and the actual sales during the holdout period is recommended for use in your plans. This recommendation is specific to each product and might change each time that you generate a forecast.

## Mean Absolute Deviation

Mean Absolute Deviation (MAD) is the mean (or average) of the absolute values (or magnitude) of the deviations (or errors) between actual and forecast data. MAD is a measure of the average magnitude of errors to expect, given a forecasting method and data history. Because absolute values are used in the calculation, positive errors do not cancel out negative errors. When comparing several forecasting methods, the one with the smallest MAD has shown to be the most reliable for that product for that holdout period. When the forecast is unbiased and errors are normally distributed, a simple mathematical relationship exists between MAD and two other common measures of distribution, which are standard deviation and Mean Squared Error. For example:

- $MAD = (\sum |(Actual) - (Forecast)|) / n$
- Standard Deviation,  $(\sigma) \cong 1.25 MAD$
- Mean Squared Error  $\cong -\sigma^2$

The following shows the calculation of MAD for two of the forecasting methods. This example assumes that you have specified in the processing option that the holdout period length (periods of best fit) is equal to 5 periods.

### Method 1, Last Year to This Year

This table is history used in the calculation of MAD, Given Periods of Best Fit = 5:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1996 | None | None | None | None | None | None | None | 128 | 118 | 123 | 139 | 133 |

This table is 110 Percent Over Last Year Forecast for the Holdout Period:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | 141 | 130 | 135 | 153 | 146 |

This table is Actual Sales History for the Holdout Period:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | 129 | 131 | 114 | 119 | 137 |

This table is Absolute Value of Errors, (Actual) – (Forecast):

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | 12  | 1   | 21  | 34  | 9   |

Mean Absolute Deviation =  $(12 + 1 + 21 + 34 + 9) / 5 = 15.4$

### Method 4, Moving Average, $n = 4$

History Used in the Calculation of MAD, Given Periods of Best Fit = 5,  $n = 4$ :

| Year | Jan  | Feb  | Mar  | Apr | May | Jun | Jul | Aug  | Sep  | Oct  | Nov  | Dec  |
|------|------|------|------|-----|-----|-----|-----|------|------|------|------|------|
| 1997 | None | None | None | 125 | 122 | 137 | 140 | None | None | None | None | None |

This is the Moving Average Forecast for the Holdout Period, Given  $n = 4$ :

| Calculation                                   | Month    |
|-----------------------------------------------|----------|
| $(125 + 122 + 137 + 140) / 4 = 131$           | Aug 1997 |
| $(122 + 137 + 140 + 129) / 4 = 132$           | Sep 1997 |
| $(137 + 140 + 129 + 131) / 4 = 134.25$ or 134 | Oct 1997 |
| $(140 + 129 + 131 + 114) / 4 = 128.5$ or 129  | Nov 1997 |
| $(129 + 131 + 114 + 119) / 4 = 123.25$ or 123 | Dec 1997 |

This table is the results of the Moving Forecast Average:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | 131 | 132 | 134 | 129 | 123 |

This table is Actual Sales History for the Holdout Period:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | 129 | 131 | 114 | 119 | 137 |

This table is Absolute Value of Errors, Actual – Forecast:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | 2   | 1   | 20  | 10  | 14  |

Mean Absolute Deviation equals  $(2 + 1 + 20 + 10 + 14) / 5 = 9.4$

Based on these two choices, the Moving Average,  $n = 4$  method, is recommended because it has the smaller MAD, 9.4, for the given holdout period.

### Percent of Accuracy

Percent of Accuracy (POA) is a measure of forecast bias. When forecasts are consistently too high, inventories accumulate and inventory costs rise. When forecasts are consistently too low, inventories are consumed and customer service declines. A forecast that is 10 units too low, then 8 units too high, then 2 units too high is an unbiased forecast. The positive error of 10 is canceled by negative errors of 8 and 2.

$$(\text{Error}) = (\text{Actual}) - (\text{Forecast})$$

When a product can be stored in inventory, and when the forecast is unbiased, a small amount of safety stock can be used to buffer the errors. In this situation, eliminating forecast errors is not as important as generating unbiased forecasts. However, in service industries, the previous situation is viewed as three errors. The service is understaffed in the first period, and then overstaffed for the next two periods. In services, the magnitude of forecast errors is usually more important than is forecast bias.

$$\text{POA} = [(\Sigma \text{Actual sales during holdout period}) / (\Sigma \text{Forecast sales during holdout period})] \times 100\%$$

The summation over the holdout period enables positive errors to cancel negative errors. When the total of actual sales exceeds the total of forecast sales, the ratio is greater than 100 percent. Of course, the forecast cannot be more than 100 percent accurate. When a forecast is unbiased, the POA ratio is 100 percent. Therefore, a 95 percent accuracy rate is more desirable than a 110 percent accurate rate. The POA criterion selects the forecasting method that has a POA ratio that is closest to 100 percent.

The following example shows the calculation of POA for two forecasting methods. This example assumes that you have specified in the processing option that the holdout period length (periods of best fit) is equal to 5 periods.

### Method 1, Last Year to This Year

This table is history used in the calculation of MAD, Given Periods of Best Fit = 5:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1996 | None | None | None | None | None | None | None | 128 | 118 | 123 | 139 | 133 |

This table is 110 Percent Over Last Year Forecast for the Holdout Period:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | 141 | 130 | 135 | 153 | 146 |

This table is Actual Sales History for the Holdout Period:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | 129 | 131 | 114 | 119 | 137 |

Sum of Actuals equals  $(129 + 131 + 114 + 119 + 137) = 630$

Sum of Forecasts equals  $(141 + 130 + 135 + 153 + 146) = 705$

POA ratio equals  $(630 / 705) \times 100\% = 89.36\%$

### Method 4, Moving Average, $n = 4$

History Used in the Calculation of MAD, Given Periods of Best Fit = 5,  $n = 4$ :

| Year | Jan  | Feb  | Mar  | Apr | May | Jun | Jul | Aug  | Sep  | Oct  | Nov  | Dec  |
|------|------|------|------|-----|-----|-----|-----|------|------|------|------|------|
| 1997 | None | None | None | 125 | 122 | 137 | 140 | None | None | None | None | None |

This is the Moving Average Forecast for the Holdout Period, Given  $n = 4$ :

| Calculation                                   | Month    |
|-----------------------------------------------|----------|
| $(125 + 122 + 137 + 140) / 4 = 131$           | Aug 1997 |
| $(122 + 137 + 140 + 129) / 4 = 132$           | Sep 1997 |
| $(137 + 140 + 129 + 131) / 4 = 134.25$ or 134 | Oct 1997 |
| $(140 + 129 + 131 + 114) / 4 = 128.5$ or 129  | Nov 1997 |
| $(129 + 131 + 114 + 119) / 4 = 123.25$ or 123 | Dec 1997 |

This table is the results of the Moving Forecast Average:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | 131 | 132 | 134 | 129 | 123 |

This table is Actual Sales History for the Holdout Period:

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 1997 | None | None | None | None | None | None | None | 129 | 131 | 114 | 119 | 137 |

Sum of Actuals equals  $(129 + 131 + 114 + 119 + 137) = 630$

Sum of Forecasts equals  $(131 + 132 + 134 + 129 + 123) = 649$

POA ratio equals  $(630 / 649) * 100\% = 97.07\%$

Based on these two choices, the Moving Average,  $n = 4$  method is recommended because it has POA closest to 100 percent for the given holdout period.

## Demand Patterns

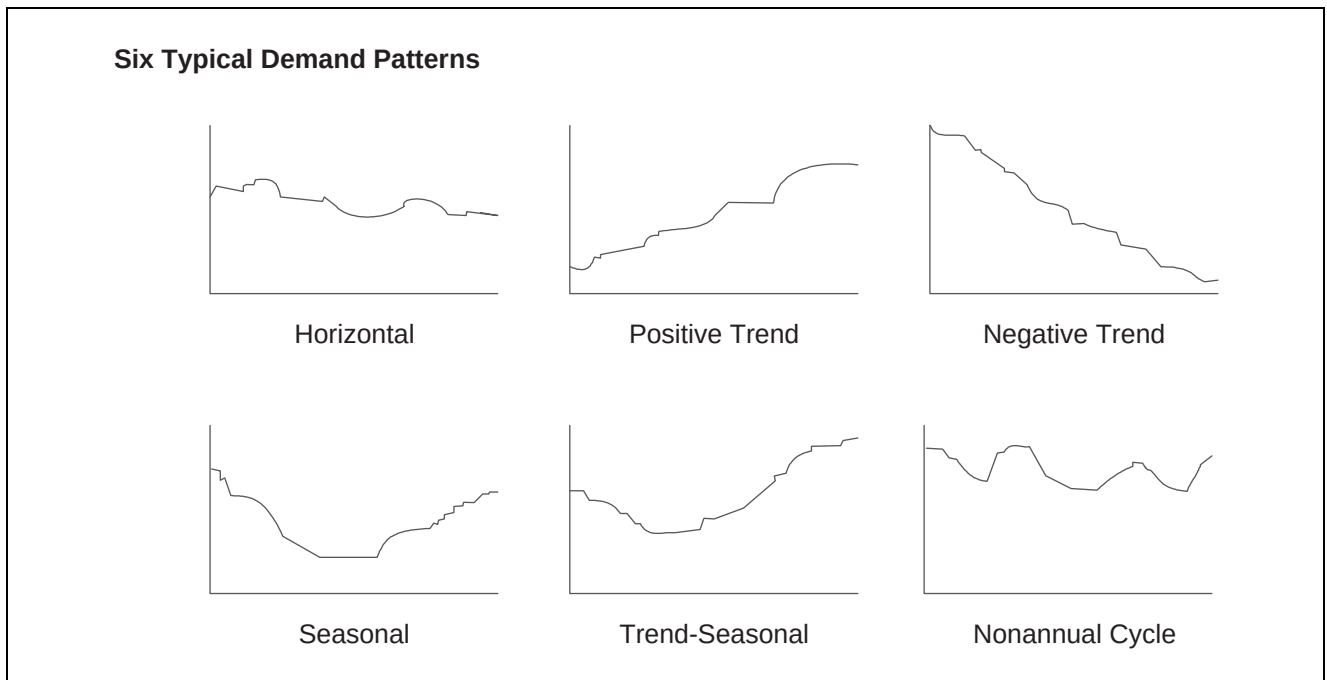
Forecast Management uses sales order history to predict future demand. This section discusses:

- Six typical demand patterns
- Forecast accuracy
- Forecast considerations
- Forecasting process

Forecast methods available in PeopleSoft EnterpriseOne Forecast Management are tailored for these demand patterns.

### Six Typical Demand Patterns

This graphic shows the six typical demand patterns:



Charting six typical demand patterns

You can forecast the independent demand of the following information for which you have past data:

- Samples
- Promotional items
- Customer orders
- Service parts
- Interplant demands

You can also forecast demand for the following manufacturing strategy types by using the manufacturing environments in which they are produced:

This table shows manufacturing strategies:

| Manufacturing Strategy | Description                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------------------|
| Make-to-stock          | The manufacture of end items that meet the customers' demand, which occurs after the product is completed. |
| Assemble-to-order      | The manufacture of subassemblies that meet customers' option selections.                                   |
| Make-to-order          | The manufacture of raw materials and components that are stocked to reduce leadtime.                       |

## Forecast Accuracy

The following statistical laws govern forecast accuracy:

- A long-term forecast is less accurate than a short-term forecast because the further into the future you project the forecast, the more variables can affect the forecast.

- A forecast for a product family tends to be more accurate than a forecast for individual members of the product family. Some errors cancel each other as the forecasts for individual items summarize into the group, thus creating a more accurate forecast.

## Forecast Considerations

You should not rely exclusively on past data to forecast future demands. The following circumstances might affect your business, and require you to review and modify your forecast:

- New products that have no past data.
- Plans for future sales promotion.
- Changes in national and international politics.
- New laws and government regulations.
- Weather changes and natural disasters.
- Innovations from competition.
- Economic changes.

You can also use the following kinds of long-term trend analysis to influence the design of your forecasts:

- Market surveys.
- Leading economic indicators.

## Forecasting Process

You use the Refresh Actuals program (R3465) to copy data from the Sales Order History File table (F42119), the Sales Order Detail File table (F4211), or both, into either the Forecast File table (F3460) or the Forecast Summary File table (F3400), depending on the kind of forecast that you plan to generate.

## CHAPTER 4

# Setting Up PeopleSoft EnterpriseOne Forecast Management

This chapter provides an overview of the setup requirements and discusses how to set up:

- Detail forecasts.
- Planning bills.

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## Understanding Forecast Management

This section discusses:

- Forecast Management setup.
- Company hierarchies.
- Distribution hierarchies.
- Summary of Detail Forecasts and Summary Forecasts.
- Summary Forecast setup.

Before you generate a detail forecast, you set up criteria for the dates and kinds of data on which the forecasts are based, and set up the time periods that the system should use to structure the forecast output.

To set up detail forecasts, you must:

- Set up inclusion rules to specify the sales history records and current sales orders on which you want to base the forecast.
- Specify beginning and ending dates for the forecast.
- Indicate the date pattern on which you want to base the forecast.
- Add any forecast types not already provided by the system.
- Define large customers for separate customer forecasts.

### Supply and Demand Inclusion Rules

Forecast Management uses supply and demand inclusion rules to determine which records from the Sales Order Detail File table (F4211) and Sales Order History File table (F42119) to include or exclude when you run the Refresh Actuals program (R3465). Supply and demand inclusion rules enable you to specify the status and type of items and documents to include in the records. You can set up as many different inclusion rule versions as you need for forecasting.

## Fiscal Date Patterns

Fiscal date patterns are user defined codes (H00/DP) that identify the year and the order of the months of that year for which the system creates the forecast. Forecast Management uses fiscal date patterns to determine the time periods into which the sales order history is grouped. Before you can generate a detail forecast, you must set up a standard monthly date pattern. The system divides the sales history into weeks or months, depending on the processing option that you select. If you want to forecast by months, you must set up the fiscal date pattern. If you want to forecast by weeks, you must set up both the fiscal date pattern and a 52-period date pattern.

To set up fiscal date patterns, specify the beginning fiscal year, current fiscal period, and which date pattern to follow. Forecast Management uses this information during data entry, updating, and reporting. Set up fiscal date patterns for as far back as your sales history extends and as far forward as you want to forecast.

Use the same fiscal date pattern for all forecasted items. A mix of date patterns across items that are summarized at higher levels in the hierarchy causes unpredictable results. The fiscal date pattern must be an annual calendar: For example, from January 1, 1999, through December 31, 1999; or from June 1, 1999, through May 31, 2000.

PeopleSoft recommends that you set up a separate fiscal date pattern for forecasting only so that you can control the date pattern. If you use the date pattern that is already established in the Financial Management system, the financial officer controls the date pattern.

See Setting Up Fiscal Date Patterns in the General Accounting Guide.

## 52 Period Date Pattern

After you set up forecasting fiscal date patterns, you must set up a 52 period pattern for each code to forecast by weeks. When you set up a 52 period date pattern for a forecast, the period end dates are weekly instead of monthly.

## Forecast Types

Forecast Management uses Forecast Type (34/DF) to differentiate the multiple forecasts that reside in the Forecast File table (F3460). Forecast Type can identify actual sales history, a system generated best-fit forecast, each of the 12 generated forecast methods, or manually entered forecasts. Each time that sales history is extracted or a forecast is generated, you can select a forecast type to identify the data.

You can set up multiple forecasts for the same item, branch/plant, and date by using different forecast types. You can use existing codes or add codes to the user defined code table 34/DF to identify forecast types.

This table shows different types of forecasts:

| Code | Description                   | Hard Coded |
|------|-------------------------------|------------|
| 01   | Simple Percent Over Last Year | Y          |
| 11   | Exponential Smoothing         | Y          |
| AA   | Actual Sales                  | N          |
| BF   | Best Simulated Forecast       | N          |
| MF   | Maintenance Forecast          | N          |
| MM   | Maintenance Management        | N/A        |

| Code | Description            | Hard Coded |
|------|------------------------|------------|
| PP   | Production Plan        | N/A        |
| SP   | Service Parts Forecast | N          |

Processing options in the Distribution Requirements Planning (DRP), Master Production Schedule (MPS), and Material Requirements Planning (MRP) versions of MRP/MPS Requirements Planning (R3482) enable you to enter forecast type codes to define which forecasting types to use in calculations.

## Large Customers

For customers with significant sales demand or more activity, you can create separate forecasts and actual history records. Use this task to specify customers as large so that you can generate forecasts and actual history records for only those customers.

After you set up the customer, set the appropriate processing option in the Forecast Generation program (R34650) so that the system searches the Sales Order History File table (F42119) for sales to that customer and creates separate Forecast File table (F3460) records for that customer.

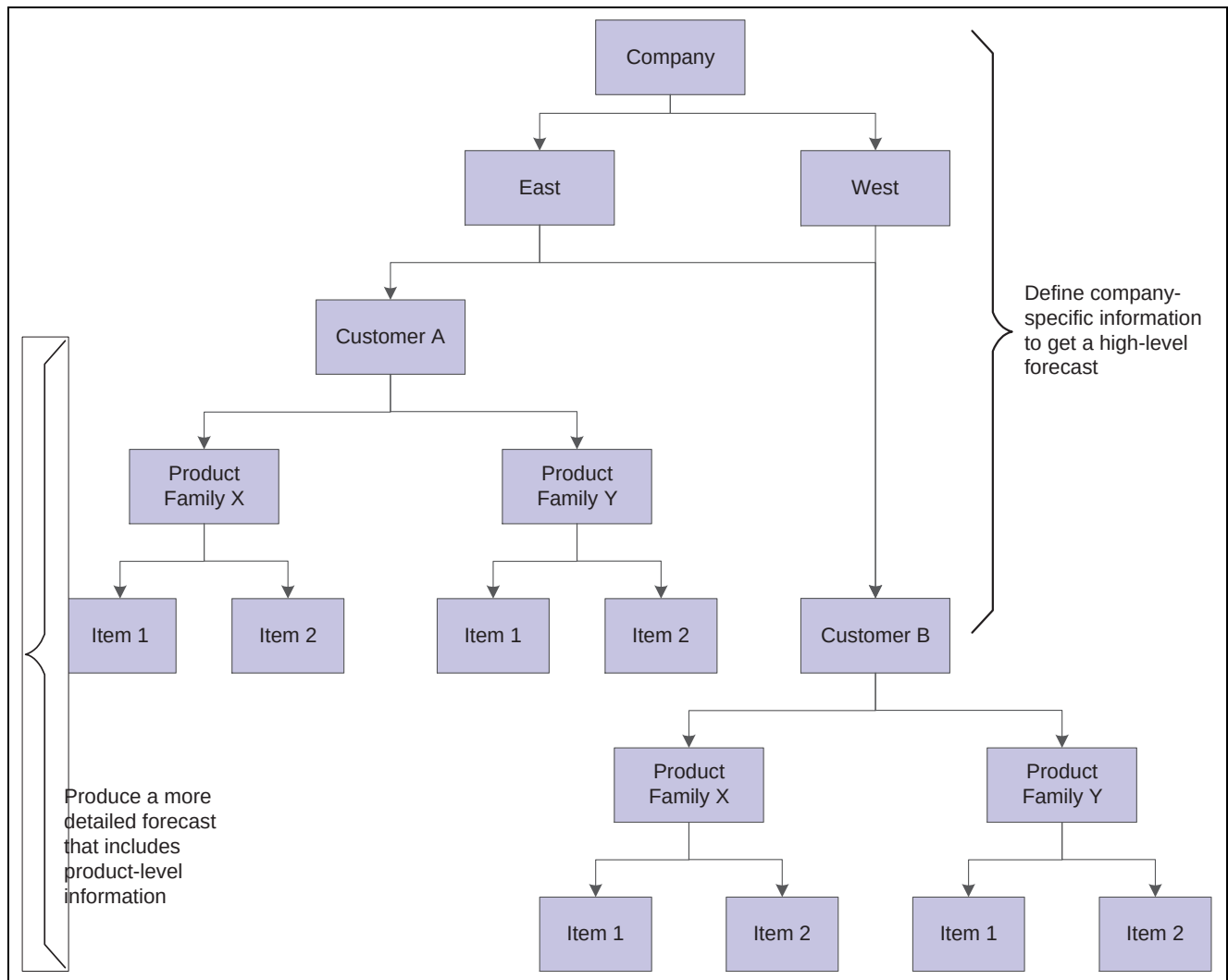
Use a processing option to enable the system to process larger customers by Ship To instead of Sold To.

If you included customer level in the hierarchy, the system summarizes the sales actuals with customers into separate branches of the hierarchy.

## Understanding Company Hierarchies

You must define your company's hierarchy before you generate a summary forecast. PeopleSoft recommends that you organize the hierarchy by creating a diagram or storyboard.

This graphic is an example of a company hierarchy:



Example of a Company Hierarchy

Establish a forecasting structure that realistically depicts the working operation of your company, from item level to headquarters level, to increase the accuracy of your forecasts. By defining your company's processes and relationships at multiple levels, you maintain information that is more detailed and can plan better for your future needs.

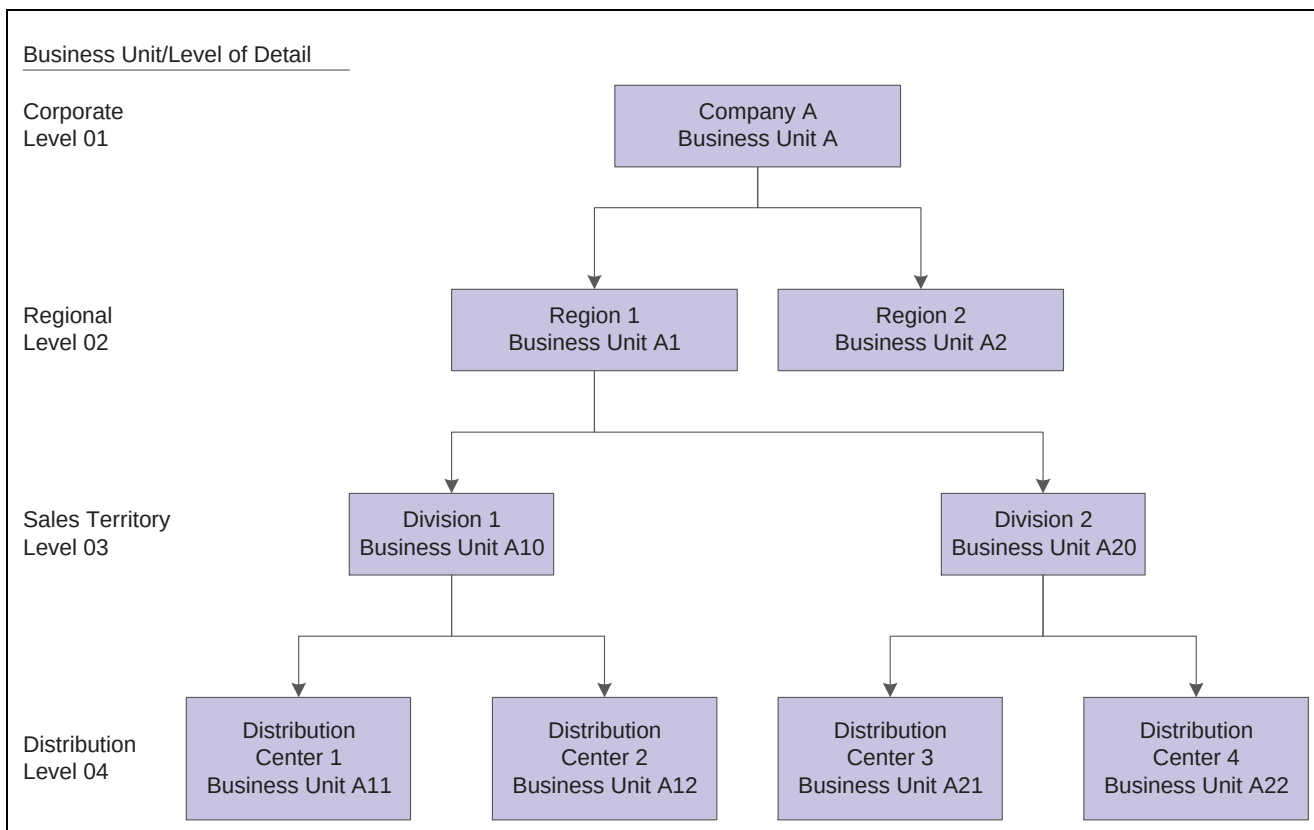
## Understanding Distribution Hierarchies

When planning and budgeting for divisions of your organization, you can summarize detailed forecasts that are based on your distribution hierarchy. For example, you can create forecasts by large customer or region for your sales staff, or create forecasts by product family for your production staff.

To define the distribution hierarchy, you must set up summary codes and assign summary constants. You also must enter address book, business unit, and item branch data.

### Example: Distribution Hierarchy

This chart shows an example of a distribution hierarchy:

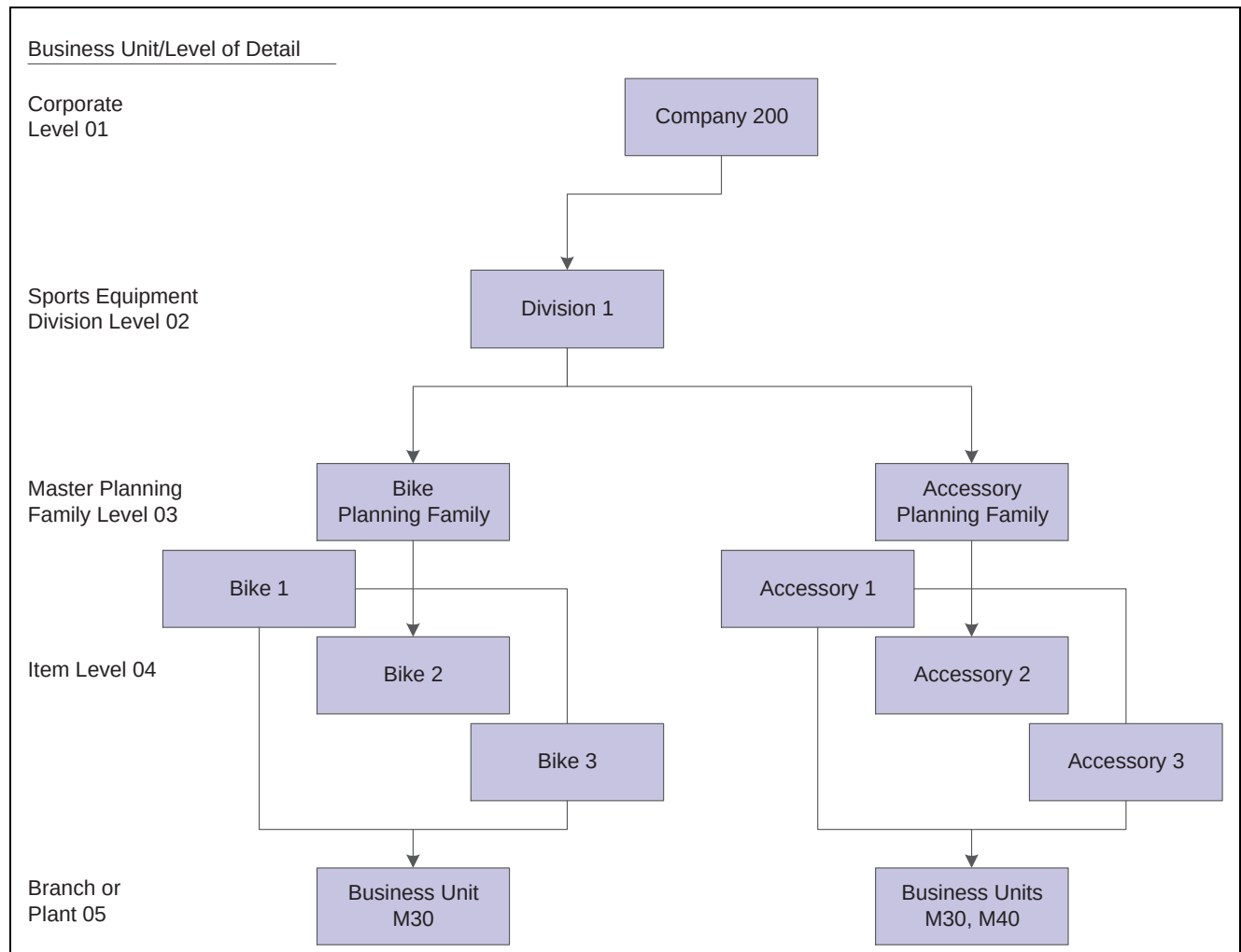


Example of a distribution hierarchy for Company A

### Example: Manufacturing Hierarchy for Company 200

You might want to see a forecast of the total demand for a product summarized by product families.

The following chart shows an example of how to set up a hierarchy to get the forecast summary by product:



Example of a manufacturing hierarchy for Company 200

## Understanding Summary of Detail Forecasts and Summary Forecasts

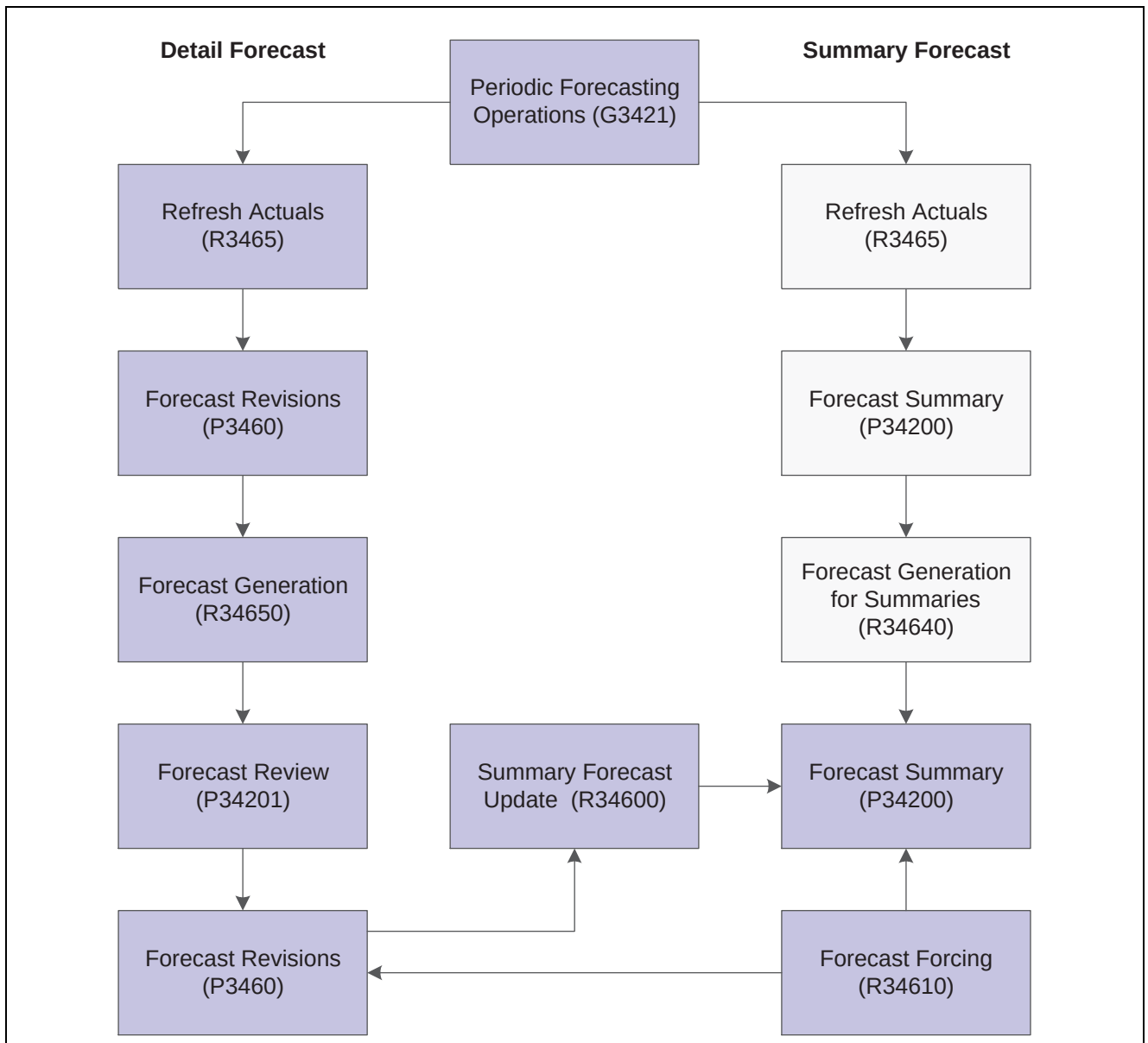
Summary of Detail forecasts and Summary forecasts are different.

### Summary of Detail Forecasts

A summary of detail forecast uses item-level data and predicts future sales in terms of item quantities and sales amounts.

The system updates the Sales Order History File table (F42119) with sales data from the Sales Order Detail File table (F4211). You copy the sales history into the Forecast File table (F3460) to generate summaries of detail forecasts. The system generates summary forecasts that provide information for each level of the hierarchy that you set up with summary constants. These constants are stored in the Category Code Key Position File table (F4091). Both summaries of detail forecasts and summary forecasts are stored in the Forecast Summary File table (F3400).

The shaded blocks of this graphic show this process:



Process for detail forecast summary

## Summary Forecasts

Use summary forecasts to project demand at a product group level. Summary forecasts are also called aggregate forecasts. You generate a summary forecast that is based on summary actual data.

Summary forecasts combine sales history into a monetary value of sales by product family, by region, or in other groupings that are used as input to the aggregate production planning activity. You can use summary forecasts to run simulations.

The system updates the Sales Order History File table (F42119) with sales data from the Sales Order Detail File table (F4211) to generate summary forecasts. You copy the sales history into the Forecast Summary File table (F3400) to generate summary forecasts. The system generates summary forecasts that provide information for each level of the hierarchy that you set up with summary constants. Summary constants are stored in the Category Code Key Position File table (F4091). Both summary forecasts and summaries of detail forecasts are stored in table F3400.

## Understanding Summary Forecast Setup

For summary forecasts, Forecast Management requires you to set up the information for detail forecasts, and set up and define a summary hierarchy.

You set up your summary codes (40/KV) and then identify the constants for each summary code. These summary codes and constants define your distribution hierarchy.

To set up summary forecasts, you must:

- Define the hierarchy with summary codes and constants.
- Enter address book data, business unit data, and item branch data.

You must set up detail forecasts before you can set up summary forecasts.

### Summary Codes

To set up the hierarchy, you must set up summary codes. For each hierarchy that you define, you must specify a unique identifier called a summary code. Summary codes are setup in user defined code (UDC) 40/KV.

This table is examples of summary codes:

| Codes | Description                  | Hard Coded |
|-------|------------------------------|------------|
| 200   | Sales Channel Summarization  | N          |
| CUS   | Large Customer Summarization | N          |
| EAS   | Eastern Forecast             | N          |
| MDW   | Mid-Western Forecast         | N          |
| PHR   | Pharmaceutical Forecast      | N          |
| SM    | Marketing Summarization Code | N          |

When creating summary forecasts, you select a summary code to indicate the hierarchy with which you want to work.

### Summary Code Constants

For each summary code, use summary constants to define each level of the hierarchy. You can use category codes from the Address Book program (P01012) and Item Master table (F4101) to define up to 14 levels in the hierarchy. You can define these levels as follows:

- Define the top level as the Global Summary to summarize forecasts for several companies into a single corporate view.
- Define the second level as the Company Summary to summarize forecasts for all of the facilities in a single company.
- Define up to 11 middle levels, which include the category codes and the customer level.
- Use as many as 20 address book category codes and 20 item branch category codes to assign other levels in the hierarchy.
- Use the Customer Level field as another category code. You can specify each of your large customers as a level of the hierarchy. This action enables you to create specific forecasts for each large customer.

- The lowest level that you can define is the item level.
- Define an Item Summary level that provides forecasts for the individual item level. All detail forecast records for an item can be summarized at this level.

Detail records for a branch/plant item are automatically placed after all levels of the hierarchy. The system does not include these detail records as one of the 14 levels of the hierarchy.

---

## Setting Up Detail Forecasts

This section discusses how to:

- Set up Forecasting Supply and Demand Inclusion Rules.
- Set up Forecasting Fiscal Date Patterns.
- Set up the 52 Period Date Pattern.
- Set up Large Customers.
- Assign constants to Summary Codes.

## Forms Used to Set Up Forecast Management

| Form Name                               | Form ID | Navigation                                                                                                                                                                                                    | Usage                                                                                                                                                                                                                       |
|-----------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Work With Supply/Demand Inclusion Rules | W34004A | Material Planning Setup (G3442), Supply/Demand Inclusion Rules                                                                                                                                                | Set up forecasting supply and demand inclusion rules.<br><br>Select the lines that you want to include.<br><br>The program changes the included value of each line that you selected from 0 (not included) to 1 (included). |
| Set Up Fiscal Date Pattern              | W0010C  | Organization & Account Setup (G09411), Company Names & Numbers<br><br>On the Work With Companies form, select Date Pattern from the Form menu.<br><br>On the Work With Fiscal Date Patterns form, select Add. | Set up forecasting fiscal date patterns.                                                                                                                                                                                    |
| Set Up 52 Periods                       | W0008BG | 52 Period Accounting menu (G09313), Set 52 Period Dates<br><br>On the Work With 52 Periods form, select Add.                                                                                                  | Set up the 52 period date pattern.<br><br>Enter a fiscal date pattern, a beginning date for the fiscal year, and an end date for each period.                                                                               |
| Customer Master Revision                | W03013A | Sales Order Management Setup (G4241), Customer Billing Instructions<br><br>On the Work With Customer Master form, select a record.                                                                            | Define large customers.                                                                                                                                                                                                     |
| Revise Summary Constants                | W4091A  | Forecasting Setup (G3441), Summary Constants (P4091)                                                                                                                                                          | Assign constants to summary codes and define hierarchy levels.<br><br>Select the More button for additional summary constants.                                                                                              |

## Setting Up Forecasting Supply and Demand Inclusion Rules

Access the Work With Supply/Demand Inclusion Rules form.

**Supply/Demand Inclusion Rules - Work With Supply/Demand Inclusion Rules**

Select Find Delete Close Tools

Rule Version  Sales History ☐ Selected

Skip to Order Type

Records 1 - 15 ▶ ⌂ Customize Grid

| <input type="checkbox"/> | <input type="checkbox"/> | Included | Order Type | Line Type | Line Status | Status Description           | Rule Version |
|--------------------------|--------------------------|----------|------------|-----------|-------------|------------------------------|--------------|
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | BC         | J         | 230         | Approve Purchase Order Proof | HIS          |
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | BC         | J         | 280         | Print Purchase Order         | HIS          |
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | BC         | J         | 400         | Record Progress Payment      | HIS          |
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | BC         | J         | 900         | Backorder in S/O Entry       | HIS          |
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | BC         | J         | 902         | Backorder in Commitments     | HIS          |
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | BC         | J         | 904         | Backorder in Ship. Conf.     | HIS          |
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | BC         | J         | 912         | Added in Commitments         | HIS          |
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | BC         | J         | 914         | Added in Ship. Conf.         | HIS          |
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | BC         | J         | 999         | Complete - Ready to Purge    | HIS          |
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | C4         | C         | 520         | Enter Sales Order            | HIS          |
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | C4         | C         | 527         | Approve Shipment/Load        | HIS          |
| <input type="checkbox"/> | <input type="checkbox"/> | 0        | C4         | C         | 560         | Shipment Confirmation        | HIS          |

Work With Supply/Demand Inclusion Rules form

| Description  | Glossary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rule Version | <p>A user defined code (40/RV) that identifies an inclusion rule that you want the system to use for this branch/plant. The Manufacturing and Warehouse Management systems use inclusion rules as follows:</p> <ul style="list-style-type: none"> <li>For Manufacturing: <ul style="list-style-type: none"> <li>enables multiple versions of resource rules for running MPS, MRP, or DRP.</li> </ul> </li> <li>For Warehouse Management: <ul style="list-style-type: none"> <li>enables multiple versions of inclusion rules for running putaway and picking. The system processes only those order lines that match the inclusion rule for a specified branch/plant.</li> </ul> </li> </ul> |
| Included     | <p>A code that is used to prompt detail selection from a list of items. Values are:</p> <p>0:Not included</p> <p>1:Included</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Description | Glossary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Order Type  | <p>A user defined code (00/DT) that identifies the type of document. This code also indicates the origin of the transaction. PeopleSoft has reserved document type codes for vouchers, invoices, receipts, and time sheets, which create automatic offset entries during the post program. (These entries are not self-balancing when you originally enter them.)</p> <p>The following document types are defined by PeopleSoft and should not be changed:</p> <p><i>P</i>:Accounts Payable documents</p> <p><i>R</i>:Accounts Receivable documents</p> <p><i>T</i>:Payroll documents</p> <p><i>I</i>:Inventory documents</p> <p><i>O</i>:Purchase Order Processing documents</p> <p><i>J</i>:General Accounting/Joint Interest Billing documents</p> <p><i>S</i>:Sales Order Processing documents</p> |
| Line Type   | <p>A code that controls how the system processes lines on a transaction. It controls the systems with which the transaction interfaces, such as General Accounting, Job Cost, Accounts Payable, Accounts Receivable, and Inventory Management. It also specifies the conditions under which a line prints on reports, and is included in calculations. Codes include the following:</p> <p><i>S</i>:Stock item</p> <p><i>J</i>:Job cost</p> <p><i>N</i>:Nonstock item</p> <p><i>F</i>:Freight</p> <p><i>T</i>:Text information</p> <p><i>M</i>:Miscellaneous charges and credits</p> <p><i>W</i>:Work order</p>                                                                                                                                                                                        |
| Line Status | <p>A user defined code (40/AT) that indicates the status of the line.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## Setting Up Forecasting Fiscal Date Patterns

Access the Set Up Fiscal Date Pattern form.

**Company Names & Numbers - Set Up Fiscal Date Pattern**

OK Cancel Tools

Fiscal Date Pattern

Date Fiscal Year Begins

| Period | End Date                              | Period | End Date                              |
|--------|---------------------------------------|--------|---------------------------------------|
| 1      | <input type="text" value="06/30/04"/> | 8      | <input type="text" value="01/31/05"/> |
| 2      | <input type="text" value="07/31/04"/> | 9      | <input type="text" value="02/28/05"/> |
| 3      | <input type="text" value="08/31/04"/> | 10     | <input type="text" value="03/31/05"/> |
| 4      | <input type="text" value="09/30/04"/> | 11     | <input type="text" value="04/30/05"/> |
| 5      | <input type="text" value="10/31/04"/> | 12     | <input type="text" value="05/31/05"/> |
| 6      | <input type="text" value="11/30/04"/> | 13     | <input type="text" value="05/31/05"/> |
| 7      | <input type="text" value="12/31/04"/> | 14     | <input type="text" value="05/31/05"/> |

Set Up Fiscal Date Pattern form

| Description             | Glossary                                                                                                                                                                                                                                                                |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fiscal Date Pattern     | A code that identifies date patterns. You can use one of 15 codes. You must set up special codes (letters A through N) for 4-4-5, 13-period accounting, or any other date pattern unique to your environment. An R, the default, identifies a regular calendar pattern. |
| Date Fiscal Year Begins | The first day of the fiscal year.                                                                                                                                                                                                                                       |

## Setting Up the 52 Period Date Pattern

Access the Set Up 52 Periods form.

**Set 52 Period Dates - Set Up 52 Periods**

OK Cancel Tools

Fiscal Date Pattern

Date Fiscal Year Begins

| Period End Date                          | Period End Date                          | Period End Date                          | Period End Date                          | Period End Date                          |
|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|
| 01 <input type="text" value="01/04/02"/> | 12 <input type="text" value="03/22/02"/> | 23 <input type="text" value="06/07/02"/> | 34 <input type="text" value="08/23/02"/> | 45 <input type="text" value="11/08/02"/> |
| 02 <input type="text" value="01/11/02"/> | 13 <input type="text" value="03/29/02"/> | 24 <input type="text" value="06/14/02"/> | 35 <input type="text" value="08/30/02"/> | 46 <input type="text" value="11/15/02"/> |
| 03 <input type="text" value="01/18/02"/> | 14 <input type="text" value="04/05/02"/> | 25 <input type="text" value="06/21/02"/> | 36 <input type="text" value="09/06/02"/> | 47 <input type="text" value="11/22/02"/> |
| 04 <input type="text" value="01/25/02"/> | 15 <input type="text" value="04/12/02"/> | 26 <input type="text" value="06/28/02"/> | 37 <input type="text" value="09/13/02"/> | 48 <input type="text" value="11/29/02"/> |
| 05 <input type="text" value="02/01/02"/> | 16 <input type="text" value="04/19/02"/> | 27 <input type="text" value="07/05/02"/> | 38 <input type="text" value="09/20/02"/> | 49 <input type="text" value="12/06/02"/> |
| 06 <input type="text" value="02/08/02"/> | 17 <input type="text" value="04/26/02"/> | 28 <input type="text" value="07/12/02"/> | 39 <input type="text" value="09/27/02"/> | 50 <input type="text" value="12/13/02"/> |
| 07 <input type="text" value="02/15/02"/> | 18 <input type="text" value="05/03/02"/> | 29 <input type="text" value="07/19/02"/> | 40 <input type="text" value="10/04/02"/> | 51 <input type="text" value="12/20/02"/> |
| 08 <input type="text" value="02/22/02"/> | 19 <input type="text" value="05/10/02"/> | 30 <input type="text" value="07/26/02"/> | 41 <input type="text" value="10/11/02"/> | 52 <input type="text" value="12/31/02"/> |
| 09 <input type="text" value="03/01/02"/> | 20 <input type="text" value="05/17/02"/> | 31 <input type="text" value="08/02/02"/> | 42 <input type="text" value="10/18/02"/> | 53 <input type="text" value="12/31/02"/> |
| 10 <input type="text" value="03/08/02"/> | 21 <input type="text" value="05/24/02"/> | 32 <input type="text" value="08/09/02"/> | 43 <input type="text" value="10/25/02"/> | 54 <input type="text" value="12/31/02"/> |
| 11 <input type="text" value="03/15/02"/> | 22 <input type="text" value="05/31/02"/> | 33 <input type="text" value="08/16/02"/> | 44 <input type="text" value="11/01/02"/> |                                          |

Set Up 52 Periods form

## Setting Up Large Customers

Access the Customer Master Revision form.

**Customer Billing Instructions - Customer Master Revision**

Work With Customer Master   **Customer Master Revision**

OK Cancel Form Previous Next Tools

Customer Number 4242 Capital System

Long Address Number

Company 00000

Select Tab: Credit

|                          |                       |                            |           |
|--------------------------|-----------------------|----------------------------|-----------|
| Credit Limit             | 50,000.00             | Recall for Review Date     |           |
| Credit Manager           | CR01 Dominique Abbott | Date of Last Credit Review | 03/06/02  |
| Credit Message           |                       | Date Account Opened        | 04/22/97  |
| Temporary Credit Message |                       |                            |           |
| Person Opening Account   | DEMO                  | ABC Code Sales             | A Grade A |
| Last Reviewed By         | DL811727              | ABC Code Margin            | C Grade C |
| Financial Stmt's on Hand |                       | ABC Code Average Days      | C Grade C |
| Dun and Bradstreet Date  |                       |                            |           |
| Experian Date            |                       |                            |           |

Customer Master Revision form

| Description    | Glossary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ABC Code Sales | <p>Type A in this field.</p> <p>The ABC code indicates an item's ABC ranking by sales amount. During ABC analysis, the system groups items by sales amount in descending order. It divides this array into three classes called A, B, and C. The A group usually represents 10% to 20% of your total items and 50% to 70% of your projected sales volume. The next grouping, B, usually represents about 20% of the items and 20% of the sales volume. The C class contains 60% to 70% of the items and represents about 10% to 30% of the sales volume. The ABC principle states that you can save effort and money when you apply different controls to the low-value, high-volume class than you apply to improve control of high-value items.</p> <p>You can override a system-assigned ABC code on the Item/Branch Plant Info form (41026A) on the Additional Info tab.</p> |

## Assigning Constants to Summary Codes

Access the Revise Summary Constants form.

**Summary Constants - Revise Summary Constants**

OK Cancel Form Tools

Summary Code 200

**Key Positions**

|                                                    | Address Book Category Codes                       | Item Category Codes                                    |
|----------------------------------------------------|---------------------------------------------------|--------------------------------------------------------|
| Global Summary Y/N <input type="text" value="N"/>  | Location or Branch <input type="text" value="0"/> | Sales Catalog Selection <input type="text" value="0"/> |
| Company Summary Y/N <input type="text" value="Y"/> | Salesperson <input type="text" value="0"/>        | Sub Section <input type="text" value="0"/>             |
| Item Summary Y/N <input type="text" value="Y"/>    | Sales Territory <input type="text" value="1"/>    | Sales Category Code 3 <input type="text" value="0"/>   |
| Customer Level <input type="text"/>                | Category Code 04 <input type="text" value="0"/>   | Sales Category Code 4 <input type="text" value="0"/>   |
|                                                    | Category Code 05 <input type="text" value="0"/>   | Sales Category Code 5 <input type="text" value="0"/>   |
|                                                    | Category Code 06 <input type="text" value="0"/>   | Commodity Class <input type="text" value="0"/>         |
|                                                    | Category Code 07 <input type="text" value="0"/>   | Commodity Sub Class <input type="text" value="0"/>     |
|                                                    | Category Code 08 <input type="text" value="0"/>   | Vendor Rebate Code <input type="text" value="0"/>      |
|                                                    | Review Criteria <input type="text" value="0"/>    | Master Planning Family <input type="text" value="2"/>  |
|                                                    | Review Priority <input type="text" value="0"/>    | Landed Cost Rule <input type="text" value="0"/>        |

Revise Summary Constants form

| Description         | Glossary                                                                                                                                                                                                                                                    |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Summary Code        | A user defined code (40/KY) that indicates the type of summary forecast.                                                                                                                                                                                    |
| Global Summary Y/N  | A code that indicates whether the forecast should be summarized to the global level. The global level is the top level of the forecasting hierarchy and represents a summary of all levels.                                                                 |
| Company Summary Y/N | A code that indicates whether the forecast should be summarized to the Company level. The company level is the next level above the level indicated as number one in the hierarchy. The system summarizes all forecasts within the company into this level. |
| Item Summary Y/N    | A code that indicates whether the forecast should be summarized down to the item number level. This level is the last level in the hierarchy. The system summarizes all forecast detail records for an item into this level.                                |
| Customer Level      | A code that indicates the customer number as one of the levels in the forecasting hierarchy.                                                                                                                                                                |

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## Setting Up Planning Bills

This section provides an overview of planning bills and discusses how to:

- Set up Item Master information.
- Enter Planning Bills.

### Understanding Planning Bills

You must set up a planning bill before you generate a planning bill forecast. You use the Product Data Management system to set up a planning bill. Then the system uses the planning bill to generate a forecast for the hypothetical average parent item. The forecast shows the component level exploded.

#### Item Master Information

Before you enter the criteria that you want to use on the planning bill, you must set up item master information on which the planning is based. The system stores this information in the Item Master table (F4101).

The Item Branch File table (F4102) also stores the item information. After you add item master records for the appropriate part numbers, the system retrieves item information from table F4102.

#### Planning Bills

You enter a planning bill in the Product Data Management system to change the percentages on which the hypothetical average parent item is based. This action enables you to account for any planning variations on which you might want to base forecasts.

## Forms Used to Set Up Planning Bills

| Form Name                               | Form ID | Navigation                                                                                                            | Usage                                                                                                                                              |
|-----------------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Item Master Revisions                   | W4101E  | Inventory Master/Transactions (G4111), Item Master<br><br>On the Work With Item Master Browse form, select Add.       | Set up item master information.<br><br>Complete the Item Number, Description, Stocking Type, GL Class, and Kit/Configurator Pricing Method fields. |
| Category Codes                          | W4101B  | On the Work With Item Master Browse form, select a record and select Category Codes from the Row menu.                | Set up item master information.                                                                                                                    |
| Additional System Information           | W4101C  | On the Work With Item Master Browse form, select a record and select Additional System Information from the Row menu. | Set up additional system information.                                                                                                              |
| Enter Bill of Material Information      | W3002H  | Daily PDM Discrete (G3011), Enter/Change Bill<br><br>On the Work with Bill of Material form, and select a record.     | Enter planning bills.<br><br>Enter Item Number, Quantity, and Feat Plan % information. Review the information in the Is Cd field.                  |
| Bill of Material Inquiry - Single Level | W3002H  | On the Work with Bill of Material form, select BOM Inquiry from the Row menu.                                         | View the single level bill of material.                                                                                                            |
| Bill of Material Inquiry - Multi Level  | W30200C | On the Bill of Material Inquiry - Single Level form, select Multi-Level from the View menu.                           | View the multi-level bill of material.                                                                                                             |

## Setting Up Item Master Information

Access the Category Codes form.

Category Codes

Work With Item Master BrowseItem Master RevisionsCategory Codes

OKCancelPreviousNextTools

Item Number220Touring Bike, Red

Sales Catalog SectionBIKBicycle Cat...

Sub SectionTRGTouring Bik...

Sales Category Code 3Add sales c...

Sales Category Code 4888Touring Bik...

Sales Category Code 5357Finished Go...

Preferred Sales Carrier

Commodity Classtest

Commodity Sub Class...

Supplier Rebate CodeAdd supplie...

Master Planning Family200Bike

Landed Cost RuleBLANK

Preferred Purchasing Carrier

Shipping Conditions CodeBlank-Shi...

Shipping Commodity ClassBlank-Ship...

Cycle Count Category.

Item Dimension Group.

Warehouse Process Grp 1Blank

Warehouse Process Grp 2Blank

Warehouse Process Grp 3Blank

Item Pool CodeBlank

Category Code 6Blank

Category Code 7.

Category Code 8.

Category Code 9.

Category Code 10blanco

Item Master-Category Codes form

| Description | Glossary                   |
|-------------|----------------------------|
| Item Number | An identifier for an item. |
| Description | A remark about an item.    |

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| Description            | Glossary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stocking Type          | <p>A user defined code (41/I) that indicates how you stock an item, for example, as finished goods or as raw materials. The following stocking types are hard-coded and you should not change them:</p> <p><i>0</i>: Phantom item</p> <p><i>B</i>: Bulk floor stock</p> <p><i>C</i>: Configured item</p> <p><i>E</i>: Emergency/corrective maintenance</p> <p><i>F</i>: Feature</p> <p><i>K</i>: Kit parent item</p> <p><i>N</i>: Nonstock</p> <p>The first character of Description 2 in the user defined code table indicates if the item is purchased (P) or manufactured (M).</p> |
| GL Class               | <p>A user defined code (41/9) that controls which general ledger accounts receive the dollar amount of inventory transactions for this item.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Master Planning Family | <p>A user defined code (41/P4) that represents an item property type or classification, such as commodity type or planning family. The system uses this code to sort and process like items.</p> <p>This field is one of six classification categories available primarily for purchasing purposes.</p>                                                                                                                                                                                                                                                                               |
| Planning Code          | <p>A code that indicates how Master Production Schedule (MPS), Material Requirements Planning (MRP), or Distribution Requirements Planning (DRP) processes this item. Valid codes are:</p> <p><i>0</i>: Not Planned by MPS, MRP, or DRP</p> <p><i>1</i>: Planned by MPS or DRP</p> <p><i>2</i>: Planned by MRP</p> <p><i>3</i>: Planned by MRP with additional independent forecast</p> <p><i>4</i>: Planned by MPS, Parent in Planning Bill</p> <p><i>5</i>: Planned by MPS, Component in Planning Bill</p> <p>These codes are hard coded.</p>                                       |

## Entering Planning Bills

Access the Bill of Material Inquiry - Multi Level form.

**Bill of Material Inquiry - Multi Level** i ? ?

Select Find Close Form Report View Row Tools

**BOM Inquiry** **Parts Availability** **Leadtime Inquiry**

Branch

Parent Item  Touring Bike, Red

Requested Quantity   Drawing Number

Quantity w/Shrink  Type of Bill

Revision Level  As of Date  Skip to Line

Records 1 - 10 Customize Grid

| <input type="checkbox"/> | Level | 2nd Item Number | Description           | Quantity | UM | F V |
|--------------------------|-------|-----------------|-----------------------|----------|----|-----|
| <input type="checkbox"/> | 1     | 2004            | Cro-Moly Frame        | 1.000000 | EA | ▲   |
| <input type="checkbox"/> | 2     | 9001            | 25 mm Cro-Moly Tubing | 0.001234 | CM |     |
| <input type="checkbox"/> | 1     | 2001            | Cro-Moly Frame, Red   | 1.000000 | EA |     |
| <input type="checkbox"/> | 2     | 2004            | Cro-Moly Frame        | 2.000000 | EA |     |
| <input type="checkbox"/> | 3     | 9001            | 25 mm Cro-Moly Tubing | 0.001234 | CM |     |
| <input type="checkbox"/> | 2     | 9001            | 25 mm Cro-Moly Tubing | 1.000000 | CM |     |
| <input type="checkbox"/> | 1     | 2001            | Cro-Moly Frame, Red   | 1.000000 | EA |     |
| <input type="checkbox"/> | 2     | 2004            | Cro-Moly Frame        | 2.000000 | EA | ▼   |

Bill of Material Multi Level Inquiry form

| Description | Glossary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Feat Plan % | <p>The percentage of demand for a specified feature based on projected production. For example, a company might produce 65% of their lubricant with high viscosity, and 35% with low viscosity, based on customer demand.</p> <p>The Material Planning system uses this percentage to accurately plan for a process's co-products and by-products. Enter percentages as whole numbers, for example, enter 5% as 5.0. The default value is 0%.</p>                                                                                                                                                                                                                                                                                                                                                                  |
| Is Cd       | <p>A code that indicates how the system issues each component in the bill of material from stock. In Shop Floor Management, it indicates how the system issues a part to a work order. Values are:</p> <p><i>I</i>: Manual issue</p> <p><i>F</i>: Floor stock (there is no issue)</p> <p><i>B</i>: Backflush (when the part is reported as complete)</p> <p><i>P</i>: Preflush (when the parts list is generated)</p> <p><i>U</i>: Super backflush (at the pay-point operation)</p> <p><i>S</i>: Sub-contract item (send to supplier)</p> <p><i>Blank</i>: Shippable end item</p> <p>You can issue a component in more than one way within a specific branch/plant by using different codes on the bill of material and the work order parts list. The bill of material code overrides the branch/plant value.</p> |

## CHAPTER 5

# Working with Sales Order History

This chapter provides an overview of sales order history and discusses how to:

- Run the Refresh Actuals program (R3465).
- Work with the Forecast Revisions program (R3460).

---

## Understanding Sales Order History

The system generates detail forecasts based on sales history data, current sales data, or both, that you copy from the Sales Order Detail File table (F4211) and the Sales Order History File table (F42119) into the Forecast File table (F3460). If you want the forecast to include current sales data, you must so specify in a processing option for the extraction program. When you copy the sales history, you specify a date range that is based on the request date of the sales order. The demand history data can be distorted, however, by unusually large or small values (spikes or outliers), data entry errors, or lost sales (sales orders that were canceled due to lack of inventory).

You should review the data in the date range that you specified to identify missing or inaccurate information. Then you can revise the sales order history to account for inconsistencies and distortions before you generate the forecast.

After you copy the sales order history into the Forecast File table (F3460), you should review the data for spikes, outliers, entry errors, or missing demand that might distort the forecast. You can then revise the sales order history manually to account for these inconsistencies before you generate the forecast.

---

## Running the Refresh Actuals Program (R3465)

This section provides an overview of the Refresh Actual program, lists prerequisites, and discusses how to:

- Set processing options for Refresh Actuals (R3465).
- Run Refresh Actuals (R3465).

## Understanding the Refresh Actuals Program

The system generates detail and summary forecasts that are based on data in the Forecast File table (F3460), Forecast Summary File table (F3400), or both. Use the Refresh Actuals program (R3465) to copy the sales order history (type AA) from the Sales Order History File table (F42119) to table F3460, table F3400 table, or both, based upon criteria that you specify.

This program lets you:

- Select a date range for the sales order history, current sales order information, or both.
- Select a version of the inclusion rules to determine which sales history to include.
- Generate monthly or weekly sales order histories.
- Generate a separate sales order history for a large customer.
- Generate summaries.
- Generate records with amounts, quantities, or both.

You do not need to clear table F3460 before you run this program. The system automatically deletes any records for the same:

- Period as the actual sales order histories to be generated.
- Items.
- Sales order history type.
- Branch/plant.

## Prerequisites

Before you complete the tasks in this section:

- Set up the Forecast Generation program (R34650).
- Update sales order history.

## Setting Processing Options for Refresh Actuals (R3465)

Sometimes you must *refresh* or update sales history information that will be used as the input to the forecast generation process.

Refresh Actuals (R3465) enables you to specify the following edits in sales history, before use in forecast generation:

- Specify forecast type.
- Specify the version of Supply/Demand Inclusion Rules program (P34004) to use.
- Specify whether the system will use weekly or monthly planning to create actuals.
- Specify whether the system creates separate records for large customers when creating actuals.
- Specify whether the system uses the Ship To address or the Sold To address upon which to base large customer summaries when creating actuals.
- Specify whether the system creates detail forecasts with quantities, amounts, or both.
- Specify whether the system uses both the Sales Order Detail File table (F4211) and the Sales Order History File table (F42119) when creating actuals, or uses only table F42119.
- Specify the fiscal date pattern in user defined code H00/DP that is used when creating actuals.
- Specify the beginning date from which the system processes records.
- Specify the ending date that the system uses when creating actuals.

The summary processing options let you specify how the system processes the following edits:

- Create summarized forecast records, either detail or both.

- Use summary codes.
- Retrieve address book category codes.

## Process

These processing options let you specify how the system performs the following edits when generating sales history:

- Use the default forecast type.
- Use the version of the Supply/Demand Inclusion Rules program.
- Use weekly or monthly planning.
- Create summary records.
- Use Ship To address.
- Use quantities and amounts.
- Include sales order detail.

### 1. Forecast Type

Use this processing option to specify the forecast type that the system uses when creating the forecast actuals. Forecast type is a user defined code (34/DF) that identifies the type of forecast to process. Enter the forecast type to use as the default value or select it from the Select User Define Code form. If you leave this field blank, the system creates actuals from AA forecast types.

### 2. Supply Demand Inclusion Rules

Use this processing option to specify the version of the Supply/Demand Inclusion Rules program that the system uses when extracting sales actuals. You must enter a version in this field before you can run the Extract Sales Order History program (R3465).

Versions control how the Supply/Demand Inclusion Rules program displays information. Therefore, you might need to set the processing options to specific versions to meet your needs.

### 3. Actuals Consolidation

Use this processing option to specify whether the system uses weekly or monthly planning when creating actuals. Values are:

*1:*The system uses weekly planning.

*Blank:*The system uses monthly planning.

### 4. Large Customer Summary

Use this processing option to specify whether the system creates summary records for large customers when creating actuals. Values are:

*1:*The system creates summary records for large customers.

*Blank:*The system does not create summary records.

### 5. Ship To or Sold To Address

Use this processing option to specify whether the system uses the Ship To address on which to base large customer summaries, or the Sold To address, when creating actuals. Values are:

*1:*The system uses the Ship To address.

*Blank:*The system uses the Sold To address.

### 6. Amount or Quantity

Use this processing option to specify whether the system creates detail forecasts with quantities, amounts, or both. Values are:

*1:*The system creates forecasts with only quantities.

*2:*The system creates forecasts with only amounts.

*Blank:*The system creates forecasts with both quantities and amounts.

## 7. Use Active Sales Orders

Use this processing option to specify whether the system uses both the Sales Order Detail table (F4211) and the Sales Order History table (F42119) when creating actuals, or uses only the history table. Values are:

*1:*The system uses both tables.

*Blank:*The system uses only the history table.

## Dates

These processing options let you specify the fiscal date pattern that the system uses, and the beginning and ending dates of the records that the system includes in the processing.

### 1. Fiscal Date Pattern

Use this processing option to specify the fiscal date pattern that the system uses when creating actuals. Fiscal date pattern is a user defined code (H00/DP) that identifies the fiscal date pattern. Enter a pattern to use as the default value or select it from the Select User Defined Code form.

### 2. Begin Extract Date

Use this processing option to specify the beginning date from which the system processes records. Enter the beginning date to use as the default value or select it from the Calendar. If you leave this field blank, the system uses the system date.

### 3. End Extract Date

Use this processing option to specify the ending date that the system uses when creating actuals. Enter the ending date to use as the default value or select it from the Calendar. Enter an ending date only if you want to include a specific time period.

## Summary

These processing options let you specify how the system processes the following edits:

- Create summarized forecast records.
- Use summary codes.
- Retrieve address book category codes.

### 1. Summary or Detail

Use this processing option to specify whether the system creates summarized forecast records, detail forecast records, or both. Values are:

*1:*The system creates both summarized and detail forecast records.

*2:*The system creates only summarized forecast records.

*Blank:*The system creates only detail forecast records.

### 2. Forecast Summary Code

Use this processing option to specify the summary code that the system uses to create summarized forecast records. Summary code is a user defined code (40/KV) that identifies the code to create summarized forecast records. Enter the code to use as the default value or select it from the Select User Define Code form.

### 3. Category Codes Address Book

Use this processing option to specify from where the system retrieves the address book category codes. Values are:

*I:* The system retrieves the address book number from the Forecast table (F3460).

*Blank:* The system uses the cost center to determine which address book number to use to retrieve the category codes.

## Interop

These processing options let you specify the default document type for the system to use for the purchase order, and whether to use before or after image processing.

- 1. Transaction Type** Use this processing option to specify the transaction type to which the system processes outbound interoperability transactions. Transaction type is a user defined code (00/TT) that identifies the type of transaction. Enter a type to use as the default value or select it from the Select User Define Code form.
- 2. Image Processing** Use this processing option to specify whether the system writes before or after image processing. Values are:
  - I:* The system writes before the images for the outbound change transaction are processed.
  - Blank:* The system writes after the images are processed.

## Running Refresh Actuals (R3465)

Run the Refresh Actuals (R3465) program.

---

## Working with the Forecast Revisions Program (R3460)

This section provides an overview of the Forecast Revisions program and discusses how to:

- Revise sales order history.
- Set processing options for Forecast Revisions (P3460).
- Run Forecast Revisions.

## Understanding the Forecast Revisions Program (R3460)

Forecast Revisions enables you to create, change, or delete a sales order history manually. You can:

- Review all entries in the Forecast File table (F3460).
- Revise the sales order history.
- Remove invalid sales history data, such as outliers or missing demand.
- Enter descriptive text for the sales order history, such as special sale or promotion information.

### Example: Revising Sales Order History

In this example, you run Refresh Actuals (R3465). The program identifies the actual quantities.

You use Forecast Revisions to associate the forecasted quantities with the forecasted amounts. The system reflects the changes made to a quantity in its corresponding amount and to an amount in its corresponding quantity. The system does so by retaining the same ratio that existed before the change. For example, when a change increases the quantity to 24, a quantity of 15 and an amount of 100 become a quantity of 24 and an amount of 160.

## Forms Used to Revise Sales Order History

| Form Name                 | Form ID | Navigation                                                                                                                    | Usage                                                                                                                                       |
|---------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Detail Forecast Revisions | W3460B  | Periodic Forecasting Operations (G3421),<br>Enter/Change Actuals<br><br>On the Work With Forecasts form, and select a record. | Revise sales order history.<br><br>To attach information to a forecast type, select the row and then select Attachments from the Form menu. |

## Revising Sales Order History

Access the Detail Forecast Revisions form.

### Work With Forecasts

Select Find Add Copy Close Form Row Tools

Item Number  
220

Unit Of Measure  
EA *Each*

Forecast Type  
BF *Best Simulated Forecast*

Branch/Plant  
M30

Touring Bike, Red

Skip to date  
\*

Records 1 - 10

Customize Grid

|                          | F<br>T | Request<br>Date | 2nd Item<br>Number | Branch<br>Plant | Custom<br>Number |
|--------------------------|--------|-----------------|--------------------|-----------------|------------------|
| <input type="checkbox"/> | BF     | 01/31/2005      | 220                |                 | M30              |
| <input type="checkbox"/> | BF     | 01/31/2005      | 220                |                 | M30              |
| <input type="checkbox"/> | BF     | 01/31/2005      | 220                |                 | M30              |
| <input type="checkbox"/> | BF     | 02/28/2005      | 220                |                 | M30              |
| <input type="checkbox"/> | BF     | 02/28/2005      | 220                |                 | M30              |
| <input type="checkbox"/> | BF     | 02/28/2005      | 220                |                 | M30              |
| <input type="checkbox"/> | BF     | 03/31/2005      | 220                |                 | M30              |
| <input type="checkbox"/> | BF     | 03/31/2005      | 220                |                 | M30              |
| <input type="checkbox"/> | BF     | 03/31/2005      | 220                |                 | M30              |
| <input type="checkbox"/> | BF     | 04/30/2005      | 220                |                 | M30              |

Detail Forecast Revisions form

| Description   | Glossary                                                                                                                                                                                                                                                     |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Branch/Plant  | Identifies a branch or plant.<br><br><b>Note.</b> You can enter numbers and characters in this field. The system right-justifies them (for example, C0123 appears as __C0123). You cannot locate business units for which you have no authority.             |
| Item Number   | A number that the system assigns to an item. It can be in short, long, or third item number format.                                                                                                                                                          |
| Forecast Type | A user defined code (34/DF) that indicates one of the following: <ul style="list-style-type: none"> <li>The forecasting method used to calculate the numbers displayed about the item.</li> <li>The actual historical information about the item.</li> </ul> |

| Description       | Glossary                                                                                    |
|-------------------|---------------------------------------------------------------------------------------------|
| Request Date      | The date that an item is scheduled to arrive or that an action is scheduled for completion. |
| Original Quantity | The quantity of units affected by this transaction.                                         |
| Original Amount   | The number of units multiplied by the unit price.                                           |

## Setting Processing Options for Forecast Revisions (P3460)

Processing options enable you to specify the default processing for programs and reports.

For programs, you can specify options such as the default values for specific transactions, whether fields appear on a form, and the version of the program that you want to run.

For reports, processing options enable you to specify the information that appears on reports. For example, you set a processing option to include the fiscal year or the number of aging days on a report.

Do not modify EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

### Defaults

Select the Defaults tab.

- 1. Default Forecast Type.** Forecast Type Forecast Type  
 A user defined code (34/DF) that indicates one of the following:
  - The forecasting method used to calculate the numbers displayed about the item
  - The actual historical information about the item
- 2. Enter a '1' to default header Forecast Type to grid records on Copy.** Default Forecast Type Default Forecast Type  
 An option that specifies the type of processing for an event.
- 3. Customer Self Service** This code indicates whether you are creating an order in standard order entry mode or Shopping Cart (or Self Service) mode. If you select Shopping Cart mode, you can select items from multiple applications before using Sales Order Entry (P4210) to create an order. You might use this feature if you are entering orders in a web environment. Values are:  
*Blank*: Standard mode  
*1*: Shopping Cart mode

### Interop

Select the Interop tab.

**1. Enter the Transaction Type for processing outbound interoperability transactions Type - Transaction**

The qualifier used to identify a specific type of transaction.

*Type:* Transaction

**2. Enter a '1' to write before images for outbound change transactions. If left blank, only after images will be written.**

Before Image Processing Before Image Processing

This flag controls image processing in interoperability transactions.

## Versions

Enter the version for each program. If left blank, version ZJDE0001 will be used.

**1. Forecast Online Simulation (P3461)**

Identifies a specific set of data selection and sequencing settings for the application. Versions may be named using any combination of alpha and numeric characters. Versions that begin with 'XJDE' or 'ZJDE' are set up by PeopleSoft.

**2. Forecast Price (P34007)**

Identifies a specific set of data selection and sequencing settings for the application. Versions may be named using any combination of alpha and numeric characters. Versions that begin with 'XJDE' or 'ZJDE' are set up by PeopleSoft.

## Running Forecast Revisions (R3460)

Run the Forecast Revisions (R3460) program.



## CHAPTER 6

# Working with Detail Forecasts

This chapter provides: an overview of detail forecasts and discusses how to create detail forecasts.

---

## Understanding Detail Forecasts

Detail forecasts are based on individual items. Use detail forecasts to project demand at the single-item level, according to each item's individual history.

Forecasts are based on sales data from the Sales Order History File table (F42119) and the Sales Order Detail File table (F4211). Before you generate forecasts, you use the Refresh Actuals program (R3465) to copy sales order history information from tables F42119 and the F4211 into the Forecast File table (F3460). This table also stores the generated forecasts.

You can generate detail forecasts or summaries of detail forecasts, based on data in table F3460. Data from your forecasts can then be revised.

The following graphic illustrates the sequence that you follow when you use the detail forecasting programs.

Graphic 718374 is missing

After you set up the actual sales history on which you plan to base your forecast, you can generate the detail forecast. You can then revise the forecast to account for any market trends or strategies that might make future demand deviate significantly from the actual sales history.

The system creates detail forecasts by applying multiple forecasting methods to past sales histories and generating a forecast that is based on the method which provides the most accurate prediction of future demand. The system can also calculate a forecast that is based on a method that you select.

When you generate a forecast for any method, including best fit, the system rounds off the forecast amounts and quantities to the nearest whole number.

When you create detail forecasts, the system:

- Extracts sales order history information from the Forecast File table (F3460).
- Calculates the forecasts by using methods that you select.
- Calculates the percent of accuracy (POA) or the mean absolute deviation (MAD) for each selected forecast method.
- Creates a simulated forecast for the months that you indicate in the processing option.
- Recommends the best fit forecast method.
- Creates the detail forecast in either dollars or units from the best fit forecast.

The system designates the extracted actual records as type AA and the best fit model as BF. These forecast type codes are not hard-coded, so you can specify your own codes. The system stores both types of records in table F3460.

When creating detail forecasts, the system enables you to:

- Specify the number of months of actual data to use to create the best fit.
- Forecast for individual large customers for all methods.
- Run the forecast in proof or final mode.
- Forecast up to five years into the future.
- Create zero forecasts, negative forecasts, or both.
- Run the forecast simulation interactively.

## Forecasts for Multiple Items

Use the Forecast Generation program (R34650) to create detail forecasts for multiple items. Review the processing options to select the values that are applicable for the program to use.

## Forecasts for a Single Item

Use the Forecast Online Simulation program (P3461) to create a detail forecast for a single item. After you run the simulation interactively, you can modify the simulated forecast and commit it to the Forecast File table (F3460).

Forecasting: detail: single item

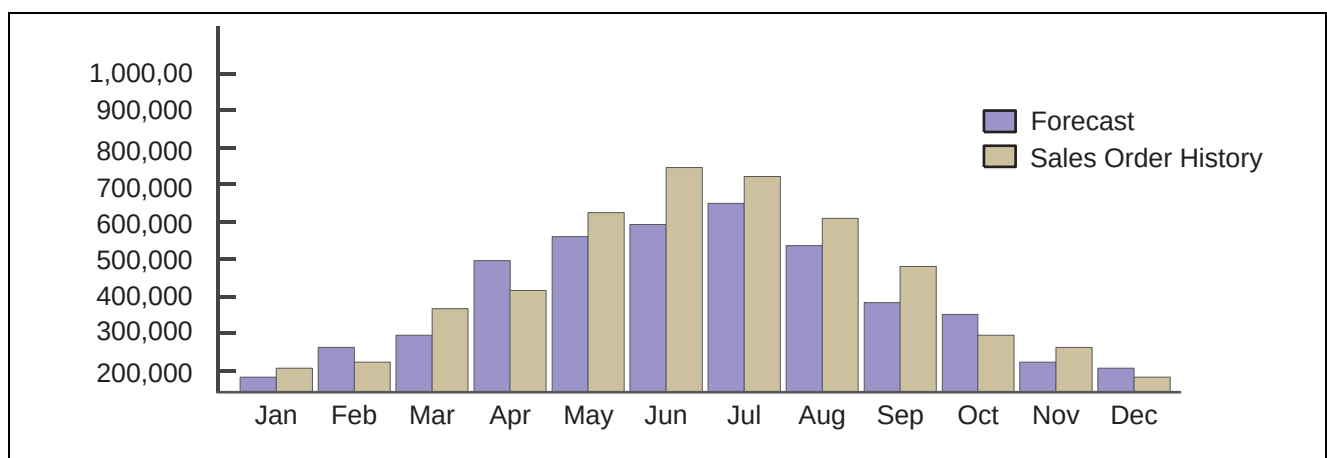
## Review of Detail Forecasts

Review forecasts to compare the actual sales to the detail forecast. The system shows the forecast values, and actual quantities or sales order extended price for an item for the specified year.

Detail mode lists all item numbers. Summary mode consolidates data by master planning family. Select the Summary option in the header area, and then select Find to review information in summary mode.

## Example: Comparing Forecast to Sales Order History

Example of a comparison between a forecast and sales order history



Comparing Forecast to Sales Order History

You can review information by planner, master planning family, or both. You can then change the forecast type to compare different forecasts to the actual demand. You can also display all of the information that is stored in the Forecast File table (F3460), select whether to review quantities or amounts, and view the data in summary or detail mode.

## Revision of Detail Forecasts

After you generate and review a forecast, you can revise the forecast to account for changes in consumer trends, market conditions, competitors' activities, your own marketing strategies, and so on. When you revise a forecast, you can change information in an existing forecast manually, add or delete a forecast, and enter descriptive text for the forecast.

You can access the forecasts that you want to revise by item number, branch/plant, forecast type, or any combination of these elements. You can specify a beginning request date to limit the number of periods.

As you revise the forecast, be aware that the following combination must be unique for each item number and branch record:

- Forecast type
- Request date
- Customer number

For example, if two records have the same request date and customer number, they must have different forecast types.

## Revision of Forecast Prices

You can enter prices for unique combinations of item number, branch/plant, forecast type, and customer number. All these values are stored in the Forecast Prices table (F34007), and are used to extend the amount or quantity on a detail forecast record in the Forecast File table (F3460) and the Forecast Summary File table (F3400). You can roll up these prices to the higher-level items in the forecast hierarchy by using the Forecast Price Rollup program (R34620).

If the forecast is stated in terms of quantity, you can use table F34007 to extend the forecast in amounts, for example, as a projection of revenue. In the case of a sales forecast, the forecast might already be stated in terms of revenue. In this case, you might want to convert the forecast into quantities to support production planning.

## Forecast Price Rollup

Use the Forecast Price Rollup program (R34620) to roll up the prices that you entered on the Forecast Pricing Revisions form to the higher-level items in the forecast hierarchy. This program uses the manually entered prices to extend the amount or quantity on a detail record and rolls up the prices through the forecasting hierarchy.

---

# Creating Detail Forecasts

This section provides an overview of detail forecasts and discusses how to:

- Create forecasts for multiple items.
- Set processing options for Forecast Generation (R34650).
- Create forecasts for a single item.

- Set processing options for Forecast Online Simulation.
- Review Detail Forecasts.
- Set processing options for Forecast Review (P34201).
- Revise Detail Forecasts.
- Revise Forecast Prices.
- Generate a Forecast Price Rollup.
- Set up processing options for Forecast Price Rollup (P34620).

## Forms Used to Create Detail Forecasts

| Form Name                  | Form ID | Navigation                                                                                                                                                                     | Usage                                                                                                                                              |
|----------------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Forecast Calculations      | W3461A  | Periodic Forecasting Operations (G3421), Online Simulation<br><br>On Work With Forecast Simulations, complete the Item Number, Actual Type, and Branch fields and select Find. | Create forecasts for a single item.<br><br>Modify the simulated forecasts to commit changes to the Forecast File table (F3460).                    |
| Work With Forecast Review  | W34201A | Periodic Forecasting Operations (G3421), Review Forecast<br><br>On Work With Forecast Review, locate a detail forecast.                                                        | Review detail forecasts.                                                                                                                           |
| Detail Forecast Revisions  | W3460B  | Periodic Forecasting Operations (G3421), Enter/Change Forecast<br><br>On Work With Forecasts, locate a forecast to revise.                                                     | Revise detail forecasts.<br><br>To associate text or drawings with a forecast type, select the row and then select Attachments from the Form menu. |
| Forecast Pricing Revisions | W34007D | Periodic Forecasting Operations (G3421), Enter/Change Forecast Price (P34007)<br><br>On Work With Forecast Prices, locate a forecast and select.                               | Revise forecast prices.                                                                                                                            |

## Creating Forecasts for Multiple Items

To create forecasts for multiple items, select Forecast Generation (R34650)..

## Setting Processing Options for Forecast Generation (R34650)

Processing options enable you to specify the default processing for programs and reports.

For programs, you can specify options such as the default values for specific transactions, whether fields appear on a form, and the version of the program that you want to run.

For reports, processing options enable you to specify the information that appears on reports. For example, you set a processing option to include the fiscal year or the number of aging days on a report.

Do not modify EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

## Methods 1 - 3

These processing options specify which forecast types that the system uses when calculating the best fit forecast. You can also specify whether the system creates detail forecasts for the selected forecast method.

Enter *1* to use the forecast method when calculating the best fit. The system does not create detail forecasts for the method. If you enter zero before the forecast, for example, 01 for Method 1 - Percent Over Last Year, the system uses the forecast method when calculating the best fit and creates the forecast method in the Forecast File table (F3460). If you leave the field blank, the system does not use the forecast method when calculating the best fit and does not create detail forecasts for the method.

A period is defined as a week or month, depending on the pattern that is selected from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

- |                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Percent Over Last Year</b>            | <p>Use this processing option to specify which type of forecast to run. This forecast method uses the Percent Over Last Year formula to multiply each forecast period by a percentage increase or decrease that you specify in a processing option. This method requires the periods for the best fit plus one year of sales history. This method is useful for seasonal items with growth or decline. Values are:</p> <p><i>Blank:</i>The system does not use this method.</p> <p><i>1:</i>The system calculates the best fit forecast.</p> <p><i>01:</i>The system uses the Percent Over Last Year formula to create detail forecasts.</p>                                                                                                                                                                                                             |
| <b>2. Percent</b>                           | <p>Use this processing option to specify the percent of increase or decrease used to multiply by the sales history from last year. For example, type 110 for a 10 percent increase or type 97 for a 3 percent decrease. Values are any percent amount, however, the amount cannot be a negative amount. Enter an amount to use or select it from the Calculator.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>3. Calculated Percent Over Last Year</b> | <p>Use this processing option to specify which type to run. This forecast method uses the Calculated Percent Over Last Year formula to compare the periods specified of past sales to the same periods of past sales of the previous year. The system determines a percentage increase or decrease, then multiplies each period by the percentage to determine the forecast. This method requires the periods of sales order history indicated in the processing option plus one year of sales history. This method is useful for short-term demand forecasts of seasonal items with growth or decline. Values are:</p> <p><i>Blank:</i>The system does not use this method.</p> <p><i>1:</i>The system calculates the best fit forecast.</p> <p><i>02:</i>The system uses the Calculated Percent Over Last Year formula to create detail forecasts.</p> |

- 4. Number of Periods** Use this processing option to specify the number of periods to include when calculating the percentage increase or decrease. Enter a number to use or select a number from the Calculator.
- 5. Last Year to This Year** Use this processing option to specify which type of forecast to run. This forecast method uses Last Year to This Year formula which uses last year's sales for the following year's forecast. This method uses the periods best fit plus one year of sales order history. This method is useful for mature products with level demand or seasonal demand without a trend. Values are:
- Blank*: The system does not use this method.
- 1*: The system calculates the best fit forecast.
- 03*: The system uses the Last Year to This Year formula to create detail forecasts.

## Methods 4 - 6

These processing options specify which forecast types that the system uses when calculating the best fit. You can also specify whether the system creates detail forecasts for the selected forecast method.

Enter *1* to use the forecast method when calculating the best fit. The system does not create detail forecasts for the method. If you enter zero before the forecast method: for example, 01 for Method 1 - Percent Over Last Year, the system uses the forecast method when calculating the best fit and creates the forecast method in the Forecast File table (F3460). If you leave the field blank, the system does not use the forecast method when calculating the best fit and does not create detail forecasts for the method.

A period is defined as a week or month, depending on the pattern that is selected from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

- 1. Moving Average** Use this processing option to specify which type of forecast to run. This forecast method uses the Moving Average formula to average the months that you indicate in the processing option to project the next period. This method uses the periods best fit from the processing option plus the number of periods of sales order history from the processing option. You should have the system recalculate this forecast monthly or at least quarterly to reflect changing demand level. This method is useful for mature products without a trend. Values are:
- Blank*: The system does not use this method.
- 1*: The system calculates the best fit forecast.
- 04*: The system uses the Moving Average formula to create detail forecasts.
- 2. Number of Periods** Use this processing option to specify the number of periods to include in the average. Enter a number to use or select a number from the Calculator.
- 3. Linear Approximation** Use this processing option to specify which type of forecast to run. This forecast method uses the Linear Approximation formula to compute a trend from the periods of sales order history indicated in the processing options and projects this trend to the forecast. You should have the system recalculate the trend monthly to detect changes in trends. This method requires periods best fit plus the number of periods that you indicate in the processing option of sales order history. This method is useful for new products or products with consistent positive or negative trends that are not due to seasonal fluctuations. Values are:

*Blank:*The system does not use this method.

*1:*The system calculates the best fit forecast.

*05:*The system uses the Linear Approximation formula to create detail forecasts.

#### 4. Number of Periods

Use this processing option to specify the number of periods to include in the linear approximation ratio. Enter the number to use or select a number from the Calculator.

#### 5. Least Squares Regression

Use this processing option to specify which type of forecast to run. This forecast method derives an equation describing a straight-line relationship between the historical sales data and the passage of time. Least Squares Regression (LSR) fits a line to the selected range of data such that the sum of the squares of the differences between the actual sales data points and the regression line are minimized. The forecast is a projection of this straight line into the future. This method is useful when there is a linear trend in the data. This method requires sales data history for the period represented by the number of periods best fit plus the number of historical data periods specified in the processing options. The minimum requirement is two historical data points. Values are:

*Blank:* The system does not use this method.

*1:*The system calculates the best fit forecast.

*06:*The system uses the Least Squares Regression formula to create detail forecasts.

#### 6. Number of Periods

Use this processing option to specify the number of periods to include in the regression. Enter the number to use or select a number from the Calculator.

### Methods 7 - 8

These processing options let you specify which forecast types that the system uses when calculating the best fit. You can also specify whether the system creates detail forecasts for the selected forecast method.

Enter *1* to use the forecast method when calculating the best fit. The system does not create detail forecasts for the method. If you enter zero before the forecast method, for example, 01 for Method 1 - Percent Over Last Year, the system uses the forecast method when calculating the best fit and creates the forecast method in the Forecast File table (F3460). If you leave the field blank, the system does not use the forecast method when calculating the best fit and does not create detail forecasts for the method.

A period is defined as a week or month, depending on the pattern that is selected from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

#### 1. Second Degree Approximation

Use this processing option to specify which type of forecast to run. This method uses the Second Degree Approximation formula to plot a curve based on the number of periods of sales history indicated in the processing options to project the forecast. This method adds the periods best fit and the number of periods, and then multiplies by three. You indicate the number of periods in the processing option of sales order history. This method is not useful for long-term forecasts. Values are:

*Blank:*The system does not use this method.

*1:*The system calculates the best fit forecast.

07: The system uses the Second Degree Approximation formula to create detail forecasts.

## 2. Number of Periods

Use this processing option to specify the number of periods to include in the approximation. Enter the number to use or select a number from the Calculator.

## 3. Flexible Method

Use this processing option to specify which type of forecast to run. This forecast method specifies the periods best fit block of sales order history starting n months prior and a percentage increase or decrease with which to modify it. This method is similar to Method 1 - Percent Over Last Year, except that you can specify the number of periods that you use as the base. Depending on what you select as n, this method requires periods best fit plus the number of periods indicated in the processing options of sales data. This method is useful for a planned trend. Values are:

*Blank:* The system does not use this method.

*1:* The system calculates the best fit forecast.

08: The system uses the Flexible method to create detail forecasts.

## 4. Number of Periods

Use this processing option to specify the number of periods before the best fit that you want to include in the calculation. Enter the number to use or select a number from the Calculator.

## 5. Percent Over Prior Period

Use this processing option to specify the percent of increase or decrease for the system to use. For example, type 110 for a 10 percent increase or type 97 for a 3 percent decrease. You can enter any percent amount, however, the amount cannot be a negative amount.

## Method 9

These processing options let you specify which forecast types that the system uses when calculating the best fit. You can also specify whether the system creates detail forecasts for the selected forecast method.

Enter *1* to have the system use the forecast method when calculating the best fit. The system does not create detail forecasts for the method. If you enter zero before the forecast method, for example, 01 for Method 1 - Percent Over Last Year, the system uses the forecast method when calculating the best fit and creates the forecast method in the Forecast File table (F3460). If you leave the field blank, the system does not use the forecast method when calculating the best fit and does not create detail forecasts for the method.

The total of all the weights that are used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods.

A period is defined as a week or month, depending on the pattern that is selected from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

## 1. Weighted Moving Average

Use this processing option to specify which type of forecast to use. The Weighted Moving Average forecast formula is similar to Method 4 - Moving Average formula, because it averages the previous number of months of sales history indicated in the processing options to project the next month's sales history. However, with this formula you can assign weights for each of the prior periods in a processing option. This method requires the number of weighted periods selected plus periods best fit data. Similar to Moving Average, this method lags demand trends, so this method is not recommended for products with strong trends or seasonality. This method is useful for mature products with demand that is relatively level. Values are:

*Blank:* The system does not use this forecast.

*1:* The system calculates the best fit forecast.

*09:* The system uses the Weighted Moving Average formula to create detail forecasts.

- |                                 |                                                                                                                                                                                     |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2. One Period Prior</b>      | Use this processing option to specify the weight to assign to one period prior for calculating a moving average. Enter the number to use or select it from the Calculator.          |
| <b>3. Two Periods Prior</b>     | Use this processing option to specify the weight to assign to two periods prior for calculating a moving average. Enter a number to use or select it from the Calculator.           |
| <b>4. Three Periods Prior</b>   | Use this processing option to specify the weight to assign to three periods prior for calculating a moving average. Enter the number to use or select it from the Calculator.       |
| <b>5. Four Periods Prior</b>    | Use this processing option to specify the weight to assign to four periods prior for calculating a moving average. Enter the number to use or select it from the Calculator.        |
| <b>6. Five Periods Prior</b>    | Use this processing option to specify the weight to assign to five periods prior for calculating a moving average. Enter the number to use or select a number from the Calculator.  |
| <b>7. Six Periods Prior</b>     | Use this processing option to specify the weight to assign to six periods prior for calculating a moving average. Enter the number to use or select a number from the Calculator.   |
| <b>8. Seven Periods Prior</b>   | Use this processing option to specify the weight to assign to seven periods prior for calculating a moving average. Enter a number to use or select a number from the Calculator.   |
| <b>9. Eight Periods Prior</b>   | Use this processing option to specify the weight to assign to eight periods prior for calculating a moving average. Enter the number to use or select a number from the Calculator. |
| <b>10. Nine Periods Prior</b>   | Use this processing option to specify the weight to assign to nine periods prior for calculating a moving average. Enter the number to use or select a number from the Calculator.  |
| <b>11. Ten Periods Prior</b>    | Use this processing option to specify the weight to assign to 10 periods prior for calculating a moving average. Enter the number to use or select a number from the Calculator.    |
| <b>12. Eleven Periods Prior</b> | Use this processing option to specify the weight to assign to 11 periods prior for calculating a moving average. Enter the number to use or select a number from the Calculator.    |
| <b>13. Twelve Periods Prior</b> | Use this processing option to specify the weight to assign to 12 periods prior for calculating a moving average. Enter the number to use or select a number from the Calculator.    |
| <b>14. Periods to Include</b>   | Use this processing option to specify the number of periods to include. Enter the number to use or select a number from the Calculator.                                             |

## Methods 10 - 11

These processing options let you specify which forecast types that the system uses when calculating the best fit. You can also specify whether the system creates detail forecasts for the selected forecast method.

Enter *1* to use the forecast method when calculating the best fit. No detail forecasts are created for the method. If you enter the method number, for example, 11 for Method 11 - Exponential Smoothing, the system uses the forecast method when calculating the best fit and creates the forecast method in the Forecast File table (F3460). If the field is blank, the system does not use the forecast method when calculating the best fit; no detail forecasts are created for the method

A period is defined as a week or month, depending on the pattern that is selected from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

### 1. Linear Smoothing

Use this processing option to specify which type of forecast to run. This forecast method calculates a weighted average of past sales data. You can specify the number of periods of sales order history to use in the calculation (from 1 to 12) in a processing option. The system uses a mathematical progression to weigh data in the range from the first (least weight) to the final (most weight). Then, the system projects this information for each period in the forecast. This method requires the periods best fit plus the number of periods of sales order history from the processing option. Values are:

*Blank*: The system does not use this method.

*1*: The system calculates the best fit forecast.

*10*: The system uses the Linear Smoothing method to create detail forecasts.

### 2. Number of Periods

Use this processing option to specify the number of periods to include in the smoothing average. Enter the number to use or select a number from the Calculator.

### 3. Exponential Smoothing

Use this processing option to specify which type of forecast to run. This forecast method uses one equation to calculate a smoothed average. This becomes an estimate representing the general level of sales over the selected historical range. This method is useful when there is no linear trend in the data. This method requires sales data history for the time period represented by the number of periods best fit plus the number of historical data periods specified in the processing options. The minimum requirement is two historical data periods. Values are:

*Blank*: The system does not use this method.

*1*: The system calculates the best fit forecast.

*11*: The system uses the Exponential Smoothing method to create detail forecasts.

### 4. Number of Periods

Use this processing option to specify the number of periods to include in the smoothing average. Enter the number to use or select a number from the Calculator.

### 5. Alpha Factor

Use this processing option to specify the alpha factor, a smoothing constant, the system uses to calculate the smoothed average for the general level or magnitude of sales. You can enter any amount, including decimals, from zero to one.

## Method 12

These processing options let you specify which forecast types that the system uses when calculating the best fit. You can also specify whether the system creates detail forecasts for the selected forecast method.

Enter *1* to use the forecast method when calculating the best fit. No detail forecasts are created for the method. If you enter the method number before the forecast method, for example 12 for Method 12 - Exponential Smoothing With Trend and Seasonality, the system uses the forecast method when calculating the best fit and creates the forecast method in the Forecast File table (F3460). If the field is blank, the system does not use the forecast method when calculating the best fit; no detail forecasts are created for the method.

A period is defined as a week or month, depending on the pattern that is selected from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

### 1. Exponential Smoothing with Trend and Seasonality

Use this processing option to specify which type of forecast to run. This forecast method calculates a trend, a seasonal index, and an exponentially smoothed average from the sales order history. The system then applies a projection of the trend to the forecast and adjusts for the seasonal index.

This method requires months best fit plus two years of sales data and is useful for items that have both trend and seasonality in the forecast. Use the processing options to enter the alpha and beta factor rather than have the system calculate them. Values are:

*Blank*: The system does not use this method.

*1*: The system calculates the best fit forecast.

*12*: The system uses the Exponential Smoothing with T&S method to create detail forecasts.

### 2. Alpha Factor

Use this processing option to specify the alpha factor, a smoothing constant, the system uses to calculate the smoothed average for the general level or magnitude of sales. You can enter any amount, including decimals, from zero to one.

### 3. Beta Factor

Use this processing option to specify the beta factor, a smoothing constant, the system uses to calculate the smoothed average for the trend component of the forecast. You can enter any amount, including decimals, from zero to one.

### 4. Seasonality

Use this processing option to specify whether the system includes seasonality in the calculation. Values are:

*0*: The system does not include seasonality.

*1*: The system includes seasonality.

*Blank*: The system does not include seasonality.

## Defaults

These processing options let you specify the defaults that the system uses to calculate forecasts. The system extracts actual values from Sales History and stores the forecasts that are generated in the Forecast File table (F3460). You can define your own forecast types for Actuals (AA) and best fit (BF).

### 1. Actuals Forecast Type

Use this processing option to specify the forecast type that identifies the sales order history used as the basis for the forecast calculations, or Actuals. Forecast type is a user defined code (34/DF) that identifies the type of forecast

to run. Enter the forecast type to use as the default value or select it from the Select User Define Code form.

## 2. Best Fit Forecast Type

Use this processing option to specify the forecast type that is generated as a result of the best fit calculation. Forecast type is a user defined code (34/DF) that identifies the type of forecast to run. Enter the forecast type to use as the default value or select it from the Select User Define Code form.

## Process

These processing options let you specify whether the system:

- Runs the Forecast Generation program (R34650) in proof or final mode.
- Creates forecasts for large customers.
- Creates weekly or monthly forecasts.

In addition, you use the processing options to specify:

- The start date, length, and data used when the system creates forecasts.
- How the system calculates the best fit forecast.

The system applies the selected forecasting methods to past sales order history and compares the forecast simulation to the actual history. When you generate a forecast, the system compares actual sales order histories to forecasts for the months or weeks that you indicate in the processing option, and computes how accurately each of the selected forecasting methods would have predicted sales. Then the system recommends the most accurate forecast as the best fit.

Mean Absolute Deviation (MAD) is the mean of the absolute values of the deviations between actual and forecast data. MAD is a measure of the average magnitude of errors to expect, given a forecasting method and data history. Because absolute values are used in the calculation, positive errors do not cancel out negative errors. When comparing several forecasting methods, the one with the smallest MAD has shown to be the most reliable for that product for that holdout period.

Percent of Accuracy (POA) is a measure of forecast bias. When forecasts are consistently too high, inventories accumulate and inventory costs rise. When forecasts are consistently too low, inventories are consumed and customer service declines. A forecast that is ten units too low, then eight units too high, then two units too high is an unbiased forecast. The positive error of ten is canceled by negative errors of eight and two.

### 1. Mode

Use this processing option to specify whether the system runs in proof or final mode. Values are:

*Blank:* The system runs in proof mode, creating a simulation report.

*1:* The system runs in final mode, creating forecast records.

### 2. Large Customers

Use this processing option to specify whether to create forecasts for large customers. Based on the Customer Master table (F0301), if the ABC code is set to A and this option is set to 1 the system creates separate forecasts for large customers. Values are:

*Blank:* The system does not create large customer forecasts.

*1:* The system creates large customer forecasts.

### 3. Weekly Forecasts

Use this processing option to specify weekly or monthly forecasts. For weekly forecasts, use fiscal date patterns with 54 periods. For monthly forecasts, use fiscal date patterns with 14 periods. Values are:

*Blank:*The system creates monthly forecasts.

*I:*The system creates weekly forecasts.

#### 4. Start Date

Use this processing option to specify the date on which the system starts the forecasts. Enter a date to use or select a date from the Calendar. If you leave this field blank, the system uses the system date.

#### 5. Forecast Length

Use this processing option to specify the number of periods to forecast. You must have previously established fiscal date patterns for the forecasted periods. If you leave this field blank, the system uses 3.

#### 6. Actual Data

Use this processing option to specify the number of periods of actual data that the system uses to calculate the best fit forecast. If you leave this field blank, the system uses 3.

The system applies the selected forecasting methods to past sales order history and compares the forecast simulation to the actual history. When you generate a forecast, the system compares actual sales order histories to forecasts for the months or weeks you indicate in the processing option and computes how accurately each of the selected forecasting methods would have predicted sales. Then, the system recommends the most accurate forecast as the best fit.

#### 7. Mean Absolute Deviation

Use this processing option to specify whether the system uses the Mean Absolute Deviation formula or the Percent of Accuracy formula to calculate the best fit forecast. Values are:

*Blank:*The system uses the Percent of Accuracy formula.

*I:*The system uses the Mean Absolute Deviation formula.

#### 8. Amounts or Quantity

Use this processing option to specify whether the system calculates the best fit forecast using amounts or quantities. If you specify to use amounts, you must also extract sales history using amounts. This also affects forecast pricing. Values are:

*Blank:*The system uses quantities.

*I:*The system uses amounts.

#### 9. Fiscal Date Pattern

Use this processing option to specify the fiscal date pattern type to use for the forecast calculations. When generating weekly forecasts, the fiscal date pattern defined here must be set up for 52 periods.

#### 10. Negative Values

Use this processing option to specify whether the system displays negative values. Values are:

*Blank:*The system substitutes a zero value for all negative values.

*I:*The system displays negative values.

### Interoperability

This processing option lets you specify the transaction type that the system uses for interoperability.

#### 1. Transaction Type

Use this processing option to specify the transaction type used for interoperability. Values are:

*Blank:*The system does not create outbound forecasts.

*JDEFC:*The system creates outbound forecasts.

## Creating Forecasts for a Single Item

Access the Forecast Calculations form.

### Actual Type

A user defined code that indicates one of the following:

1. The forecasting method used to calculate the numbers displayed about the item;
2. The actual historical information about the item.

## Setting Processing Options for Forecast Online Simulation (P3461)

Processing options enable you to specify the default processing for programs and reports.

For programs, you can specify options such as the default values for specific transactions, whether fields appear on a form, and the version of the program that you want to run.

For reports, processing options enable you to specify the information that appears on reports. For example, you set a processing option to include the fiscal year or the number of aging days on a report.

Do not modify EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

### Method 1- 3

Enter a / or a Forecast Type next to the Method desired.

#### 1. Percent Over Last Year

A user defined code (34/DF) that indicates one of the following:

- The forecasting method used to calculate the numbers displayed about the item
- The actual historical information about the item

#### Percent

Results in a calculation.

---

**Note.** Enter the percent increase over last year (such as 110 for a 10 percent increase, 97 for a 3 percent decrease).

---

#### 2. Calculated Percent Over Last Year

Forecast Method 2 (TYPF2)

**Enter the number of periods to include in the percentage.**

The number of periods for which the system generates forecasts. If you leave this field blank, the system uses three periods. The forecasted periods must already have fiscal date patterns established.

#### 3. Last Year to This Year

Forecast Method 3 (TYPF3)

### Method 4 - 6

Enter a Forecast Type next to the Method desired.

#### 4. Moving Average

Forecast Method 4 (TYPF4)

**Enter the number of periods to include in the average.**

The number of periods of actual data the system uses to calculate the best fit forecast. If you leave this field blank, the system uses three periods. The system determines the best fit forecast by applying the selected forecasting methods to past sales order history and comparing the forecast simulation to the actual history. When you generate a forecast, the system compares the actual sales order histories to forecasts for the months or weeks you indicate in the processing option and computes how accurately each of the selected forecasting methods would have predicted sales. The system then recommends the most accurate forecast as the best fit.

## **5. Linear Approximation**

Forecast Method 5 (TYPF5)

**Enter the number of periods to include in the ratio.**

The number of periods of actual data the system uses to calculate the best fit forecast. If you leave this field blank, the system uses three periods.

The system determines the best fit forecast by applying the selected forecasting methods to past sales order history and comparing the forecast simulation to the actual history. When you generate a forecast, the system compares the actual sales order histories to forecasts for the months or weeks you indicate in the processing option and computes how accurately each of the selected forecasting methods would have predicted sales. The system then recommends the most accurate forecast as the best fit.

## **6. Least Squares Regression**

Forecast Method 11 (TYPF11)

**Enter the number of periods to include in the regression.**

Number Of Periods 04 (NUMP4)

## **Method 7- 8**

Enter a Forecast Type next to the Method desired.

## **7. Second Degree Approximation**

Forecast Method 6 (TYPF6)

**Enter the number of periods.**

Number Of Periods 08 (NUMP8)

## **8. Flexible Method (Percent over N periods prior)**

Forecast Method 7 (TYPF7)

**Enter the number of periods prior.**

Number Of Periods 05 (NUMP5)

**Enter the percent over the prior period (such as 110 for a 10% increase, 97 for a 3% decrease).**

Event point for Math Numeric.

## **Method 9**

Enter a Forecast Type next to the Method desired.

**9. Weighted Moving Average**

Forecast Method 8 (TYPF8)

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**Note.** The weights must add up to 100 (for example 60, 30, and 10)
 

---

**Weight for one period prior**

Moving Average Weight 1 (WGHT1)

**Weight for two periods prior**

Moving Average Weight 2 (WGHT2)

**Weight for three periods prior**

Moving Average Weight 3 (WGHT3)

**Weight for four periods prior**

Moving Average Weight 4 (WGHT4)

**Weight for five periods prior**

Moving Average Weight 5 (WGHT5)

**Weight for six periods prior**

Moving Average Weight 6 (WGHT6)

**Weight for seven periods prior**

Moving Average Weight 7 (WGHT7)

**Weight for nine periods prior**

Moving Average Weight 8 (WGHT8)

**Weight for nine periods prior**

Moving Average Weight 9 (WGHT9)

**Weight for ten periods prior**

Moving Average Weight 10 (WGHT10)

**Weight for eleven periods prior**

Moving Average Weight 11 (WGHT11)

**Weight for twelve periods prior**

Moving Average Weight 12 (WGHT12)

---

**Note.** If no weight is entered for a period within the number of periods specified, a weight of zero will be used for that period. Weights entered for periods greater than the number of periods specified will not be used.
 

---

**Enter the number of periods to include.**

Number Of Periods 10 (NUMP10)

**Method 10-11**

Enter a Forecast Type next to the Method desired.

**10. Linear Smoothing**

Forecast Method 9 (TYPF9)

**Enter the number of periods to include in smoothing average.**

Number Of Periods 06 (NUMP6)

**11. Exponential Smoothing**

Forecast Method 12 (TYPF12)

**Enter the number of periods to include in the smoothing average.**

Number Of Periods 07 (NUMP7)

**Enter the Alpha factor. If zero it will be calculated.**

Event point for Math Numeric.

## Method 12

Enter a Forecast Type next to the Method desired.

**12. Exponential Smoothing with Trend and Seasonality factors**

Forecast Method 10 (TYPF10)

**Enter the Alpha factor. If zero it will be calculated.**

Event point for Math Numeric.

**Enter the Beta factor. If zero it will be calculated.**

Event point for Math Numeric.

**Enter a "1" to include seasonality in the calculation. If blank seasonality will not be used.**

Everest event point processing flag 04.

## Process 1

Select the Process 1 tab.

**1. Enter the Forecast Type to use when creating the Best Fit Forecast.**

Forecast Type 2 (TYPFF)

**2. Enter a "1" to create summary records for large customers (ABC = type).**

An option that specifies the type of processing for an event.

**3. Enter a "1" to specify weekly forecasts. Blank defaults to monthly.**

An option that specifies the type of processing for an event.

**4. Enter the date to start forecasts. Default of today's date if left blank.**

The date that an item is scheduled to arrive or that an action is scheduled for completion.

**5. Enter Number of periods to forecast. Default to 3 periods if blank.**

The quantity of units affected by this transaction.

**6. Enter the number of periods of actual data to be used to calculate best fit forecast. If left blank 3 periods of data will be used.**

A value that represents the available quantity, which might consist of the on-hand balance minus commitments, reservations, and backorders. You enter this value in the Branch/Plant Constants program (P41001).

## Process 2

Select the Process 2 tab.

**7. Enter a “1” to calculate Best Fit forecast using Mean Absolute Deviation. Blank will calculate the Best Fit using Percent of Accuracy.**

A flag that indicates whether automatic spell check is turned on.

**8. Enter a “1” to forecast using amounts. Default of blank will forecast quantities.**

A flag that indicates that data is case sensitive.

**9. Enter the Fiscal Date Pattern Type to use for forecast dating.**

A code that identifies date patterns. You can use one of 15 codes. You must set up special codes (letters A through N) for 4-4-5, 13-period accounting, or any other date pattern unique to your environment. An R, the default, identifies a regular calendar pattern.

**10. Enter a “1” to enable negative values to be written. If left blank, negative values will be written as zeroes.**

An option that specifies the type of processing for an event.

## Versions

Enter the version for each program. If left blank, version ZJDE0001 will be used.

**1. Forecast Review by Type (P34300)**

Identifies a specific set of data selection and sequencing settings for the application. Versions may be named using any combination of alpha and numeric characters. Versions that begin with 'XJDE' or 'ZJDE' are set up by PeopleSoft

## Reviewing Detail Forecasts

Access the Work With Forecast Review form.

**YR**

A number that identifies the year that the system uses for the transaction.

**Planner Number**

The address number of the material planner for this item.

**Master Planning Family**

A user defined code (41/P4) that represents an item property type or classification, such as commodity type or planning family. The system uses this code to sort and process like items.

This field is one of six classification categories available primarily for purchasing purposes.

**Forecast Quantity**

The quantity of units forecasted for production during a planning period.

**Actual Quantity**

The quantity of units affected by this transaction.

**Qty %**

A number that represents the percent of the forecast that has been consumed by the actual sales.

|                        |                                                                   |
|------------------------|-------------------------------------------------------------------|
| <b>Forecast Amount</b> | The current amount of the forecasted units for a planning period. |
| <b>Actual Amount</b>   | The number of units multiplied by the unit price.                 |

## Setting Processing Options for Forecast Review (P34201)

Processing options enable you to specify the default processing for programs and reports.

For programs, you can specify options such as the default values for specific transactions, whether fields appear on a form, and the version of the program that you want to run.

For reports, processing options enable you to specify the information that appears on reports. For example, you set a processing option to include the fiscal year or the number of aging days on a report.

Do not modify EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

### Defaults

Select the Defaults tab.

- |                                             |                                                                                                                                                                                                                                                                       |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Enter the default Forecast Type</b>   | <p>A user defined code (34/DF) that indicates one of the following:</p> <ul style="list-style-type: none"> <li>• The forecasting method used to calculate the numbers displayed about the item</li> <li>• The actual historical information about the item</li> </ul> |
| <b>2. Enter the default type for Actual</b> | A generic field that is used as a work field.                                                                                                                                                                                                                         |

### Versions

Select the Versions tab.

|                                                                                          |                               |
|------------------------------------------------------------------------------------------|-------------------------------|
| <b>Enter the version for each program. If left blank, version ZJDE0001 will be used.</b> | Enter the version to be used. |
|------------------------------------------------------------------------------------------|-------------------------------|

- |                                      |                                                                                                                                                                                                                                             |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Forecast Revisions (P3460)</b> | Identifies a specific set of data selection and sequencing settings for the application. Versions may be named using any combination of alpha and numeric characters. Versions that begin with 'XJDE' or 'ZJDE' are set up by J.D. Edwards. |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Revising Detail Forecasts

Access the Detail Forecast Revisions form.

|                        |                                                                                                                                    |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Unit Of Measure</b> | A user defined code (00/UM) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box). |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------|

## Revising Forecast Prices

Access the Forecast Pricing Revisions form.

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Effective Date</b>  | <p>A date that indicates when a component part goes into effect on a bill of material or when a rate schedule is in effect</p> <p>The default is the current system date. You can enter future effective dates so that the system plans for upcoming changes. Items that are no longer effective in the future can still be recorded and recognized in Product Costing, Shop Floor Management, and Capacity Requirements Planning. The Material Requirements Planning system determines valid components by effectivity dates, not by the bill of material revision level. Some forms display data based on the effectivity dates you enter.</p>                                                                                                                                                                                         |
| <b>Expiration Date</b> | <p>A date that indicates when a component part is no longer in effect on a bill of material, or when a rate schedule is no longer active. It can also indicate when a routing step is no longer in effect as a sequence on the routing for an item.</p> <p>The default is December 31 of the default year defined in the Data Dictionary for Century Change Year. You can enter future effective dates so that the system plans for upcoming changes. Items that are no longer effective in the future can still be recorded and recognized in Product Costing, Shop Floor Management, and Capacity Requirements Planning. The Material Requirements Planning system determines valid components by effectivity dates, not by the bill of material revision level. Some forms display data based on the effectivity dates you enter.</p> |
| <b>Price</b>           | <p>The list or base price to be charged for one unit of this item. In sales order entry, all prices must be set up in the Item Base Price File table (F4106).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## Generating a Forecast Price Rollup

To generate a forecast price rollup, select Forecast Price Rollup (R34620).

## Setting Processing Options for Forecast Price Rollup (R34620)

Processing options enable you to specify the default processing for programs and reports.

For programs, you can specify options such as the default values for specific transactions, whether fields appear on a form, and the version of the program that you want to run.

For reports, processing options enable you to specify the information that appears on reports. For example, you set a processing option to include the fiscal year or the number of aging days on a report.

Do not modify EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

### Control

Select the Control tab.

|                                                                                                                                                  |                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <p><b>1. Enter the Summary Code to use for pricing the summary forecast records. If left blank only the detail forecasts will be priced.</b></p> | <p>A user defined code (40/KY) that indicates the type of summary forecast.</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|

**2. Enter a “1” to Rollup based on Amount. Blank will default to Rollup based on Quantity.**

An option that specifies the type of processing for an event.



## CHAPTER 7

# Working with Summary Forecasting

This chapter provides an overview of summary forecasts and discusses how to:

- Set up summary forecasts.
- Generate summary forecasts.

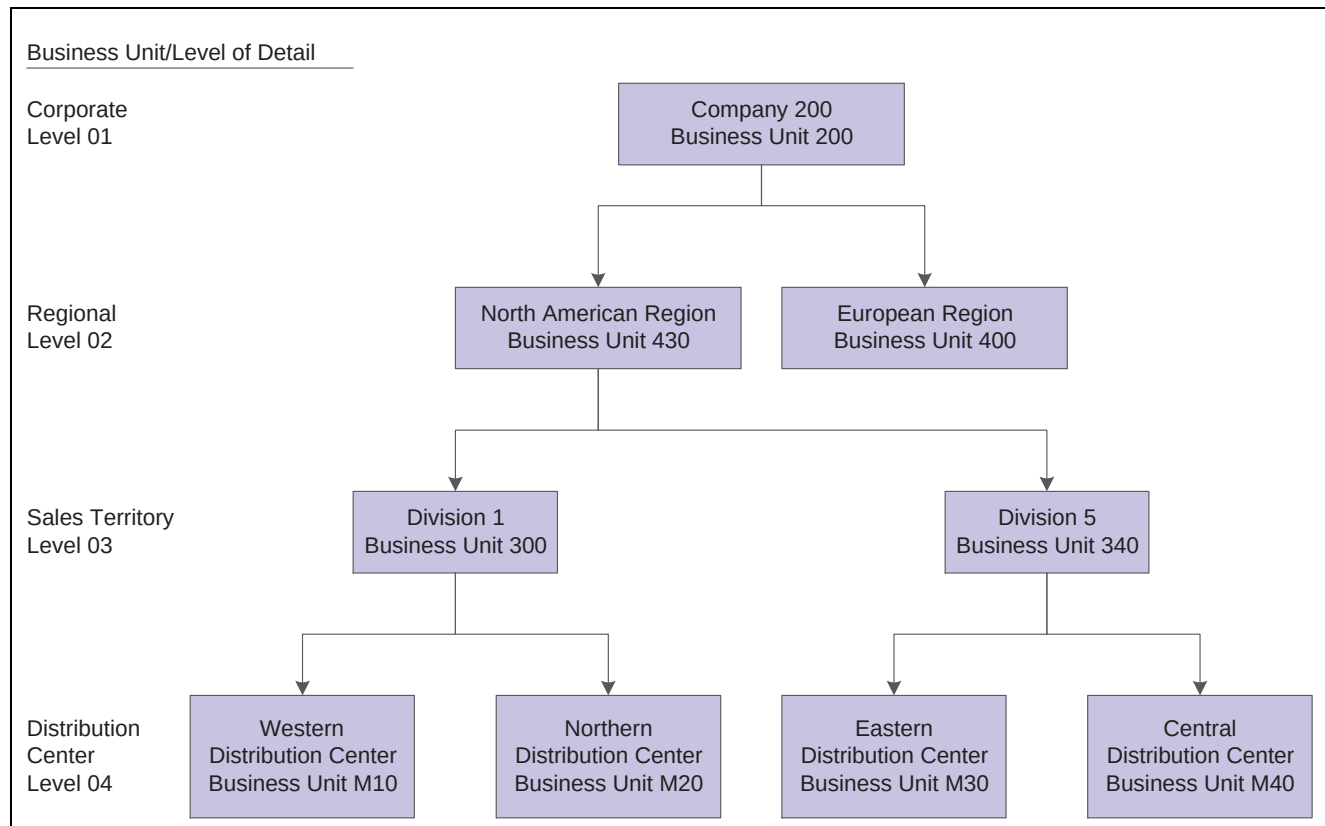
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## Understanding Summary Forecasts

You use summary forecasts to project demand at a product group level. Summary forecasts are also called aggregate forecasts. You can generate a summary of a detail forecast or a summary forecast based on summarized actual sales history.

### Address Book Category Codes

You use address book category codes to define business attributes for the summary hierarchy. For example, regions, territories, and distribution centers. The address book category codes associate the levels of the hierarchy when you generate the summary forecast. Optionally, you can define your category codes with your business unit if your hierarchy is tied to your business unit structure.



Example workflow for assigning category codes

For example, Division 1 (in the North American Region) uses business unit code 430 as its address book Sales Territory (03) category code. The Western Distribution Center resides in Division 1. To establish the link to the North American Region, the address book category codes for the Western Distribution Center must include the business unit codes that are defined at each level of the hierarchy. In the address book for Western Distribution Center (M10), the Division 1 business unit code (300) resides in the Sales Territory (03) category code. The North American Region's business unit code (430) is assigned to the Region category code (02).

The following table illustrates the category codes for the North American Region hierarchy:

| Business Unit Description | Business Unit Number | Level of Detail | Address Book | Address Book Category Code |
|---------------------------|----------------------|-----------------|--------------|----------------------------|
| Corporate Business Unit   | 200                  | 1               | 200          |                            |
| North American Region     | 430                  | 2               | 1234         |                            |
| European Region           | 400                  | 2               | 4567         |                            |
| Division 1                | 300                  | 3               | 5678         | Territory (03): 430        |
| Division 5                | 340                  | 3               | 8765         | Territory (03): 430        |

| Business Unit Description    | Business Unit Number | Level of Detail | Address Book | Address Book Category Code              |
|------------------------------|----------------------|-----------------|--------------|-----------------------------------------|
| Northern Distribution Region | M20                  | 4               | 6066         | Territory (03): 300<br>Region (04): 430 |
| Western Distribution Region  | M10                  | 4               | 6058         | Territory (03): 300<br>Region (04): 430 |
| Central Distribution Region  | M40                  | 4               | 6082         | Territory (03): 340<br>Region (04): 430 |
| Eastern Distribution Region  | M30                  | 4               | 6074         | Territory (03): 340<br>Region (04): 430 |

At each level in the hierarchy, the first category code defines the highest level in the hierarchy. The second category code defines the second higher level, and so on.

## Business Unit Data

Review the company business units and business unit address book numbers to verify that the business units and corresponding address book numbers have been set up correctly. To review company business units, review the level of detail for each business unit in the company hierarchy, and verify that the appropriate address book number is assigned to the business unit.

## Item Branch Category Codes

Information for an item at a specific branch is maintained in item branch records. The system stores this information in the Item Branch File table (F4102). You should review the item branch records to verify that the items in each branch/plant contain data for the category codes that you selected as levels on the Revise Summary Constants form.

For example, if you select a Master Planning Family as part of a company hierarchy, you must verify that a corresponding user defined code exists in the item branch category code field for that Master Planning Family.

## Summary Forecast Generation

The system generates summary forecasts that are based on sales history data that you copy from the Sales Order History File table (F42119) into the Forecast Summary File table (F3400). When you copy the sales history, you specify a date range that is based on the request date of the sales order. The sales history data can be distorted by unusually large or small values (spikes or outliers), data entry errors, or missing demand (sales orders that were canceled due to lack of inventory).

You should review the data in the date range that you specified to identify missing or inaccurate information. You then revise the sales order history to account for inconsistencies and distortions when you generate the forecast. If you want to account for changes in sales order activity for an especially large customer, Forecast Management enables you to work with that customer's changes separately.

---

**Note.** To generate summary forecasts for item quantities on all levels of the hierarchy, generate a detail forecast first, and then run the Summary Forecast Update program (R34600).

---

The Forecast Generation for Summaries program (R34640) enables you to test simulated versions of future sales scenarios without having to run full detail forecasts. You can use this program to simulate and plan long-range trends because this program does not update information in the Forecast File table (F3460), which is used as input to Distribution Requirements Planning (DRP), Master Production Schedule (MPS), and Material Requirements Planning (MRP) generation.

You can simulate multiple forecasting methods, including the system's 12 hard-coded methods, with past sales order histories; and then select the best fit as determined by the system or another appropriate model to generate a forecast of future sales amounts. You can also select a specific forecasting method and use that model to generate the current forecast. The system generates forecasts of sales amounts for each level in the hierarchy and stores them in the Forecast Summary File table (F3400).

The Forecast Generation for Summaries program uses the same 12 forecasting methods that are used to create detail forecasts. However, the system creates forecast information for each level in the hierarchy.

You can also use the Forecast Generation for Summaries program to:

- Specify the summary code for the hierarchy for which you want to forecast.
- Generate summary forecasts that are based on sales history.
- Select a best fit forecast.
- Store any or all of the forecast methods in table F3400.
- Generate the forecast in a fiscal date pattern that you select.
- Specify the number of months of actual data to use to create the best fit.
- Forecast for individual large customers.
- Forecast an unlimited number of periods into the future.

If you use the default type codes in the processing options, the actual sales history records are identified by type AA, and the best fit model is identified by type BF. The system saves the BF type and AA type records (or corresponding type codes that you designate) in table F3400. However, forecast types 01 through 12 are not automatically saved. You must set a processing option to save them.

When you run the Forecast Generation for Summaries program, the system:

- Extracts sales order history information from table F3400.
- Calculates the forecasts by using methods that you select.
- Determines the Percent of Accuracy (POA) or Mean Absolute Deviation (MAD) for each selected forecast method.
- Recommends the best fit forecast method.
- Generates the summary forecast in both monetary amounts and units from the best fit forecast.

## **Summary Sales Order History**

The system generates summary forecasts that are based on data in the Forecast Summary File table (F3400). Use the Refresh Actuals program (R3465) to copy the sales order history (type AA) from the Sales Order History File table (F42119) to table F3400, based upon criteria that you specify.

The system stores sales order histories in table F3400 with forecast type AA or a type code that you designate.

You do not need to clear table F3400 before you run this program. The system automatically deletes any records for the same:

- Period as the actual sales order histories to be generated.

- Items.
- Sales order history type (AA).
- Branch or plant.

---

**Note.** The Refresh Actuals program (R3465) converts sales orders into the primary unit of measure and adjusts the resulting quantities.

---

After you copy the sales order history into the Forecast Summary File table (F3400), you should review the data for spikes, outliers, entry errors, or missing demand that might distort the forecast. Revise the sales order history manually to account for these inconsistencies before you generate the forecast.

## Summarized Detail Forecasts

After generating the forecasts, you can compare them to actual sales order histories. You can then revise both history and forecast data, according to your own criteria.

When you review summaries of forecasts, you can also access a previously generated forecast. You can access a date range to show the sales order history, and the forecast of item quantities or sales amounts. Then you can compare actual sales to the forecast.

When you revise summaries of forecasts, you revise information in a specific level of the forecast. You can also use the Forecast Forcing program (R34610) to apply changes that you made to the summary. You can apply these changes up the hierarchy, down the hierarchy, or in both directions.

Use the Forecast Summary program (P34200) to review summaries of your forecasts. You can also review previously generated forecasts.

After reviewing the forecasts, you can compare them to actual sales order histories. You can then revise both forecast data, according to your own criteria.

If you run the Forecast Generation for Summaries program (R34640) to update the Summary Forecast File table (F3400), the revision forms do not show lower-level forecasts of item quantities. However, if you run the Summary Forecast Update program (R34600) to update table F3400, these forms show the lower-level forecasts of item quantities.

## Summary Forecasts Using Forecast Forcing

The Forecast Forcing program (R34610) enables you to apply the manual changes that you made to the summary of a forecast either up the hierarchy (aggregation), down the hierarchy (disaggregation), or in both directions. The system stores these changes in the Forecast Summary File table (F3400).

You can force changes to quantities, amounts, or both. When you make changes both up and down the hierarchy, the program resets the flag on the record to indicate the change. The program makes changes down the hierarchy to the lowest detail level. These changes are also updated in the Forecast File table (F3460).

---

**Note.** If you force changes in only one direction, the program resets the flag, based on a processing option. You can lose the ability to make changes in the other direction if you force a change in only one direction.

On Forecast Summary (P34200), you can set the Bypass Forcing flag on the Summary Forecast Revisions form for records in the hierarchy below an adjusted record. The system subtracts the bypassed record amounts and quantities from the parent amounts and quantities before calculating the percentages. The system distributes the total amounts to the other children in the hierarchy that were not bypassed. You can only bypass records when you make changes down the hierarchy.

---

## Example of Forecast Forcing (R34610)

The Forecast Forcing program (R34610) uses the parent/child relationship at each level within the hierarchy to calculate a parent/child ratio. The parent/child ratio is the percentage of the amount or quantity for each child level, based on the total amount or quantity of the parent.

In the following example, the parent's original amount is 200 and its two children in the next level each have an original amount of 100. The program calculates the ratio as 50 percent of the parent. The parent/child ratio is calculated at each level of the hierarchy.

When forcing the changes up the hierarchy, the program summarizes each record again so that the summarized total of the records above it reflects the adjusted amount.

The system summarizes the changes to the lower levels up to the parent level. If you change Product Family X from a quantity of 100 to a quantity of 300, the parent quantity changes to 400.

The Forecast Forcing program also makes adjustments down the hierarchy. The parent/child ratio can be based on an original parent/child ratio or an adjusted parent/child ratio.

Using the original parent/child ratio, the system maintains the parent/child ratio when the parent quantity changes. The system uses the adjusted quantity of the parent to calculate the changes at the next lower level. An increase of 600 units to Customer A using the original ratio of 50 percent for each child results in the children calculation of  $600 \times .5 = 300$  each.

---

## Setting Up Summary Forecasts

This section lists prerequisites and discusses how to:

- Revise address book category codes.
- Review business unit data.
- Verify item branch category codes.

### Prerequisites

Before you complete the tasks in this section:

- Enter new records for all locations and customers that are defined in your distribution hierarchy which are not included in your address book.
- Set up the address book numbers for each business unit.

### See Also

*Setting Up Business Units in the General Accounting Guide*

## Forms Used to Set Up Summary Forecasts

| Form Name                | Form ID | Navigation                                                                                                                                                                                                                                                  | Usage                                  |
|--------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Work With Addresses      | W01012B | Daily Processing (G01),<br>Address Book Revisions<br><br>Complete the Alpha Name<br>and Search Type fields and<br>select Find.<br><br>Select an address number.                                                                                             | Revise address book<br>category codes. |
| Address Book Revision    | W01012A | Select the Cat Code 1 - 10<br>tab and complete any of<br>the fields.<br><br>To access additional category<br>code fields, select the Cat<br>Code 11-30 tab.<br><br>Select OK.                                                                               | Revise the address book.               |
| Work With Business Units | W0006B  | Organization & Account<br>Setup (G09411), Review and<br>Revise Business Units<br><br>Complete the Company field<br>and select Find:<br><br>Select a business unit.                                                                                          | Review business unit data.             |
| Revise Business Unit     | W0006B  | Select the More Detail tab<br>and complete the Address<br>Number field:<br><br>Select OK.                                                                                                                                                                   | Revise business unit data.             |
| Work With Item Branch    | W41026E | Inventory<br>Master/Transactions<br>(G4111), Item Branch/Plant<br><br>Complete the Item Number<br>field and select Find.<br><br>Select a branch/plant and<br>then select Category Codes<br>from the Row menu.<br><br>Complete the Commodity<br>Class field. | Revise item branch data.               |

## Revising Address Book Category Codes

Access the Work With Addresses form.

PeopleSoft®

Address Book Revisions - Address Book Revision

Work With Addresses Address Book Revision

OK Cancel Form Previous Next Tools

Address Number 200

Address Book Mailing Additional Related Address Cat Code 1 - 10 Cat Code 11 - 30

|                  |     |            |                  |     |             |
|------------------|-----|------------|------------------|-----|-------------|
| Category Code 01 |     | .          | Category Code 06 | 987 | Electronics |
| Category Code 02 |     | .          | Category Code 07 |     | .           |
| Category Code 03 | 300 | Division 1 | Category Code 08 |     | .           |
| Category Code 04 | 400 | Europe     | Category Code 09 |     | .           |
| Category Code 05 |     | .          | Category Code 10 |     | .           |

Address Book Revision form

**Alpha Name**

The text that names or describes an address. This 40-character alphabetic field appears on a number of forms and reports. You can enter dashes, commas, and other special characters, but the system cannot search on them when you use this field to search for a name.

**Reviewing Business Unit Data**

Access the Work With Business Units form.

**Company**

A code that identifies a specific organization, fund, or other reporting entity. The company code must already exist in the Company Constants table (F0010) and must identify a reporting entity that has a complete balance sheet. At this level, you can have intercompany transactions.

---

**Note.** You can use company 00000 for default values such as dates and automatic accounting instructions. You cannot use company 00000 for transaction entries.

---

**Address Number** A number that identifies an entry in the Address Book system, such as employee, applicant, participant, customer, supplier, tenant, or location.

## Verifying Item Branch Category Codes

Access the Work With Item Branch form.

**Commodity Class** A code (table 41/P1) that represents an item property type or classification, such as commodity type, planning family, or so forth. The system uses this code to sort and process like items.

This is one of six classification categories available primarily for purchasing purposes.

---

## Generating Summary Forecasts

This section provides an overview of generating summary forecasts and discusses how to:

- Set processing options for Forecast Generation for Summaries (R34640).
- Revise sales order history.
- Set processing options for Summary Forecast Update (R34600).
- Review a summary forecast.
- Set processing options for Forecast Summary (P34200).
- Revise a summary forecast.
- Revise summary forecasts using Forecast Forcing (R34610).
- Set processing options for Forecast Summary (R34610).

## Understanding Generating Summary Forecasts

The system generates summary forecasts that are based on sales history data that you copy from the Sales Order History File table (F42119) into the Forecast Summary File table (F3400). When you copy the sales history, you specify a date range that is based on the request date of the sales order. The sales history data can be distorted by unusually large or small values (spikes or outliers), data entry errors, or missing demand (sales orders that were canceled due to lack of inventory).

You should review the data in the date range that you specified to identify missing or inaccurate information. You then revise the sales order history to account for inconsistencies and distortions when you generate the forecast. If you want to account for changes in sales order activity for an especially large customer, Forecast Management enables you to work with that customer's changes separately.

---

**Note.** To generate summary forecasts for item quantities on all levels of the hierarchy, generate a detail forecast first, and then run the Summary Forecast Update program (R34600).

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### Summary Sales Order History

The system generates summary forecasts that are based on data in the Forecast Summary File table (F3400). Use the Refresh Actuals program (R3465) to copy the sales order history (type AA) from the Sales Order History File table (F42119) to table F3400, based upon criteria that you specify.

The system stores sales order histories in table F3400 with forecast type AA or a type code that you designate.

You do not need to clear table F3400 before you run this program. The system automatically deletes any records for the same:

- Period as the actual sales order histories to be generated.
- Items.
- Sales order history type (AA).
- Branch or plant.

---

**Note.** The Refresh Actuals program (R3465) converts sales orders into the primary unit of measure and adjusts the resulting quantities.

---

## Summary Forecasts

The Forecast Generation for Summaries program (R34640) enables you to test simulated versions of future sales scenarios without having to run full detail forecasts. You can use this program to simulate and plan long-range trends because this program does not update information in the Forecast File table (F3460), which is used as input to Distribution Requirements Planning (DRP), Master Production Schedule (MPS), and Material Requirements Planning (MRP) generation.

You can simulate multiple forecasting methods, including the system's 12 hard-coded methods, with past sales order histories; and then select the best fit as determined by the system or another appropriate model to generate a forecast of future sales amounts. You can also select a specific forecasting method and use that model to generate the current forecast. The system generates forecasts of sales amounts for each level in the hierarchy and stores them in the Forecast Summary File table (F3400).

The Forecast Generation for Summaries program uses the same 12 forecasting methods that are used to create detail forecasts. However, the system creates forecast information for each level in the hierarchy.

You can also use the Forecast Generation for Summaries program to:

- Specify the summary code for the hierarchy for which you want to forecast.
- Generate summary forecasts that are based on sales history.
- Select a best fit forecast.
- Store any or all of the forecast methods in table F3400.
- Generate the forecast in a fiscal date pattern that you select.
- Specify the number of months of actual data to use to create the best fit.
- Forecast for individual large customers.
- Forecast an unlimited number of periods into the future.

If you use the default type codes in the processing options, the actual sales history records are identified by type AA, and the best fit model is identified by type BF. The system saves the BF type and AA type records (or corresponding type codes that you designate) in table F3400. However, forecast types 01 through 12 are not automatically saved. You must set a processing option to save them.

When you run the Forecast Generation for Summaries program, the system:

- Extracts sales order history information from table F3400.
- Calculates the forecasts by using methods that you select.

- Determines the Percent of Accuracy (POA) or Mean Absolute Deviation (MAD) for each selected forecast method.
- Recommends the best fit forecast method.
- Generates the summary forecast in both monetary amounts and units from the best fit forecast.

## **Sales Order History Revisions**

Revising sales order history

After you copy the sales order history into the Forecast Summary File table (F3400), you should review the data for spikes, outliers, entry errors, or missing demand that might distort the forecast. Revise the sales order history manually to account for these inconsistencies before you generate the forecast.

## **Summary Forecast Update Program (R34600)**

The Summary Forecast Update program (R34600) generates summary forecasts, which are stored in the Forecast Summary File table (F3400) and are based on data from the Forecast File table (F3460). The Summary Forecast Update program enables you to use detail data to generate summary forecasts that provide both sales amount and item quantity data. You can summarize detail actual sales data or forecasted data. Proper data selection is critical to accurate processing. You should include only items in the summary constants hierarchy.

Data in table F3460 is based on both input that is copied from the Sales Order History File table (F42119) by using the Refresh Actuals program (R3465) and input that is generated by the Forecast Generation program (R34650).

You do not need to clear table F3400 before you run this program. The system deletes any forecasts in the table for the summary code that you specify. If you enter the from and through dates, the system only deletes those forecasts within the date range. The system adds the forecast amounts to the selected record and to every record in the hierarchy above it.

## **Prerequisites**

Before you complete the tasks in this section:

- Run the Refresh Actuals program (R3465).
- Make changes to the sales order history with the Forecast Revisions program (P3460).
- Before revising sales order history, run the Refresh Actuals program (R3465).
- Run the Forecast Generation program (R34650).
- For \_\_\_\_\_, select the processing option that indicates the direction in which you want to make changes.
- Set up detail forecasts.
- Set up the summary forecast.
- Generate a summary forecast or a summary of detail forecast.

## Forms Used to Generate Summary Forecasts

| Form Name                  | Form ID | Navigation                                                                                                                                                                                                                                                                                                                                                                                                     | Usage                               |
|----------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Work With Summary Forecast | W34200C | <p>Periodic Forecasting Operations (G3421), Enter Change Summaries</p> <p>Complete the Summary Code, Actual Type, Forecast Type, From Date, and Thru Date fields and select Find.</p> <p>Select a record to review.</p>                                                                                                                                                                                        | Revise summary sales order history. |
| Summary Forecast Revisions | W34200C | <p>Review the following fields in the detail area: Original Quantity, Adjusted Quantity, Original Amount, Adjusted Amount.</p> <p>Complete the Change Type and Change Amount fields in the detail area to change information for the forecast summary.</p> <p>To change information for individual lines, complete the following fields and select OK: Adjusted Quantity, Adjusted Amount, Bypass Forcing.</p> | Revise summary forecast.            |
| Work with Summary Forecast | W34200C | Select Review from the Form menu.                                                                                                                                                                                                                                                                                                                                                                              | Review the summary forecast.        |
| Forecast Review by Type    | W34200C | Review the following options and fields: Weekly, Quantity, Level 1, Fiscal Year, Type, Period 1.                                                                                                                                                                                                                                                                                                               | Review the forecast by type.        |
| Work With Summary Forecast | W34200C | <p>Periodic Forecasting Operations (G3421), Enter Change Summaries</p> <p>Complete the following fields and select Find: Summary Code, Actual Type, Forecast Type, From Date, Thru Date.</p> <p>Select a record to review.</p>                                                                                                                                                                                 | Review a summary forecast.          |
| Summary Forecast Revisions | W34200C | Review the following fields: Original Quantity, Adjusted Quantity, Original Amount, Adjusted Amount.                                                                                                                                                                                                                                                                                                           | Revise summary forecast.            |

| Page Name                  | Object Name | Navigation                                                                                                                                                                                                                                                                                                                            | Usage                      |
|----------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| Work With Summary Forecast | W34200C     | Periodic Forecasting Operations (G3421), Enter Change Summaries<br><br>Complete the following fields and select Find: Summary Code, Actual Type, Forecast Type, From Date, Thru Date.<br><br>Select a record to review.                                                                                                               | Revise a summary forecast. |
| Summary Forecast Revisions | W34200C     | Complete the following fields in the header area to change information for the forecast summary: Change Type, Change Quantity.<br><br>To change information for individual lines, complete the following fields: Adjusted Quantity, Adjusted Amount.<br><br>Complete the fields that appear based on summary constants and select OK. | Revise a summary forecast. |

## Setting Processing Options for Forecast Generation for Summaries (R34640)

Processing options enable you to specify the default processing for programs and reports.

For programs, you can specify options such as the default values for specific transactions, whether fields appear on a form, and the version of the program that you want to run.

For reports, processing options enable you to specify the information that appears on reports. For example, you set a processing option to include the fiscal year or the number of aging days on a report.

Do not modify EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

### Methods 1 - 3

These processing options let you specify which forecast types that the system uses when calculating the best fit forecast for each level in the hierarchy. You can also specify whether the system creates summary forecasts for the selected forecast method.

Enter *1* to use the forecast method when calculating the best fit. If you leave the processing option blank, the system does not use that forecast method when calculating the best fit and does not create summary forecasts for the method.

The system defines a period as a week or month, depending on the pattern that is chosen from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

- 1. Percent Over Last Year** Use this processing option to specify which type of forecast to run. This forecast method uses the Percent Over Last Year formula to multiply each forecast period by a percentage increase or decrease. You specify the increase

or decrease in the Percent processing option. This method requires the periods for the best fit plus one year of sales history. This method is useful for seasonal items with growth or decline. Values are:

*Blank:*The system does not use this method.

*1:*The system uses the Percent Over Last Year formula to create summary forecasts.

## 2. Percent

Use this processing option to specify the percent of increase or decrease by which the system multiplies the sales history from last year. For example, type 110 for a 10 percent increase or type 97 for a 3 percent decrease. Values are any percent amount; however, the amount cannot be a negative amount. Enter an amount to use or select it from the Calculator.

## 3. Calculated Percent Over Last Year

Use this processing option to specify which type of forecast to run. This forecast method uses the Calculated Percent Over Last Year formula to compare the periods of past sales that you specify to the same periods of past sales of the previous year. The system determines a percentage increase or decrease, then multiplies each period by this percentage to determine the forecast. This method uses the periods of sales order history that you specify in the following Number of Periods processing option plus one year of sales history.

This method is useful for short-term demand forecasts of seasonal items with growth or decline. Values are:

*Blank:*The system does not use this method.

*1:*The system uses the Calculated Percent Over Last Year formula to create summary forecasts.

## 4. Number of Periods

Use this processing option to specify the number of periods to include when calculating the percentage increase or decrease. Enter a number to use or select it from the Calculator.

## 5. Last Year to This Year

Use this processing option to specify which type of forecast to run. This forecast method uses the Last Year to This Year formula which calculates the year's forecast based on the prior year's sales. This method uses the periods best fit plus one year of sales order history. This method is useful for mature products with level demand or seasonal demand without a trend. Values are:

*Blank:*The system does not use this method.

*1:* The system uses the Last Year to This Year formula to create summary forecasts.

## Methods 4 - 6

These processing options let you specify which forecast types that the system uses when calculating the best fit forecast for each level in the hierarchy. You can also specify whether the system creates summary forecasts for the selected forecast method.

Enter *1* to use the forecast method when calculating the best fit. If you leave the processing option blank, the system does not use that forecast method when calculating the best fit and does not create summary forecasts for the method.

The system defines a period as a week or month, depending on the pattern that is chosen from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

**1. Moving Average**

Use this processing option to specify which type of forecast to run. This forecast method uses the Moving Average formula to average the months that you indicate in the following Number of Periods processing option to project the next period. This method uses the periods for the best fit from the Actual Data processing option under the Process 1 tab plus the number of periods of sales order history. You should have the system recalculate this forecast monthly or at least quarterly to reflect changing demand level. This method is useful for mature products without a trend. Values are:

*Blank:*The system does not use this method.

*1:*The system uses the Moving Average formula to create summary forecasts.

**2. Number of Periods**

Use this processing option to specify the number of periods to include in the Moving Average forecast method. Enter a number to use or select it from the Calculator.

**3. Linear Approximation**

Use this processing option to specify which type of forecast to run. This forecast method uses the Linear Approximation formula to compute a trend from the periods of sales order history and projects this trend to the forecast.

You should have the system recalculate the trend monthly to detect changes in trends. This method uses period's best fit plus the number of periods that you indicate in the following Number of Periods processing option of sales order history. This method is useful for new products or products with consistent positive or negative trends that are not due to seasonal fluctuations. Values are:

*Blank:*The system does not use this method.

*1:*The system uses the Linear Approximation formula to create summary forecasts.

**4. Number of Periods**

Use this processing option to specify the number of periods to include in the Linear Approximation forecast method. Enter the number to use or select it from the Calculator.

**5. Least Squares Regression**

Use this processing option to specify which type of forecast to run. This forecast method derives an equation describing a straight-line relationship between the historical sales data and the passage of time. Least Squares Regression fits a line to the selected range of data such that the sum of the squares of the differences between the actual sales data points and the regression line are minimized. The forecast is a projection of this straight line into the future. This method is useful when there is a linear trend in the sales data. This method uses sales data history for the period represented by the number of periods best fit plus the number of historical data periods specified in the following Number of Periods processing option. The system requires a minimum of two historical data points. Values are:

*Blank:*The system does not use this method.

*1:*The system uses the Least Squares Regression formula to create summary forecasts.

**6. Number of Periods**

Use this processing option to specify the number of periods to include in the Least Squares Regression forecast method. You must enter at least two periods.

Enter the numbers to use or select them from the Calculator.

## Methods 7 - 8

These processing options let you specify which forecast types that the system uses when calculating the best fit forecast for each level in the hierarchy. You can also specify whether the system creates summary forecasts for the selected forecast method.

Enter *1* to use the forecast method when calculating the best fit. If you leave the processing option blank, the system does not use that forecast method when calculating the best fit and does not create summary forecasts for the method.

The system defines a period as a week or month, depending on the pattern that is chosen from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

### 1. Second Degree Approximation

Use this processing option to specify which type of forecast to run. This forecast method uses the Second Degree Approximation formula to plot a curve based on a specified number of sales history periods. You specify the number of sales history periods in the following Number of Periods processing option to project the forecast. This method adds the period's best fit and the number of periods, and then the sum multiplies by three. This method is not useful for long-term forecasts. Values are:

*Blank:* The system does not use this method.

*1:* The system uses the Second Degree Approximation formula to create summary forecasts.

### 2. Number of Periods

Use this processing option to specify the number of periods to include in the Second Degree Approximation forecast method. Enter the number to use or select it from the Calculator.

### 3. Flexible Method

Use this processing option to specify which type of forecast to run. This forecast method specifies the period's best fit block of sales order history starting *n* months prior and a percent increase or decrease with which to modify the forecast. This method is similar to Method 1 - Percent Over Last Year, except that you can specify the number of periods that you use as the base. Depending on what you select as *n*, this method requires period's best fit plus the number of periods that you specify in the following Number of Periods processing option. This method is useful when forecasting products with a planned trend. Values are:

*Blank:* The system does not use this method.

*1:* The system uses the Flexible Method formula to create summary forecasts.

### 4. Number of Periods

Use this processing option to specify the number of periods before the best fit that you want to include in the Flexible Method calculation. Enter the number to use or select it from the Calculator.

### 5. Percent Over Prior Period

Use this processing option to specify the percent of increase or decrease for the system to use. For example, type 110 for a 10 percent increase or type 97 for a 3 percent decrease. Values are any percent amount; however, the amount cannot be a negative amount. Enter an amount to use or select it from the Calculator.

## Method 9

These processing options let you specify which forecast types that the system uses when calculating the best fit forecast for each level in the hierarchy. You can also specify whether the system creates summary forecasts for the selected forecast method.

Enter *I* to use the forecast method when calculating the best fit. If you leave the processing option blank, the system does not use that forecast method when calculating the best fit and does not create summary forecasts for the method.

The system defines a period as a week or month, depending on the pattern that is chosen from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

### **1. Weighted Moving Average**

Use this processing option to specify which type of forecast to use. The Weighted Moving Average forecast formula is similar to Method 4 - Moving Average formula, because it averages the previous number of months of sales history indicated in the following processing options to project the next month's sales history. However, with this formula you use the following processing options to assign weights for each of the prior periods (up to 12).

This method uses the number of weighted periods selected plus period's best fit. Similar to the Moving Average, this method lags demand trends, so this method is not recommended for products with strong trends or seasonality. This method is useful for mature products with demand that is relatively level. Values are:

*Blank:* The system does not use this method.

*I:* The system uses the Weighted Moving Average formula to create summary forecasts.

### **2. One Period Prior**

Use this processing option to specify the weight to assign to one period prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.

### **3. Two Periods Prior**

Use this processing option to specify the weight to assign to two periods prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.

### **4. Three Periods Prior**

Use this processing option to specify the weight to assign to three periods prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.

### **5. Four Periods Prior**

Use this processing option to specify the weight to assign to four periods prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.

- 6. Five Periods Prior** Use this processing option to specify the weight to assign to five periods prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.
- 7. Six Periods Prior** Use this processing option to specify the weight to assign to six periods prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.
- 8. Seven Periods Prior** Use this processing option to specify the weight to assign to seven periods prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.
- 9. Eight Periods Prior** Use this processing option to specify the weight to assign to eight periods prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.
- 10. Nine Periods Prior** Use this processing option to specify the weight to assign to nine periods prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.
- 11. Ten Periods Prior** Use this processing option to specify the weight to assign to 10 periods prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.
- 12. Eleven Periods Prior** Use this processing option to specify the weight to assign to 11 periods prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.

- 13. Twelve Periods Prior** Use this processing option to specify the weight to assign to 12 periods prior for calculating a moving average. The total of all the weights used in the Weighted Moving Average calculation must equal 100. If you do not enter a weight for a period within the specified number of periods, the system uses a weight of zero for that period. The system does not use weights entered for periods greater than the number of specified periods. Enter the number to use or select it from the Calculator.
- 14. Periods to Include** Use this processing option to specify the number of periods to include in the Weighted Moving Average forecast method. Enter the number to use or select it from the Calculator.

## Methods 10 - 11

These processing options let you specify which forecast types that the system uses when calculating the best fit forecast for each level in the hierarchy. You can also specify whether the system creates summary forecasts for the selected forecast method.

Enter “1” to use the forecast method when calculating the best fit. If you leave the processing option blank, the system does not use that forecast method when calculating the best fit and does not create summary forecasts for the method.

The system defines a period as a week or month, depending on the pattern that was chosen from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

- 1. Linear Smoothing** Use this processing option to specify which type of forecast to run. This forecast method calculates a weighted average of past sales data. You can specify the number of periods of sales order history to use in the calculation (from 1 to 12). You enter these periods in the following Number of Periods processing option. The system uses a mathematical progression to weigh data in the range from the first (least weight) to the final (most weight). Then, the system projects this information for each period in the forecast. This method requires the period’s best fit plus the number of periods of sales order history. Values are:
- Blank:* The system does not use this method.
- 1:* The system uses the Linear Smoothing formula to create summary forecasts.
- 2. Number of Periods** Use this processing option to specify the number of periods to include in the Linear Smoothing forecast method. Enter the number to use or select it from the Calculator.
- 3. Exponential Smoothing** Use this processing option to specify which type of forecast to run. This forecast method uses one equation to calculate a smoothed average. This becomes an estimate representing the general level of sales over the selected historical range. This method is useful when there is no linear trend in the data. This method requires sales data history for the time period represented by the number of period’s best fit plus the number of historical data periods specified in the following Number of Periods processing option. The system requires that you specify at least two historical data periods. Values are:
- Blank:* The system does not use this method.
- 1:* The system uses the Exponential Smoothing formula to create summary forecasts.

- 4. Number of Periods** Use this processing option to specify the number of periods to include in the Exponential Smoothing forecast method. Enter the number to use or select it from the Calculator.
- 5. Alpha Factor** Use this processing option to specify the alpha factor (a smoothing constant) that the system uses to calculate the smoothed average for the general level or magnitude of sales. You can enter any amount, including decimals, from zero to one.

## Method 12

These processing options let you specify which forecast types that the system uses when calculating the best fit forecast for each level in the hierarchy. You can also specify whether the system creates summary forecasts for the selected forecast method.

Enter *1* to use the forecast method when calculating the best fit. If you leave the processing option blank, the system does not use that forecast method when calculating the best fit and does not create summary forecasts for the method.

The system defines a period as a week or month, depending on the pattern that is chosen from the Date Fiscal Patterns table (F0008). For weekly forecasts, verify that you have established 52 period dates.

- 1. Exponential Smoothing with Trend and Seasonality** Use this processing option to specify which type of forecast to run. This forecast method calculates a trend, a seasonal index, and an exponentially smoothed average from the sales order history. The system then applies a projection of the trend to the forecast and adjusts for the seasonal index.
- This method requires month's best fit plus two years of sales data and is useful for items that have both trend and seasonality in the forecast. Use the following Alpha Factor and Beta Factor processing options to enter the alpha and beta factors rather than have the system calculate them. Values are:
- Blank:* The system does not use this method.
- 1:* The system uses the Exponential Smoothing with Trend and Seasonality formula to create summary forecasts.
- 2. Alpha Factor** Use this processing option to specify the alpha factor (a smoothing constant) that the system uses to calculate the smoothed average for the general level of magnitude of sales. You can enter any amount, including decimals, from zero to one.
- 3. Beta Factor** Use this processing option to specify the beta factor (a smoothing constant) that the system uses to calculate the smoothed average for the trend component of the forecast. You can enter any amount, including decimals, from zero to one.
- 4. Seasonality** Use this processing option to specify whether the system includes seasonality in the calculation. Values are:
- Blank:* The system does not include seasonality.
- 1:* The system includes seasonality in the Exponential Smoothing with Trend and Seasonality forecast method.

## Defaults

These processing options let you specify the default values that the system uses to calculate forecasts. The system extracts actual values from the Sales Order History File (F42119).

**1. Forecast Type**

Use this processing option to specify the forecast type that the system uses when creating the summary forecast. Forecast type is a user defined code (34/DF) that identifies the type of forecast to process. Enter the forecast type to use as the default value or select it from the Select User Define Code form. If you leave this processing option blank, the system does not create any summaries. You must enter a forecast type.

**Process**

These processing options let you specify whether the system runs the program in proof or final mode; creates weekly or monthly forecasts; and specifies the start date, length, and data that are used to create forecasts.

In addition, you use these processing options to specify how the system calculates the best fit forecast. The system applies the selected forecasting methods to past sales order history and compares the forecast simulation to the actual history. When you generate a forecast, the system compares actual sales order histories to forecasts for the months or weeks that you indicate in the Forecast Length processing option, and computes how accurately each of the selected forecasting methods predict sales. Then the system identifies the most accurate forecast as the best fit. The system uses two measurements for forecasts: Mean Absolute Deviation (MAD) and Percent of Accuracy (POA).

MAD is the mean of the absolute values of the deviations between actual and forecast data. MAD is a measure of the average magnitude of errors to expect, given a forecasting method and data history. Because absolute values are used in the calculation, positive errors do not cancel out negative errors. When you compare several forecasting methods, the forecast with the smallest MAD has shown to be the most reliable for that product for that holdout period.

POA is a measure of forecast bias. When forecasts are consistently too high, inventories accumulate and inventory costs rise. When forecasts are consistently too low, inventories are consumed and customer service declines. A forecast that is ten units too low, then eight units too high, and then two units too high, is an unbiased forecast. The positive error of ten is canceled by the negative errors of eight and two.

**1. Mode**

Use this processing option to specify whether the system runs the summary forecast in proof or final mode. When you run this program in proof mode, the system does not create any forecast records which enables you to run it again with different criteria until you produce appropriate forecast information.

When you run this program in final mode, the system creates forecast records. Values are:

*Blank:* The system runs the summary forecast in proof mode.

*1:* The system runs the summary forecast in final mode.

**2. Weekly Forecasts**

Use this processing option to specify monthly or weekly forecasts. For weekly forecasts, use fiscal date patterns with 52 periods. For monthly forecasts, use fiscal date patterns with 14 periods. Values are:

*Blank:* The system creates monthly forecasts.

*1:* The system creates weekly forecasts.

**3. Start Date**

Use this processing option to specify the date on which the system starts the forecast. Enter a date to use or select one from the Calendar. If you leave this processing option blank, the system uses the system date.

**4. Forecast Length**

Use this processing option to specify the number of periods to forecast. You must have previously established fiscal date patterns for the forecasted periods. If you leave this processing option blank, the system uses 3.

**5. Actual Data**

Use this processing option to specify the number of periods of actual data that the system uses to calculate the best fit forecast. If you leave this processing option blank, the system uses 3 periods.

The system applies the selected forecasting methods to past sales order history and compares the forecast simulation to the actual history. When you generate a forecast, the system compares actual sales order histories to forecasts for the months or weeks that you indicate in the Forecast Length processing option and computes how accurately each of the selected forecasting methods would have predicted sales. Then, the system identifies the most accurate forecast as the best fit.

**6. Mean Absolute Deviation**

Use this processing option to specify whether the system uses the Mean Absolute Deviation formula or the Percent of Accuracy formula to calculate the best fit forecast. Values are:

*Blank:* The system uses the Percent of Accuracy formula.

*1:* The system uses the Mean Absolute Deviation formula.

**7. Amounts or Quantities**

Use this processing option to specify whether the system calculates the best fit forecast using quantities or amounts. If you specify to use amounts, you must also extract sales history using amounts. This processing option also affects forecast pricing. Values are:

*Blank:* The system uses quantities.

*1:* The system uses amounts.

**8. Fiscal Date Pattern**

Use this processing option to specify the fiscal date pattern type to use for the forecast calculations. If you run weekly forecasts, the fiscal date pattern that you specify here must be set up for 52 periods.

**9. Negative Values**

Use this processing option to specify whether the system displays negative values. Values are:

*Blank:* The system substitutes a zero value for all negative values.

*1:* The system displays all negative values.

## Revising Sales Order History

Access the Work With Summary Forecast form.

PeopleSoft®

Enter Change Summaries - Summary Forecast Revisions

OK Cancel Form Row Tools

Current Level: Global 1. Global Level From Date: \* Thru Date: \* Type: AA

Change Type: Change Quantity:

Records 1 - 34 Customize Grid

|                                  | Request Date | Original Quantity | Adjusted Quantity | Original Amount | Adjusted Amount | Bypass Forcing | Change Type | Change Amount |
|----------------------------------|--------------|-------------------|-------------------|-----------------|-----------------|----------------|-------------|---------------|
| <input checked="" type="radio"/> | 07/31/02     | 5318              | 5318              | 841,586.00      | 841,586.00      | N              |             |               |
| <input type="radio"/>            | 08/31/02     | 5753              | 5753              | 816,987.00      | 816,987.00      | N              |             |               |
| <input type="radio"/>            | 09/30/02     | 5319              | 5319              | 968,823.00      | 968,823.00      | N              |             |               |
| <input type="radio"/>            | 10/31/02     | 5287              | 5287              | 452,974.00      | 452,974.00      | N              |             |               |
| <input type="radio"/>            | 11/30/02     | 6395              | 6395              | 630,606.00      | 630,606.00      | N              |             |               |
| <input type="radio"/>            | 12/31/02     | 5610              | 5610              | 913,402.00      | 913,402.00      | N              |             |               |
| <input type="radio"/>            | 01/31/03     | 4634              | 4634              | 311,098.00      | 311,098.00      | N              |             |               |
| <input type="radio"/>            | 02/28/03     | 4070              | 4070              | 247,692.00      | 247,692.00      | N              |             |               |
| <input type="radio"/>            | 03/31/03     | 6063              | 6063              | 544,610.00      | 544,610.00      | N              |             |               |
| <input type="radio"/>            | 04/30/03     | 5966              | 5966              | 566,442.00      | 566,442.00      | N              |             |               |
| <input type="radio"/>            | 05/31/03     | 6384              | 6384              | 946,430.00      | 946,430.00      | N              |             |               |
| <input type="radio"/>            | 06/30/03     | 5747              | 5747              | 944,714.00      | 944,714.00      | N              |             |               |
| <input type="radio"/>            | 07/31/03     | 5227              | 5227              | 908,917.00      | 908,917.00      | N              |             |               |
| <input type="radio"/>            | 08/31/03     | 6572              | 6572              | 849,164.00      | 849,164.00      | N              |             |               |
| <input type="radio"/>            | 09/30/03     | 4348              | 4348              | 980,906.00      | 980,906.00      | N              |             |               |
| <input type="radio"/>            | 10/31/03     | 5123              | 5123              | 409,262.00      | 409,262.00      | N              |             |               |
| <input type="radio"/>            | 11/30/03     | 6113              | 6113              | 763,184.00      | 763,184.00      | N              |             |               |
| <input type="radio"/>            | 12/31/03     | 5666              | 5666              | 1,054,618.00    | 1,054,618.00    | N              |             |               |
| <input type="radio"/>            | 01/31/04     | 5028              | 5028              | 281,850.00      | 281,850.00      | N              |             |               |

Summary Forecast Revisions form

**Bypass Forcing**

A code that indicates whether to bypass the Forecast Forcing program (R34610). A Y indicates that the quantity and amount of a forecast should not be changed by an adjustment made to a forecast higher in the summary hierarchy. This flag is effective only when forecast forcing is done down the summary hierarchy.

**Weekly**

A flag to display weekly or monthly records.

**Quantity**

A flag to display the Quantity or the Amount data in records.

**Level 1**

The first key position of the forecasting hierarchy. The value in this field relates to the first level chosen in the forecasting constants.

**Level 10**

The tenth key position of the forecasting hierarchy. The value in this field relates to the tenth level chosen in the forecasting constants.

|                    |                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fiscal Year</b> | <p>00 through 99 to designate a specific fiscal year</p> <p>blanks to designate the current fiscal year (financial reporting date)</p> <p>* to designate all fiscal years</p> <p>–9 through –1 to designate a previous fiscal year (relative to the financial reporting date)</p> <p>+1 through +9 to designate a future fiscal year (relative to the financial reporting date)</p> |
| <b>Period 1</b>    | Time Series Column 01. This column will hold Time Series Dates or Quantities.                                                                                                                                                                                                                                                                                                       |
| <b>Period 52</b>   | Time Series Column 52. This column will hold Time Series Dates or Quantities.                                                                                                                                                                                                                                                                                                       |

## Setting Processing Options for Summary Forecast Update (R34600)

Processing options enable you to specify the default processing for programs and reports.

For programs, you can specify options such as the default values for specific transactions, whether fields appear on a form, and the version of the program that you want to run.

For reports, processing options enable you to specify the information that appears on reports. For example, you set a processing option to include the fiscal year or the number of aging days on a report.

Do not modify EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

### Process

These processing options let you specify the defaults the system uses for the Summary Forecast Update program (R34600). These defaults include summary code, forecast type, beginning and ending dates, address, and fiscal date pattern.

The Summary Forecast Update program generates summary forecasts that are based on data from the Forecast File table (F3460) and stores the forecasts in the Forecast Summary File table (F3400). The summary forecasts provide both sales amount and item quantity data. Proper data selection is critical to accurate processing. Include only items in the summary constants hierarchy.

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Summary Code</b>  | Use this processing option to specify which summary code the system uses when running the summary. Summary code is a user defined code (40/KV) that identifies the summary code for running the summary. You define summary codes using the Summary Constants program (P4091) from the Forecasting Setup menu (G3441). Enter the summary code to use as the default value or select it from the Select User Define Code form. |
| <b>Forecast Type</b> | Use this processing option to specify the detail forecast type that you want the system to use to summarize the forecast. Forecast type is a user defined code (34/DF) that identifies the detail forecast type. Enter the forecast type to use as the default value or select it from the Select User Define Code form.                                                                                                      |
| <b>From Date</b>     | Use this processing option to specify the date from which the system begins the summary forecast. Enter a date to use as the beginning forecast date or                                                                                                                                                                                                                                                                       |

select a date from the calendar. If you leave this field blank, the system uses all data to generate the summary forecast.

### **Thru Date**

Use this processing option to specify the date from which the system ends the summary forecast. Enter a date to use as the ending forecast date or select a date from the calendar. If you leave this field blank, the system uses all data to generate the summary forecast.

### **Address**

Use this processing option to specify whether the system considers the address book numbers are part of the hierarchy or if the system retrieves the address book numbers from the business unit associated with the forecast.

If you leave this field blank, the system retrieves the address book numbers from the business units associated with the forecast detail. In the Business Units program (P0006) on the Organization Account Setup menu (G09411) you can determine which address number is assigned to a business unit. In this case, the system uses the category codes for that address number if you are using address book category codes in the summarization hierarchy.

If you enter *I*, the system considers the address book numbers of the customers are part of the hierarchy. This customer number comes from the Forecast table (F3460). The customer number would be part of the forecast as a result of generating forecasts for large customers. If you did not generate forecasts for large customers or if you do not have any customers defined as large (ABC code on the Customer Master table F0301) set to A) the system does not associate address book numbers with the forecasts. Values are:

*Blank*: The system retrieves the address book number from the business units associated with the forecast detail.

*I*: The system considers the address book numbers of the customers are part of the hierarchy.

### **Fiscal Date Pattern**

Use this processing option to specify the monthly fiscal date pattern the system uses to create summary forecasts. Fiscal date pattern is a user defined code (H00/DP) that identifies the date pattern for the forecast. The system retrieves the pattern from the Date Fiscal Patterns table (F0008). Enter the fiscal date pattern to use as the default value or select it from the Select User Define Code form. If you leave this field blank, the system creates records using dates from the detail forecast records.

## **Reviewing a Summary Forecast**

Access the Work With Summary Forecast form.

**PeopleSoft®**

**Enter Change Summaries - Summary Forecast Revisions**

OK Cancel Form Row Tools

Current Level: Global 1. Global Level From Date: \* Thru Date: \* Type: AA

Change Type: Change Quantity:

Records 1 - 34 Customize Grid

|                                  | Request Date | Original Quantity | Adjusted Quantity | Original Amount | Adjusted Amount | Bypass Forcing | Change Type | Change Amount |
|----------------------------------|--------------|-------------------|-------------------|-----------------|-----------------|----------------|-------------|---------------|
| <input checked="" type="radio"/> | 07/31/02     | 5318              | 5318              | 841,586.00      | 841,586.00      | N              |             |               |
| <input type="radio"/>            | 08/31/02     | 5753              | 5753              | 816,987.00      | 816,987.00      | N              |             |               |
| <input type="radio"/>            | 09/30/02     | 5319              | 5319              | 968,823.00      | 968,823.00      | N              |             |               |
| <input type="radio"/>            | 10/31/02     | 5287              | 5287              | 452,974.00      | 452,974.00      | N              |             |               |
| <input type="radio"/>            | 11/30/02     | 6395              | 6395              | 630,606.00      | 630,606.00      | N              |             |               |
| <input type="radio"/>            | 12/31/02     | 5610              | 5610              | 913,402.00      | 913,402.00      | N              |             |               |
| <input type="radio"/>            | 01/31/03     | 4634              | 4634              | 311,098.00      | 311,098.00      | N              |             |               |
| <input type="radio"/>            | 02/28/03     | 4070              | 4070              | 247,692.00      | 247,692.00      | N              |             |               |
| <input type="radio"/>            | 03/31/03     | 6063              | 6063              | 544,610.00      | 544,610.00      | N              |             |               |
| <input type="radio"/>            | 04/30/03     | 5966              | 5966              | 566,442.00      | 566,442.00      | N              |             |               |
| <input type="radio"/>            | 05/31/03     | 6384              | 6384              | 946,430.00      | 946,430.00      | N              |             |               |
| <input type="radio"/>            | 06/30/03     | 5747              | 5747              | 944,714.00      | 944,714.00      | N              |             |               |
| <input type="radio"/>            | 07/31/03     | 5227              | 5227              | 908,917.00      | 908,917.00      | N              |             |               |
| <input type="radio"/>            | 08/31/03     | 6572              | 6572              | 849,164.00      | 849,164.00      | N              |             |               |
| <input type="radio"/>            | 09/30/03     | 4348              | 4348              | 980,906.00      | 980,906.00      | N              |             |               |
| <input type="radio"/>            | 10/31/03     | 5123              | 5123              | 409,262.00      | 409,262.00      | N              |             |               |
| <input type="radio"/>            | 11/30/03     | 6113              | 6113              | 763,184.00      | 763,184.00      | N              |             |               |
| <input type="radio"/>            | 12/31/03     | 5666              | 5666              | 1,054,618.00    | 1,054,618.00    | N              |             |               |
| <input type="radio"/>            | 01/31/04     | 5028              | 5028              | 281,850.00      | 281,850.00      | N              |             |               |

Summary Forecast Revisions form

**From Date** The date that an item is scheduled to arrive or that an action is scheduled for completion.

**Thru Date** The date that specifies the last update to the file record.

**Adjusted Quantity** The quantity of units forecasted for production during a planning period.

**Adjusted Amount** The current amount of the forecasted units for a planning period.

## Setting Processing Options for Forecast Summary (P34200)

Processing options enable you to specify the default processing for programs and reports.

For programs, you can specify options such as the default values for specific transactions, whether fields appear on a form, and the version of the program that you want to run.

For reports, processing options enable you to specify the information that appears on reports. For example, you set a processing option to include the fiscal year or the number of aging days on a report.

Do not modify EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

## Defaults

Select the Defaults tab.

### Forecast Type

A user defined code (34/DF) that indicates one of the following:

- The forecasting method used to calculate the numbers displayed about the item
- The actual historical information about the item

### Actual Type

A user defined code that indicates one of the following:

1. The forecasting method used to calculate the numbers displayed about the item;
2. The actual historical information about the item.

## Versions

Enter the version for each program. If left blank, either ZJDE0001 or the version listed will be used.

### 1. Forecast Forcing (XJDE0001) (R34610)

A user-defined set of specifications that control how applications and reports run. You use versions to group and save a set of user-defined processing option values and data selection and sequencing options. Interactive versions are associated with applications (usually as a menu selection). Batch versions are associated with batch jobs or reports. To run a batch process, you must select a version.

### 2. Forecast Review By Type (P34300)

Identifies a specific set of data selection and sequencing settings for the application. Versions may be named using any combination of alpha and numeric characters. Versions that begin with 'XJDE' or 'ZJDE' are set up by PeopleSoft.

### 3. Forecast Revisions (P3460)

Identifies a specific set of data selection and sequencing settings for the application. Versions may be named using any combination of alpha and numeric characters. Versions that begin with 'XJDE' or 'ZJDE' are set up by PeopleSoft.

## Revising a Summary Forecast

Access the Work With Summary Forecast form.

### Change Type

A field that tells the system whether the number in the New Price field is an amount or a percentage. Values are:

A Amount

% Percentage

**Change Amount**

The amount of the future change in unit price. This number can be either a dollar amount or a percentage value. If the next field (Column Title = PT) is a \$ sign, the change is in dollars; if the value is a % sign, the change is to be a percentage of the current price.

---

**Note.** When entering a percentage, enter it as a whole number.

---

## Revising Summary Forecasts Using Forecast Forcing (R34610)

Access the Forecast Program (R34610).

### Setting Processing Options for Forecast Forcing (R34610)

Processing options enable you to specify the default processing for programs and reports.

For programs, you can specify options such as the default values for specific transactions, whether fields appear on a form, and the version of the program that you want to run.

For reports, processing options enable you to specify the information that appears on reports. For example, you set a processing option to include the fiscal year or the number of aging days on a report.

Do not modify EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

#### Process

These processing options let you specify how you want the system to process the manual changes that are made to the applicable summary forecast. These processes include:

- Forcing the changes in the specified hierarchy direction.
- Resetting the flag for changed records.
- Forcing only quantity or amount changes.
- Using the adjusted or original forecast values.
- Using the specified summary code.
- Identifying which fiscal date pattern was used to create the summary forecast.

#### 1. Hierarchy Direction

Use this processing option to specify the direction in which to force the changes made to the summary forecast. The system updates the changes in the Forecast table (F3460).

*Blank:* The system forces the changes up and down the hierarchy and automatically resets the flag on the record to indicate the change.

*1:* The system forces the changes up the hierarchy.

*2:* The system forces the changes down the hierarchy.

If you set this processing option to 1 or 2 and you want the system to reset the flag on the changed record, set the Revised Flag processing option to 1.

#### 2. Revised Flag

Use this processing option to specify whether the system resets the revised flag for the records changed when you set the Hierarchy Direction processing option to 1 or 2.

*Blank:* The system does not reset the Revised flag.

*1:* The system resets the Revised flag for the changed record.

### 3. Quantities and Amounts

Use this processing option to specify whether the system forces the changes made to quantities or amounts or both.

*Blank:* The system forces the changes made to both quantities and amounts.

*1:* The system forces only the quantity changes.

*2:* The system forces only the amount changes.

### 4. Ratio Calculations

Use this processing option to specify whether the system calculates the parent/child ratios using the original or the adjusted forecast values. The parent/child ratio is the percentage of the amount or quantity for each child level, based on the total amount or quantity of the parent.

*Blank:* The system uses the original forecast values.

*1:* The system uses the adjusted forecast values.

### 5. Summary Code (Required)

Use this processing option to specify the summary code for which to force changes. This processing option is required and the system overrides any summary code specified in the data selection. Summary code is a user defined code (40/KV) that identifies the summary code. You define summary codes using the Summary Constants program from the Forecasting Setup menu (G3441).

Enter the summary code to use or select it from the Select User Define Code form.

### 6. Fiscal Date Pattern

Use this processing option to specify the fiscal date pattern used to create this summary forecast. This processing option is required if you set the Hierarchy Direction processing option to force changes down and if you created the summary and detail forecasts using different fiscal date patterns. Fiscal date pattern is a user defined code (H00/DP) that identifies the date pattern for the forecast. The system retrieves the pattern from the Date fiscal Patterns table (F0008). Enter the fiscal date pattern to use or select it from the Select User Define Code form. If you leave this field blank, the system forces the changes both up and down the hierarchy.



## CHAPTER 8

# Working with Planning Bill Forecasts

This chapter provides an overview of Planning Bill Forecasts and discusses how to:

- Generate Planning Bill Forecasts.
- Set processing options for MRP/MPS Requirements Planning (R3482).

---

## Understanding Planning Bill Forecasts

This section discusses:

- Planning bills.
- Planning Bill Forecasts.
- Exploding the forecast to the item level.

### Planning Bills

Planning bills are groups of items in a bill of material format that reflect how an item is sold rather than how an item is built. Planning bills enable you to account for the variety of possible options and features that might be included as components in a saleable end item.

### Planning Bill Forecasts

After setting up a planning bill, you can generate a planning bill forecast to help you plan configurations for end products. The MRP/MPS Requirements Planning program (R3482) reads the detail forecast for the selected parent planning bill items and explodes it to create a forecast for the planning bill components for the same time periods.

You can use a planning bill to configure a hypothetical average parent item that is not manufactured, but represents the components which are needed to satisfy demand for all the combinations of options and features that you expect to sell. For example, if your sales history shows that 60 percent of all the bikes you sell are 10-speed bikes and 40 percent are 15-speed bikes, your planning bill includes an average parent bike that is neither a 10-speed bike nor a 15-speed bike, but a hybrid bike that is 60 percent 10-speed bike and 40 percent 15-speed bike.

Use planning bills during master scheduling or material planning. You can forecast with a planning bill to determine component demand within the Master Production Schedule (MPS), Material Requirements Planning (MRP), and Distribution Requirements Planning (DRP) systems.

## Document Types for MRP/MPS Requirements Planning (R3482)

When you select a forecast type to use with a planning bill, you must also enter the type code for this forecast as a forecast type to be read. This action enables the system to read the forecast and explode it down to the component level. You can specify up to five forecast types to be read in a sequence that you specify.

### Example: Average Parent Item

Your sales history shows that 60 percent of the bikes that you sell are 10-speed bikes and 40 percent are 15-speed bikes. Of the 10-speed bikes, 70 percent are blue and 30 percent are green. Of the 15-speed bikes, 80 percent are blue and 20 percent are green. You use these percentages to configure an average parent item.

The average parent bike will be:

- 60 percent 10-speed.
- 40 percent 15-speed.
- 42 percent blue 10-speed (70 percent of 60 percent).
- 18 percent green 10-speed (30 percent of 60 percent).
- 32 percent blue 15-speed (80 percent of 40 percent).
- 8 percent green 15-speed (20 percent of 40 percent).

You decide to manufacture or purchase at these percentages.

Summary forecasts are more accurate than detail forecasts. For example, a forecast for the total number of bikes that will sell in 1998 is more accurate than a forecast for blue 10-speed bikes that will sell in 1998.

The forecast is based upon total bike sales history. This forecast is the summary forecast. The option percentages produce a production (or purchase) forecast for each of the options. This forecast is the detail forecast.

## Exploding the Forecast to the Item Level

You use the planning bill to explode a forecast for the total number of products down to the level of the specific combination of options and features that are included in each saleable end item.

As you set up a planning bill, you designate each level of the item hierarchy above the end item level as an average parent with a planning code of 4. You designate the saleable end items as components of the phantom parents with a planning code of 5.

As you generate the planning bill forecast, you use processing options to designate a forecast type to be read as input and a forecast type to be calculated for the components. You also designate the calculated forecast type as the second type to be read so that it can be exploded down through each level of the hierarchy until the forecast is applied to the saleable end items.

### Example: Exploding the Forecast

You use a planning bill to configure an average parent item that represents total bike sales. This average parent bike represents the top level of the item hierarchy and is configured as follows:

- 60 percent 10-speed bike.
- 40 percent 15-speed bike.

Because bikes with both the 10-speed and 15-speed options can be further divided into blue and green bikes, both the total of all 10-speed bikes and the total of all 15-speed bikes are represented by average parent bikes on the second level of the item hierarchy. These average parents are configured as follows:

- 10-speed bikes:
- 70 percent blue
- 30 percent green
- 15-speed bikes:
- 80 percent blue
- 20 percent green

The system enables you to process multiple parent items as in this example. You use planning code 4 to designate each of the phantom products on the two higher levels of the hierarchy (total bikes on the top level, and total 10-speed bikes and total 15-speed bikes on the second level) as parent items. You use planning code 5 to designate the end item bikes (for example, blue 15-speed bikes) on the bottom level as components of the phantom parent items.

You assign user defined codes to additional forecast types that you want to include in the processing options which were not supplied with the system. For this forecast, you plan to use forecast types that you have defined and assigned to codes 13 and 16. You designate 16 in processing options as the forecast type to be read as input for the top-level parent item and 13 as the forecast type to be created for calculating the forecast for the components.

The system reads the forecast for total bike sales as determined by forecast type 16 and assigns a percentage of the total forecast to each of the portions of the total on the next level of the hierarchy (total 10-speed and total 15-speed sales).

These percentages are based on feature planned percents. Feature planned percents are the percentage of total products that include features that differentiate some products in the total from others. You define the feature planned percent on the Enter/Change Bill - [Enter Bill of Material Information] form. In this example, the feature planned percents are 60 percent for the 10-speed feature and 40 percent for the 15-speed feature.

The system then calculates a forecast that is based on forecast type 13 which it applies to the next level. You also designate 13 as the second forecast type to be read as input so that the system reads the forecast for the second level, which it then applies to the saleable end items (blue and green 10-speed bikes and blue and green 15-speed bikes).

The system reads forecast type 16 and calculates a type 13 forecast of 20,000 total bikes. The system then reads the forecast and explodes it down the hierarchy to the end item level as follows:

- 60 percent of the 20,000 total bikes equals 12,000 10-speed bikes.
- 40 percent of the 20,000 total bikes equals 8,000 15-speed bikes.
- 70 percent of the 12,000 10-speed bikes (42 percent of total bike sales) equals 8,400 blue 10-speed bikes.
- 30 percent of the 12,000 10-speed bikes (18 percent of total bike sales) equals 3,600 green 10-speed bikes.
- 80 percent of the 8,000 15-speed bikes (32 percent of total bike sales) equals 6,400 blue 15-speed bikes.
- 20 percent of the 8,000 15-speed bikes (8 percent of total bike sales) equals 1,600 green 15-speed bikes.

## See Also

*Multilevel Master Schedules in the Requirements Planning Guide*

*Bill of Material in the Product Data Management Guide*

---

## Prerequisites

Before you complete the tasks in this section:

- Enter a planning bill.
- Run the Forecast Revisions program manually to add the forecast for the parent item.

---

## Generating Planning Bill Forecasts

Run the MRP/MPS Requirements Planning program (R3482).

---

## Setting Processing Options for MRP/MPS Requirements Planning (R3482)

Processing options enable you to specify the default processing for programs and reports.

For programs, you can specify options such as the default values for specific transactions, whether fields appear on a form, and the version of the program that you want to run.

For reports, processing options enable you to specify the information that appears on reports. For example, you set a processing option to include the fiscal year or the number of aging days on a report.

Do not modify EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

### Horizon

Select the Horizon tab.

- |                                                              |                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Generation Start Date 1.<br/>Generation Start Date</b> | Use this processing option to specify the date the program uses to start the planning process. This date is also the beginning of the planning horizon.                                                                                                                                                                                                            |
| <b>2. Past Due Periods</b>                                   | <p>The program includes supply and demand from this number of periods prior to the Generation Start Date. Values are:</p> <p>0: 0 periods (default)</p> <p>1: 1 period</p> <p>2: 2 periods</p>                                                                                                                                                                     |
| <b>3. Planning Horizon<br/>Periods</b>                       | <p>Number of planning days</p> <p>Use this processing option to specify the number of days to be included in the plan. For example, when you view the time series, you see daily data for the number of planning days, then weekly data for the number of planning weeks, then monthly data for the number of planning months.</p> <p>Number of planning weeks</p> |

Use this processing option to specify the number of weeks to be included in the plan. For example, when you view the time series, you see daily data for the number of planning days, then weekly data for the number of planning weeks, then monthly data for the number of planning months.

Number of planning months

Use this processing option to specify the number of months to be included in the plan. For example, when you view the time series, you see daily data for the number of planning days, then weekly data for the number of planning weeks, then monthly data for the number of planning months.

## Parameters

Select the Parameters tab.

### 1. Generation Mode 1 = net change 2 = gross regeneration

A gross regeneration includes every item specified in the data selection. A net change includes only those items in the data selection that have changed since the last time you ran the program. Values are:

1: net change

2: gross regeneration

### 2. Generation Type

Please see the help for the Parameters tab for detailed information. Values are:

1: single-level MPS/DRP

2: planning bill

3: multi-level MPS

4: MRP with or without MPS

5: MRP with frozen MPS

### 3. UDC Type

Use this processing option to specify the UDC table (system 34) that contains the list of quantity types to be calculated and written to the Time Series table (F3413). Default = QT.

### 4. Version of Supply/Demand Inclusion Rules

Use this processing option to define which version of supply/demand inclusion rules the program reads. These rules define the criteria used to select items for processing.

## On Hand Data

Select the On Hand Data tab.

### 1. Include Lot Expiration Dates

Use this processing option to specify whether the system considers lot expiration dates when calculating on-hand inventory. For example, if there is 200 units on-hand with an expiration date of August 31, 2010, and you need 200 on September 1, 2010, the program does not recognize the expired lot and creates a message to order or manufacture more of the item to satisfy demand. Values are:

*Blank:* Do not consider lot expiration dates when calculating on-hand inventory.

1: Do consider lot expiration dates when calculating on-hand inventory

**2. Safety Stock Decrease**

Use this processing option to specify whether to plan based on a beginning available quantity from which the safety stock quantity has been subtracted. Values are:

*blank*: do not decrease

*1*: decrease

**3. Receipt Routing Quantities**

In a manufacturing environment, sometimes it is necessary to establish where stock is, in order to determine whether or not it is available for immediate use.

**Quantity in Transit**

In a manufacturing environment, sometimes it is necessary to establish where stock is, in order to determine whether or not it is available for immediate use. Enter 1 if you want quantities in transit to be included in the Beginning Available calculation on the time series. Otherwise, the program includes these quantities in the In Receipt (+IR) line of the time series. The quantities are still considered available by this program. The difference is only in how you view the quantities in the time series. Values are:

*blank*: do not include in on-hand inventory

*1*: include in on-hand inventory

**Quantity in Inspection**

In a manufacturing environment, sometimes it is necessary to establish where stock is, in order to determine whether or not it is available for immediate use. Enter 1 if you want quantities in inspection to be included in the Beginning Available calculation. Otherwise, the program includes these quantities in the In Receipt (+IR) line of the time series. The quantities are still considered available by this program, however. The difference is only in how you view the quantities in the time series. Valid values are:

*blank*: do not include in on-hand inventory

*1*: include in on-hand inventory

**User Defined Quantity 1**

In a manufacturing environment, sometimes it is necessary to establish where stock is, in order to determine whether or not it is available for immediate use. Enter 1 if you want these user defined quantities (defined on Receipt Routings Revisions in the Update Operation 1 field) to be included in the Beginning Available calculation. Otherwise, the program includes these quantities in the In Receipt (+IR) line of the time series. The quantities are still considered available by this program, however. The difference is only in how you view the quantities in the time series. Valid values are:

*blank*: do not include in on-hand inventory

*1*: include in on-hand inventory

**User Defined Quantity 2**

In a manufacturing environment, sometimes it is necessary to establish where stock is, in order to determine whether or not it is available for immediate use. Enter 1 if you want these user defined quantities (defined on Receipt Routings Revisions in the Update Operation 2 field) to be included in the Beginning Available calculation. Otherwise, the program includes these quantities in the In Receipt (+IR) line of the time series. The quantities are still considered available by this program, however. The difference is only in how you view the quantities in the time series. Values are:

*blank*: do not include in on-hand inventory

*1*: include in on-hand inventory

- 4. Lot Hold Codes (up to 5)** Use this processing option to specify the lots to be included in the calculation of on-hand inventory. You can enter a maximum of 5 lot hold codes (41/L).  
*blank:* include no held lots in calculation of on-hand inventory  
*\*:* include all held lots in calculation of on-hand inventory
- 5. Include Past Due Rates as a supply** Use this processing option to specify whether the system considers open quantity from rate schedules that are past due as a supply. If you enter a 1 in this processing option, the system includes these quantities in the calculation of the rate schedule unadjusted (+RSU) and the rate schedule adjusted (+RS) quantities. Values are:  
*Blank:* Do not consider past due orders as a supply.  
*1:* Consider past due orders as a supply.

---

**Note.** You can review these quantity types in the MPS Time Series program (P3413) if you have set up the past due buckets to display.

---

## Forecasting

Select the Forecasting tab.

- 1. Forecast Types Used ( up to 5 ) 1. Forecast Types Used ( up to 5 )** Forecasts are a source of demand. You can create forecasts using 12 different forecast types (34/DF) within the Forecasting system. One is considered the Best Fit (BF) type compared to an item's history of demand. Use this processing option to define which forecast quantities created by which forecast type are included in the planning process. Enter multiple values with no spaces, for example: 0102BF.
- 2. Forecast Type For Planning Bills/Forecast Consumption By Customer** Use this processing option to specify the forecast type (UDC 34/DF) that the system uses to create forecasts for components when you explode generation type 2 planning bills. This value must equal that of the Forecast Types Used processing option for this functionality.  
 The following functionality is for future use.  
 When Forecast Consumption Logic is set to 2, Forecast Consumption by Customer, this processing option specifies the forecast type (34/DF) that is used to create a forecast for the actual daily demand by customer. This value cannot equal the value for the Forecast Types Used processing option for this functionality.
- 3. Forecast Consumption Logic** Use this processing option to specify whether to use forecast consumption logic during the requirements planning processing. Valid values are:  
*Blank:* Do not use forecast consumption.  
*1:* Use forecast consumption. This value invokes forecast consumption logic applied to aggregate sales order and forecast quantities within the forecast consumption period for selected items with a planning fence rule equal to H.  
*2:* Use forecast consumption by customer. This functionality will be delivered in a future release. This value invokes forecast consumption logic applied to sales order and forecast quantities for individual customers. This value must be use in conjunction with the Forecast Type for Planning Bills / Forecast Consumption by Customer.

#### 4. Default Customer Address Relationship for Forecast Consumption by Customer

When Forecast Consumption Logic is set to 2, Forecast Consumption by Customer, then this processing option specifies the customer address relationship i.e. the address book number (ship to or sold to) used for calculation purposes. Values are:

1: Use ship to address book number

2: Use sold to address book number

### Document Types

Select the Document Types tab.

#### 1. Purchase Orders 1. Purchase Orders

When you receive messages related to purchase order creation, this document type will appear as the default. The default value is OP.

#### 2. Work Orders

When you receive messages related to work order creation, this document type will appear as the default. The default value is WO.

#### 3. Rate Schedules

When you receive messages that relate to the rate schedule creation, the document type appears as the default. Enter the UDC 00/DT of the document type for the rate schedule that you want to use.

### Lead Times

Select the Lead Times tab.

#### 1. Purchased Item Safety Leadtime

For items with stocking type P, the program adds the value you enter here to the item's level leadtime to calculate the total leadtime.

#### 2. Manufactured Item Safety Leadtime

For items with stocking type M, the program adds the value you enter here to the item's level leadtime to calculate the total leadtime.

#### 3. Expedite Damper Days

Expedite messages are suppressed, starting on the generation start date and continuing for the number of days you enter here.

#### 4. Defer Damper Days

Defer messages are suppressed, starting on the generation start date and continuing for the number of days you enter here.

### Performance

Select the Performance tab.

#### 1. Clear F3411/F3412/F3413 Tables

Use this processing option with extreme caution! If you enter 1, records in the MPS/MRP/DRP Message table (F3411), MPS/MRP/DRP Lower Level Requirements (Pegging) table (F3412), and MPS/MRP/DRP Summary (Time Series) (F3413) table are purged. Access to this program should be limited. If multiple users run this program concurrently with this processing option set to 1, a record lock error results and prevents complete processing. Values are:

*blank*: do not clear tables

1: clear tables

#### 2. Input B/P Where Planning Tables Will Be Cleared

Use this processing option to specify which Branch/Plant records in the MPS/MRP/DRP Message File table (F3411), the MPS/MRP/DRP Lower Level Requirements File table (F3412), and the Summary (Time Series) table (F3413) are purged.

---

**Note.** This option is only valid when the Clear F3411/F3412/F3413 Tables processing option on the Performance tab is set to '1' and the Delete Branch/Plant processing option has a valid Branch/Plant. This processing option enables a preprocess purge of these tables. If this processing option is not enabled or set to Blank, the system purges records for a given Branch/Plant and Item as you plan the item. Depending on processing option combinations, the following scenarios can occur.

---

Example 1:

Clear F3411/F3412/F3413 Tables is set to '1.'

- (a) Delete Branch/Plant is set to Blank. All records from the three tables will be prepurged.
- (b) Delete Branch/Plant contains a valid Branch/Plant number. Records for all the items that belong to M30 will be prepurged from the three tables.
- (c) Delete Branch/Plant contains an invalid Branch/Plant number. No records from the three tables will be prepurged from the three tables.

Example 2:

Clear F3411/F3412/F3413 Tables set to Blank

Delete Branch/Plant is not active.

No records from any of the three tables will be prepurged.

### **3. Initialize MPS/MRP Print Code.**

If you enter 1 in this processing option, the program initializes every record in the Item Branch table (F4102) by setting the Item Display Code (MRPD) to blank. If you leave this field blank, processing time is decreased. The system will not clear the records in the Item Branch table (F4102). Regardless of how you set this processing option for each item in the data selection, the MRPD field is updated as follows:

- 1 if messages were not created
- 2 if messages were created

The Print Master Production Schedule program (R3450) allows you to enter data selection based on the MRPD field. Values are:

*blank:* Do not initialize the Item Branch file.

*1:* Initialize the Item Branch file.

### **4. Messages And Time Series For Phantom Items**

Use this processing option to specify whether the program generates messages and time series for phantom items. Values are:

*blank:* do not generate

*1:* generate

### **5. Ending Firm Order Status**

Use this processing option to specify the work order status at which messages are no longer exploded to components. If you leave this field blank, all messages are exploded to components.

### **6. Extend Rate Based Adjustments**

Use this processing option to specify whether adjustments for rate based items are exploded to components, thereby creating messages for the components. Values are:

*blank*:do not extend

*I*:extend

## 7. Closed Rate Status

Enter the status of closed rates. When planning for a rate based item, the program does not consider rate orders at this status or higher.

## 8. Set Key Definition For Table F3411

Use this processing option to enable the system to run multiple MRP/MPS jobs concurrently. The value that you enter specifies the range for the number of records in the MPS/MRP/DRP Message File table (F3411) and the MPS/MRP/DRP Lower Level Requirements File table (F3412) for a given run. This value must be large enough to include the number of records that will be generated for the table. For example, if you enter a value of 8 for the first run and 10 for the second run, the range of records that the system reserves for two simultaneous MRP/MPS runs would be as follows:

First run:

The system reserves records in the range of [1] to [ $1 \times 10^8$ ], or 1 through 100,000,000.

Second run:

The system reserves records in the range of [ $1 \times 10^8 + 1$ ] to [ $2 \times 10^{10}$ ], or 100,000,001 through 20,000,000,000.

---

**Note.** The values that you enter are the exponents in the calculations above. Enter a value from 7 to 14. If you do not enter a value, the system uses 10. This processing option is applicable only when a subsequent MRP/MPS job is submitted while an existing job is currently running. The number of records that the MRP/MPS Requirements Planning program (R3482) and Master Planning Schedule - Multiple Plant program (R3483) generate is based on the values that you enter in this processing option. You determine the optimum number of records that the system includes. All values should be the same for all versions. If version settings differ, the system might generate unpredictable results.

---

## 9. Set Key Definition For Table F3412

Use this processing option to enable the system to run multiple MRP/MPS jobs concurrently. The value that you enter specifies the range for the number of records in the MPS/MRP/DRP Message File table (F3411) and the MPS/MRP/DRP Lower Level Requirements File table (F3412) for a given run. This value must be large enough to include the number of records that will be generated for the table. For example, if you enter a value of 8 for the first run and 10 for the second run, the range of records that the system reserves for two simultaneous MRP/MPS runs would be as follows:

First run:

The system reserves records in the range of [1] to [ $1 \times 10^8$ ], or 1 through 100,000,000.

Second run:

The system reserves records in the range of [ $1 \times 10^8 + 1$ ] to [ $2 \times 10^{10}$ ], or 100,000,001 through 20,000,000,000.

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**Note.** The values that you enter are the exponents in the calculations above. Enter a value from 7 to 14. If you do not enter a value, the system uses 10. This processing option is applicable only when a subsequent MRP/MPS job is submitted while an existing job is currently running. The number of records that the MRP/MPS Requirements Planning program (R3482) and Master Planning Schedule - Multiple Plant program (R3483) generate is based on the values that you enter in this processing option. You determine the optimum number of records that the system includes. All values should be the same for all versions. If version settings differ, the system might generate unpredictable results.

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## 10. Suppress Time Series

Use this processing option to specify whether the MRP/MPS Requirements Planning program (R3482) generates the time series. Valid values are:

*Blank:* Generate the time series.

*1:* Do not generate the time series.

---

**Note.** Performance improves if the system does not generate the time series.

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## 11. Planning Control UDC Type

Use this processing option to specify the UDC table in system 34 that contains the list of planning control flags. The default value is PC.

### Mfg Mode

Select the Mfg Mode tab.

#### 1. Process Planning blank = discrete 1 = process

If you use process manufacturing, enter 1 to generate the plan based on the forecasts of the co-/by-products for the process. The program then creates messages for the process. Valid values are:

*blank:* discrete

*1:* process

#### 2. Project Planning

Use this processing option to specify whether the system includes supply and demand from items that are associated with a project. Project-specific items have a stocking type of P. Valid values are:

*Blank:* Do not include items associated with projects.

*1:* Include items associated with projects.

#### 3. Configurator Components Table

Use this processing option to specify whether the system processes configurator components from the Configurator Component Table (F3215) and adds them to the Sales Order Detail File table (F4211) and the Work Order Parts List table (F3111). If you enter a 1 in this processing option, the system processes the items on the Configurator Components table as demand items.

*Blank:* Do not process items from the Configurator Component Table.

*1:* Process items from the Configurator Components table.

### Parallel

Select the Parallel tab.

**1. Number of Subsystem  
Jobs 0 = Default**

Use this processing option to specify the of number subsystems in a server.  
The default is 0 (zero).

**2. Pre Processing**

Use this processing option to specify whether the system runs preprocessing during parallel processing. During preprocessing, the system checks supply and demand and plans only the items within supply and demand. Preprocessing improves performance when you run MRP and is valid only when the number of items actually planned is less than the total number of items in the data selection. Valid values are:

*Blank:* The system does not run preprocessing.

*1:*The system runs preprocessing.

# Glossary of PeopleSoft Terms

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>activity</b>                       | A scheduling entity in PeopleSoft EnterpriseOne Form Design Aid that represents a designated amount of time on a calendar.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>activity rule</b>                  | The criteria by which an object progresses from one given point to the next in a flow.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>add mode</b>                       | A condition of a form that enables users to input data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Advanced Planning Agent (APAg)</b> | A PeopleSoft EnterpriseOne tool that can be used to extract, transform, and load enterprise data. APAg supports access to data sources in the form of relational databases, flat file format, and other data or message encoding, such as XML.                                                                                                                                                                                                                                                                                                                                                |
| <b>application server</b>             | A server in a local area network that contains applications shared by network clients.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>as if processing</b>               | A process that enables you to view currency amounts as if they were entered in a currency different from the domestic and foreign currency of the transaction.                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>alternate currency</b>             | <p>A currency that is different from the domestic currency (when dealing with a domestic-only transaction) or the domestic and foreign currency of a transaction.</p> <p>In PeopleSoft EnterpriseOne Financial Management, alternate currency processing enables you to enter receipts and payments in a currency other than the one in which they were issued.</p>                                                                                                                                                                                                                           |
| <b>as of processing</b>               | A process that is run as of a specific point in time to summarize transactions up to that date. For example, you can run various PeopleSoft EnterpriseOne reports as of a specific date to determine balances and amounts of accounts, units, and so on as of that date.                                                                                                                                                                                                                                                                                                                      |
| <b>back-to-back process</b>           | A process in PeopleSoft EnterpriseOne Workflow Management that contains the same keys that are used in another process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>batch processing</b>               | <p>A process of transferring records from a third-party system to PeopleSoft EnterpriseOne.</p> <p>In PeopleSoft EnterpriseOne Financial Management, batch processing enables you to transfer invoices and vouchers that are entered in a system other than EnterpriseOne to PeopleSoft EnterpriseOne Accounts Receivable and PeopleSoft EnterpriseOne Accounts Payable, respectively. In addition, you can transfer address book information, including customer and supplier records, to PeopleSoft EnterpriseOne.</p>                                                                      |
| <b>batch server</b>                   | A server that is designated for running batch processing requests. A batch server typically does not contain a database nor does it run interactive applications.                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>batch-of-one immediate</b>         | <p>A transaction method that enables a client application to perform work on a client workstation, then submit the work all at once to a server application for further processing. As a batch process is running on the server, the client application can continue performing other tasks.</p> <p>See also direct connect and store-and-forward.</p>                                                                                                                                                                                                                                        |
| <b>business function</b>              | A named set of user-created, reusable business rules and logs that can be called through event rules. Business functions can run a transaction or a subset of a transaction (check inventory, issue work orders, and so on). Business functions also contain the application programming interfaces (APIs) that enable them to be called from a form, a database trigger, or a non-EnterpriseOne application. Business functions can be combined with other business functions, forms, event rules, and other components to make up an application. Business functions can be created through |

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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|                                     | event rules or third-generation languages, such as C. Examples of business functions include Credit Check and Item Availability.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>business function event rule</b> | See named event rule (NER).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>business view</b>                | A means for selecting specific columns from one or more PeopleSoft EnterpriseOne tables whose data is used in an application or report. A business view does not select specific rows, nor does it contain any actual data. It is strictly a view through which you can manipulate data.                                                                                                                                                                                                                                                          |
| <b>central objects merge</b>        | A process that blends a customer's modifications to the objects in a current release with objects in a new release.                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>central server</b>               | A server that has been designated to contain the originally installed version of the software (central objects) for deployment to client computers. In a typical PeopleSoft EnterpriseOne installation, the software is loaded on to one machine—the central server. Then, copies of the software are pushed out or downloaded to various workstations attached to it. That way, if the software is altered or corrupted through its use on workstations, an original set of objects (central objects) is always available on the central server. |
| <b>charts</b>                       | Tables of information in PeopleSoft EnterpriseOne that appear on forms in the software.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>connector</b>                    | Component-based interoperability model that enables third-party applications and PeopleSoft EnterpriseOne to share logic and data. The PeopleSoft EnterpriseOne connector architecture includes Java and COM connectors.                                                                                                                                                                                                                                                                                                                          |
| <b>contra/clearing account</b>      | A general ledger account in PeopleSoft EnterpriseOne Financial Management that is used by the system to offset (balance) journal entries. For example, you can use a contra/clearing account to balance the entries created by allocations in PeopleSoft EnterpriseOne General Accounting.                                                                                                                                                                                                                                                        |
| <b>Control Table Workbench</b>      | An application that, during the installation Workbench processing, runs the batch applications for the planned merges that update the data dictionary, user-defined codes, menus, and user override tables.                                                                                                                                                                                                                                                                                                                                       |
| <b>control tables merge</b>         | A process that blends a customer's modifications to the control tables with the data that accompanies a new release.                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>cost assignment</b>              | The process in PeopleSoft EnterpriseOne Advanced Cost Accounting of tracing or allocating resources to activities or cost objects.                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>cost component</b>               | In PeopleSoft EnterpriseOne Manufacturing Management, an element of an item's cost (for example, material, labor, or overhead).                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>cross segment edit</b>           | A logic statement that establishes the relationship between configured item segments. Cross segment edits are used to prevent ordering of configurations that cannot be produced.                                                                                                                                                                                                                                                                                                                                                                 |
| <b>currency restatement</b>         | The process of converting amounts from one currency into another currency, generally for reporting purposes. You can use the currency restatement process, for example, when many currencies must be restated into a single currency for consolidated reporting.                                                                                                                                                                                                                                                                                  |
| <b>database server</b>              | A server in a local area network that maintains a database and performs searches for client computers.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Data Source Workbench</b>        | An application that, during the Installation Workbench process, copies all data sources that are defined in the installation plan from the Data Source Master and Table and Data Source Sizing tables in the Planner data source to the System-release number data source. It also updates the Data Source Plan detail record to reflect completion.                                                                                                                                                                                              |

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| <b>date pattern</b>                      | A calendar that represents the beginning date for the fiscal year and the ending date for each period in that year in standard and 52-period accounting.                                                                                                                                                                                                                                                                                    |
| <b>denominated-in currency</b>           | The company currency in which financial reports are based.                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>deployment server</b>                 | A server that is used to install, maintain, and distribute software to one or more enterprise servers and client workstations.                                                                                                                                                                                                                                                                                                              |
| <b>detail information</b>                | Information that relates to individual lines in PeopleSoft EnterpriseOne transactions (for example, voucher pay items and sales order detail lines).                                                                                                                                                                                                                                                                                        |
| <b>direct connect</b>                    | A transaction method in which a client application communicates interactively and directly with a server application.<br><br>See also batch-of-one immediate and store-and-forward.                                                                                                                                                                                                                                                         |
| <b>Do Not Translate (DNT)</b>            | A type of data source that must exist on the iSeries because of BLOB restrictions.                                                                                                                                                                                                                                                                                                                                                          |
| <b>dual pricing</b>                      | The process of providing prices for goods and services in two currencies.                                                                                                                                                                                                                                                                                                                                                                   |
| <b>edit code</b>                         | A code that indicates how a specific value for a report or a form should appear or be formatted. The default edit codes that pertain to reporting require particular attention because they account for a substantial amount of information.                                                                                                                                                                                                |
| <b>edit mode</b>                         | A condition of a form that enables users to change data.                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>edit rule</b>                         | A method used for formatting and validating user entries against a predefined rule or set of rules.                                                                                                                                                                                                                                                                                                                                         |
| <b>Electronic Data Interchange (EDI)</b> | An interoperability model that enables paperless computer-to-computer exchange of business transactions between PeopleSoft EnterpriseOne and third-party systems. Companies that use EDI must have translator software to convert data from the EDI standard format to the formats of their computer systems.                                                                                                                               |
| <b>embedded event rule</b>               | An event rule that is specific to a particular table or application. Examples include form-to-form calls, hiding a field based on a processing option value, and calling a business function. Contrast with the business function event rule.                                                                                                                                                                                               |
| <b>Employee Work Center</b>              | A central location for sending and receiving all PeopleSoft EnterpriseOne messages (system and user generated), regardless of the originating application or user. Each user has a mailbox that contains workflow and other messages, including Active Messages.                                                                                                                                                                            |
| <b>enterprise server</b>                 | A server that contains the database and the logic for PeopleSoft EnterpriseOne or PeopleSoft World.                                                                                                                                                                                                                                                                                                                                         |
| <b>EnterpriseOne object</b>              | A reusable piece of code that is used to build applications. Object types include tables, forms, business functions, data dictionary items, batch processes, business views, event rules, versions, data structures, and media objects.                                                                                                                                                                                                     |
| <b>EnterpriseOne process</b>             | A software process that enables PeopleSoft EnterpriseOne clients and servers to handle processing requests and run transactions. A client runs one process, and servers can have multiple instances of a process. PeopleSoft EnterpriseOne processes can also be dedicated to specific tasks (for example, workflow messages and data replication) to ensure that critical processes don't have to wait if the server is particularly busy. |
| <b>Environment Workbench</b>             | An application that, during the Installation Workbench process, copies the environment information and Object Configuration Manager tables for each environment from the Planner data source to the System-release number data source. It also updates the Environment Plan detail record to reflect completion.                                                                                                                            |
| <b>escalation monitor</b>                | A batch process that monitors pending requests or activities and restarts or forwards them to the next step or user after they have been inactive for a specified amount of time.                                                                                                                                                                                                                                                           |

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| <b>event rule</b>                  | A logic statement that instructs the system to perform one or more operations based on an activity that can occur in a specific application, such as entering a form or exiting a field.                                                                                                                                          |
| <b>facility</b>                    | An entity within a business for which you want to track costs. For example, a facility might be a warehouse location, job, project, work center, or branch/plant. A facility is sometimes referred to as a <i>business unit</i> .                                                                                                 |
| <b>fast path</b>                   | A command prompt that enables the user to move quickly among menus and applications by using specific commands.                                                                                                                                                                                                                   |
| <b>file server</b>                 | A server that stores files to be accessed by other computers on the network. Unlike a disk server, which appears to the user as a remote disk drive, a file server is a sophisticated device that not only stores files, but also manages them and maintains order as network user request files and make changes to these files. |
| <b>final mode</b>                  | The report processing mode of a processing mode of a program that updates or creates data records.                                                                                                                                                                                                                                |
| <b>FTP server</b>                  | A server that responds to requests for files via file transfer protocol.                                                                                                                                                                                                                                                          |
| <b>header information</b>          | Information at the beginning of a table or form. Header information is used to identify or provide control information for the group of records that follows.                                                                                                                                                                     |
| <b>interface table</b>             | See Z tables.                                                                                                                                                                                                                                                                                                                     |
| <b>integration server</b>          | A server that facilitates interaction between diverse operating systems and applications across internal and external networked computer systems.                                                                                                                                                                                 |
| <b>integrity test</b>              | A process used to supplement a company's internal balancing procedures by locating and reporting balancing problems and data inconsistencies.                                                                                                                                                                                     |
| <b>interoperability model</b>      | A method for third-party systems to connect to or access PeopleSoft EnterpriseOne.                                                                                                                                                                                                                                                |
| <b>in-your-face-error</b>          | In PeopleSoft EnterpriseOne, a form-level property which, when enabled, causes the text of application errors to appear on the form.                                                                                                                                                                                              |
| <b>IServer service</b>             | Developed by PeopleSoft, this internet server service resides on the web server and is used to speed up delivery of the Java class files from the database to the client.                                                                                                                                                         |
| <b>jargon</b>                      | An alternative data dictionary item description that PeopleSoft EnterpriseOne or People World displays based on the product code of the current object.                                                                                                                                                                           |
| <b>Java application server</b>     | A component-based server that resides in the middle-tier of a server-centric architecture. This server provides middleware services for security and state maintenance, along with data access and persistence.                                                                                                                   |
| <b>JDBNET</b>                      | A database driver that enables heterogeneous servers to access each other's data.                                                                                                                                                                                                                                                 |
| <b>JDEBASE Database Middleware</b> | A PeopleSoft proprietary database middleware package that provides platform-independent APIs, along with client-to-server access.                                                                                                                                                                                                 |
| <b>JDECallObject</b>               | An API used by business functions to invoke other business functions.                                                                                                                                                                                                                                                             |
| <b>jde.ini</b>                     | A PeopleSoft file (or member for iSeries) that provides the runtime settings required for EnterpriseOne initialization. Specific versions of the file or member must reside on every machine running PeopleSoft EnterpriseOne. This includes workstations and servers.                                                            |
| <b>JDEIPC</b>                      | Communications programming tools used by server code to regulate access to the same data in multiprocess environments, communicate and coordinate between processes, and create new processes.                                                                                                                                    |

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| <b>jde.log</b>                        | The main diagnostic log file of PeopleSoft EnterpriseOne. This file is always located in the root directory on the primary drive and contains status and error messages from the startup and operation of PeopleSoft EnterpriseOne.                                                                                                                                                                                                                                               |
| <b>JDENET</b>                         | PeopleSoft proprietary communications middleware package. This package is a peer-to-peer, message-based, socket-based, multiprocess communications middleware solution. It handles client-to-server and server-to-server communications for all PeopleSoft EnterpriseOne supported platforms.                                                                                                                                                                                     |
| <b>Location Workbench</b>             | An application that, during the Installation Workbench process, copies all locations that are defined in the installation plan from the Location Master table in the Planner data source to the System data source.                                                                                                                                                                                                                                                               |
| <b>logic server</b>                   | A server in a distributed network that provides the business logic for an application program. In a typical configuration, pristine objects are replicated on to the logic server from the central server. The logic server, in conjunction with workstations, actually performs the processing required when PeopleSoft EnterpriseOne and World software runs.                                                                                                                   |
| <b>MailMerge Workbench</b>            | An application that merges Microsoft Word 6.0 (or higher) word-processing documents with PeopleSoft EnterpriseOne records to automatically print business documents. You can use MailMerge Workbench to print documents, such as form letters about verification of employment.                                                                                                                                                                                                   |
| <b>master business function (MBF)</b> | An interactive master file that serves as a central location for adding, changing, and updating information in a database. Master business functions pass information between data entry forms and the appropriate tables. These master functions provide a common set of functions that contain all of the necessary default and editing rules for related programs. MBFs contain logic that ensures the integrity of adding, updating, and deleting information from databases. |
| <b>master table</b>                   | See published table.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>matching document</b>              | A document associated with an original document to complete or change a transaction. For example, in PeopleSoft EnterpriseOne Financial Management, a receipt is the matching document of an invoice, and a payment is the matching document of a voucher.                                                                                                                                                                                                                        |
| <b>media storage object</b>           | Files that use one of the following naming conventions that are not organized into table format: Gxxx, xxxGT, or GTxxx.                                                                                                                                                                                                                                                                                                                                                           |
| <b>message center</b>                 | A central location for sending and receiving all PeopleSoft EnterpriseOne messages (system and user generated), regardless of the originating application or user.                                                                                                                                                                                                                                                                                                                |
| <b>messaging adapter</b>              | An interoperability model that enables third-party systems to connect to PeopleSoft EnterpriseOne to exchange information through the use of messaging queues.                                                                                                                                                                                                                                                                                                                    |
| <b>messaging server</b>               | A server that handles messages that are sent for use by other programs using a messaging API. Messaging servers typically employ a middleware program to perform their functions.                                                                                                                                                                                                                                                                                                 |
| <b>named event rule (NER)</b>         | Encapsulated, reusable business logic created using event rules, rather than C programming. NERs are also called business function event rules. NERs can be reused in multiple places by multiple programs. This modularity lends itself to streamlining, reusability of code, and less work.                                                                                                                                                                                     |
| <b><i>nota fiscal</i></b>             | In Brazil, a legal document that must accompany all commercial transactions for tax purposes and that must contain information required by tax regulations.                                                                                                                                                                                                                                                                                                                       |
| <b><i>nota fiscal factura</i></b>     | In Brazil, a <i>nota fiscal</i> with invoice information.<br>See also <i>nota fiscal</i> .                                                                                                                                                                                                                                                                                                                                                                                        |

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| <b>Object Configuration Manager (OCM)</b> | In PeopleSoft EnterpriseOne, the object request broker and control center for the runtime environment. OCM keeps track of the runtime locations for business functions, data, and batch applications. When one of these objects is called, OCM directs access to it using defaults and overrides for a given environment and user.                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Object Librarian</b>                   | A repository of all versions, applications, and business functions reusable in building applications. Object Librarian provides check-out and check-in capabilities for developers, and it controls the creation, modification, and use of PeopleSoft EnterpriseOne objects. Object Librarian supports multiple environments (such as production and development) and enables objects to be easily moved from one environment to another.                                                                                                                                                                                                                                                                                        |
| <b>Object Librarian merge</b>             | A process that blends any modifications to the Object Librarian in a previous release into the Object Librarian in a new release.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Open Data Access (ODA)</b>             | An interoperability model that enables you to use SQL statements to extract PeopleSoft EnterpriseOne data for summarization and report generation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Output Stream Access (OSA)</b>         | An interoperability model that enables you to set up an interface for PeopleSoft EnterpriseOne to pass data to another software package, such as Microsoft Excel, for processing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>package</b>                            | EnterpriseOne objects are installed to workstations in packages from the deployment server. A package can be compared to a bill of material or kit that indicates the necessary objects for that workstation and where on the deployment server the installation program can find them. It is point-in-time snap shot of the central objects on the deployment server.                                                                                                                                                                                                                                                                                                                                                           |
| <b>package build</b>                      | <p>A software application that facilitates the deployment of software changes and new applications to existing users. Additionally, in PeopleSoft EnterpriseOne, a package build can be a compiled version of the software. When you upgrade your version of the ERP software, for example, you are said to take a package build.</p> <p>Consider the following context: “Also, do not transfer business functions into the production path code until you are ready to deploy, because a global build of business functions done during a package build will automatically include the new functions.” The process of creating a package build is often referred to, as it is in this example, simply as “a package build.”</p> |
| <b>package location</b>                   | The directory structure location for the package and its set of replicated objects. This is usually \\deployment server\release\path_code\package\package name. The subdirectories under this path are where the replicated objects for the package are placed. This is also referred to as where the package is built or stored.                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Package Workbench</b>                  | An application that, during the Installation Workbench process, transfers the package information tables from the Planner data source to the System-release number data source. It also updates the Package Plan detail record to reflect completion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>PeopleSoft Database</b>                | See JDEBASE Database Middleware.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>planning family</b>                    | A means of grouping end items whose similarity of design and manufacture facilitates being planned in aggregate.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>preference profile</b>                 | The ability to define default values for specified fields for a user-defined hierarchy of items, item groups, customers, and customer groups.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>print server</b>                       | The interface between a printer and a network that enables network clients to connect to the printer and send their print jobs to it. A print server can be a computer, separate hardware device, or even hardware that resides inside of the printer itself.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>pristine environment</b>               | A PeopleSoft EnterpriseOne environment used to test unaltered objects with PeopleSoft demonstration data or for training classes. You must have this environment so that you can compare pristine objects that you modify.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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| <b>processing option</b>            | A data structure that enables users to supply parameters that regulate the running of a batch program or report. For example, you can use processing options to specify default values for certain fields, to determine how information appears or is printed, to specify date ranges, to supply runtime values that regulate program execution, and so on.                                                                                                                                                                                                                                                                 |
| <b>production environment</b>       | A PeopleSoft EnterpriseOne environment in which users operate EnterpriseOne software.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>production-grade file server</b> | A file server that has been quality assurance tested and commercialized and that is usually provided in conjunction with user support services.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>program temporary fix (PTF)</b>  | A representation of changes to PeopleSoft software that your organization receives on magnetic tapes or disks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>project</b>                      | In PeopleSoft EnterpriseOne, a virtual container for objects being developed in Object Management Workbench.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>promotion path</b>               | <p>The designated path for advancing objects or projects in a workflow. The following is the normal promotion cycle (path):</p> <p>11&gt;21&gt;26&gt;28&gt;38&gt;01</p> <p>In this path, 11 equals new project pending review, 21 equals programming, 26 equals QA test/review, 28 equals QA test/review complete, 38 equals in production, 01 equals complete. During the normal project promotion cycle, developers check objects out of and into the development path code and then promote them to the prototype path code. The objects are then moved to the productions path code before declaring them complete.</p> |
| <b>proxy server</b>                 | A server that acts as a barrier between a workstation and the internet so that the enterprise can ensure security, administrative control, and caching service.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>published table</b>              | Also called a master table, this is the central copy to be replicated to other machines. Residing on the publisher machine, the F98DRPUB table identifies all of the published tables and their associated publishers in the enterprise.                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>publisher</b>                    | The server that is responsible for the published table. The F98DRPUB table identifies all of the published tables and their associated publishers in the enterprise.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>pull replication</b>             | One of the PeopleSoft methods for replicating data to individual workstations. Such machines are set up as pull subscribers using PeopleSoft EnterpriseOne data replication tools. The only time that pull subscribers are notified of changes, updates, and deletions is when they request such information. The request is in the form of a message that is sent, usually at startup, from the pull subscriber to the server machine that stores the F98DRPCN table.                                                                                                                                                      |
| <b>QBE</b>                          | An abbreviation for query by example. In PeopleSoft EnterpriseOne, the QBE line is the top line on a detail area that is used for filtering data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>real-time event</b>              | A service that uses system calls to capture PeopleSoft EnterpriseOne transactions as they occur and to provide notification to third-party software, end users, and other PeopleSoft systems that have requested notification when certain transactions occur.                                                                                                                                                                                                                                                                                                                                                              |
| <b>refresh</b>                      | A function used to modify PeopleSoft EnterpriseOne software, or subset of it, such as a table or business data, so that it functions at a new release or cumulative update level, such as B73.2 or B73.2.1.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>replication server</b>           | A server that is responsible for replicating central objects to client machines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>quote order</b>                  | In PeopleSoft EnterpriseOne Procurement and Subcontract Management, a request from a supplier for item and price information from which you can create a purchase order.                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                            | In PeopleSoft EnterpriseOne Sales Order Management, item and price information for a customer who has not yet committed to a sales order.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>selection</b>                           | Found on PeopleSoft menus, a selection represents functions that you can access from a menu. To make a selection, type the associated number in the Selection field and press Enter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Server Workbench</b>                    | An application that, during the Installation Workbench process, copies the server configuration files from the Planner data source to the System-release number data source. It also updates the Server Plan detail record to reflect completion.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>spot rate</b>                           | An exchange rate entered at the transaction level. This rate overrides the exchange rate that is set up between two currencies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Specification merge</b>                 | A merge that comprises three merges: Object Librarian merge, Versions List merge, and Central Objects merge. The merges blend customer modifications with data that accompanies a new release.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>specification</b>                       | A complete description of a PeopleSoft EnterpriseOne object. Each object has its own specification, or name, which is used to build applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Specification Table Merge Workbench</b> | An application that, during the Installation Workbench process, runs the batch applications that update the specification tables.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>store-and-forward</b>                   | The mode of processing that enables users who are disconnected from a server to enter transactions and then later connect to the server to upload those transactions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>subscriber table</b>                    | Table F98DRSUB, which is stored on the publisher server with the F98DRPUB table and identifies all of the subscriber machines for each published table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>supplemental data</b>                   | <p>Any type of information that is not maintained in a master file. Supplemental data is usually additional information about employees, applicants, requisitions, and jobs (such as an employee's job skills, degrees, or foreign languages spoken). You can track virtually any type of information that your organization needs.</p> <p>For example, in addition to the data in the standard master tables (the Address Book Master, Customer Master, and Supplier Master tables), you can maintain other kinds of data in separate, generic databases. These generic databases enable a standard approach to entering and maintaining supplemental data across PeopleSoft EnterpriseOne systems.</p> |
| <b>table access management (TAM)</b>       | The PeopleSoft EnterpriseOne component that handles the storage and retrieval of use-defined data. TAM stores information, such as data dictionary definitions; application and report specifications; event rules; table definitions; business function input parameters and library information; and data structure definitions for running applications, reports, and business functions.                                                                                                                                                                                                                                                                                                             |
| <b>Table Conversion Workbench</b>          | An interoperability model that enables the exchange of information between PeopleSoft EnterpriseOne and third-party systems using non-PeopleSoft EnterpriseOne tables.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>table conversion</b>                    | An interoperability model that enables the exchange of information between PeopleSoft EnterpriseOne and third-party systems using non-PeopleSoft EnterpriseOne tables.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>table event rules</b>                   | Logic that is attached to database triggers that runs whenever the action specified by the trigger occurs against the table. Although PeopleSoft EnterpriseOne enables event rules to be attached to application events, this functionality is application specific. Table event rules provide embedded logic at the table level.                                                                                                                                                                                                                                                                                                                                                                        |
| <b>terminal server</b>                     | A server that enables terminals, microcomputers, and other devices to connect to a network or host computer or to devices attached to that particular computer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>three-tier processing</b>               | The task of entering, reviewing and approving, and posting batches of transactions in PeopleSoft EnterpriseOne.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>three-way voucher match</b>             | In PeopleSoft EnterpriseOne Procurement and Subcontract Management, the process of comparing receipt information to supplier's invoices to create vouchers. In a three-way match, you use the receipt records to create vouchers.                                                                                                                                                                                                                                                                                                                                          |
| <b>transaction processing (TP) monitor</b> | A monitor that controls data transfer between local and remote terminals and the applications that originated them. TP monitors also protect data integrity in the distributed environment and may include programs that validate data and format terminal screens.                                                                                                                                                                                                                                                                                                        |
| <b>transaction set</b>                     | An electronic business transaction (electronic data interchange standard document) made up of segments.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>trigger</b>                             | One of several events specific to data dictionary items. You can attach logic to a data dictionary item that the system processes automatically when the event occurs.                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>triggering event</b>                    | A specific workflow event that requires special action or has defined consequences or resulting actions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>two-way voucher match</b>               | In PeopleSoft EnterpriseOne Procurement and Subcontract Management, the process of comparing purchase order detail lines to the suppliers' invoices to create vouchers. You do not record receipt information.                                                                                                                                                                                                                                                                                                                                                             |
| <b>User Overrides merge</b>                | Adds new user override records into a customer's user override table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>variance</b>                            | <p>In Capital Asset Management, the difference between revenue generated by a piece of equipment and costs incurred by the equipment.</p> <p>In EnterpriseOne Project Costing and EnterpriseOne Manufacturing Management, the difference between two methods of costing the same item (for example, the difference between the frozen standard cost and the current cost is an engineering variance). Frozen standard costs come from the Cost Components table, and the current costs are calculated using the current bill of material, routing, and overhead rates.</p> |
| <b>Version List merge</b>                  | The Versions List merge preserves any non-XJDE and non-ZJDE version specifications for objects that are valid in the new release, as well as their processing options data.                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>visual assist</b>                       | Forms that can be invoked from a control via a trigger to assist the user in determining what data belongs in the control.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>vocabulary override</b>                 | An alternate description for a data dictionary item that appears on a specific PeopleSoft EnterpriseOne or World form or report.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>wchar_t</b>                             | An internal type of a wide character. It is used for writing portable programs for international markets.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>web application server</b>              | A web server that enables web applications to exchange data with the back-end systems and databases used in eBusiness transactions.                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>web server</b>                          | A server that sends information as requested by a browser, using the TCP/IP set of protocols. A web server can do more than just coordination of requests from browsers; it can do anything a normal server can do, such as house applications or data. Any computer can be turned into a web server by installing server software and connecting the machine to the internet.                                                                                                                                                                                             |
| <b>Windows terminal server</b>             | A multiuser server that enables terminals and minimally configured computers to display Windows applications even if they are not capable of running Windows software themselves. All client processing is performed centrally at the Windows terminal server and only display, keystroke, and mouse commands are transmitted over the network to the client terminal device.                                                                                                                                                                                              |

|                                      |                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>work day calendar</b>             | In EnterpriseOne Manufacturing Management, a calendar that is used in planning functions that consecutively lists only working days so that component and work order scheduling can be done based on the actual number of work days available. A work day calendar is sometimes referred to as planning calendar, manufacturing calendar, or shop floor calendar. |
| <b>workflow</b>                      | The automation of a business process, in whole or in part, during which documents, information, or tasks are passed from one participant to another for action, according to a set of procedural rules.                                                                                                                                                           |
| <b>workgroup server</b>              | A server that usually contains subsets of data replicated from a master network server. A workgroup server does not perform application or batch processing.                                                                                                                                                                                                      |
| <b>XAPI events</b>                   | A service that uses system calls to capture PeopleSoft EnterpriseOne transactions as they occur and then calls third-party software, end users, and other PeopleSoft systems that have requested notification when the specified transactions occur to return a response.                                                                                         |
| <b>XML CallObject</b>                | An interoperability capability that enables you to call business functions.                                                                                                                                                                                                                                                                                       |
| <b>XML Dispatch</b>                  | An interoperability capability that provides a single point of entry for all XML documents coming into PeopleSoft EnterpriseOne for responses.                                                                                                                                                                                                                    |
| <b>XML List</b>                      | An interoperability capability that enables you to request and receive PeopleSoft EnterpriseOne database information in chunks.                                                                                                                                                                                                                                   |
| <b>XML Service</b>                   | An interoperability capability that enables you to request events from one PeopleSoft EnterpriseOne system and receive a response from another PeopleSoft EnterpriseOne system.                                                                                                                                                                                   |
| <b>XML Transaction</b>               | An interoperability capability that enables you to use a predefined transaction type to send information to or request information from PeopleSoft EnterpriseOne. XML transaction uses interface table functionality.                                                                                                                                             |
| <b>XML Transaction Service (XTS)</b> | Transforms an XML document that is not in the PeopleSoft EnterpriseOne format into an XML document that can be processed by PeopleSoft EnterpriseOne. XTS then transforms the response back to the request originator XML format.                                                                                                                                 |
| <b>Z event</b>                       | A service that uses interface table functionality to capture PeopleSoft EnterpriseOne transactions and provide notification to third-party software, end users, and other PeopleSoft systems that have requested to be notified when certain transactions occur.                                                                                                  |
| <b>Z table</b>                       | A working table where non-PeopleSoft EnterpriseOne information can be stored and then processed into PeopleSoft EnterpriseOne. Interface tables also can be used to retrieve PeopleSoft EnterpriseOne data. Interface tables are also known as interface tables.                                                                                                  |
| <b>Z transaction</b>                 | Third-party data that is properly formatted in interface tables for updating to the PeopleSoft EnterpriseOne database.                                                                                                                                                                                                                                            |

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