# Epicor ERP

# Project Billing - Fixed Fee Course

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## Disclaimer



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# Project Billing - Fixed Fee Course

This course reviews the **Project Billing - Fixed Fee** functionality including the concepts and reporting tools in the Project Management module. Topics of discussion include maintenance program setup, project billing processes, and how to recognize the impact these processes have on a project. Throughout the course, hands-on workshops guide you through these topics.

Upon successful completion of this course, you will be able to:

- Identify key maintenance program configurations used to set up Project Billing.
- Recognize the relationship between Project Management and Project Billing.
- Identify the functionality and different uses of Project Billing invoice options.
- Create a project using the Fixed Fee Project Billing invoice method.
- Generate and analyze invoices based on different invoice options.

# Before You Begin

Read this topic for information you should know in order to successfully complete this course.

## Audience

Specific audiences will benefit from this course.

- CFO/Controller
- AR Clerk
- COO/Operations Manager
- Shop Floor Manager
- Scheduler
- Production Manager
- Engineer
- Sales Manager
- Order Entry Staff
- Account Manager

## Prerequisites

To complete the workshops in this course, the necessary modules must be licensed and operating in your training environment. For more information on the modules available, contact your Epicor Customer Account Manager at EpicorCAM@epicor.com. It is also important you understand the prerequisite knowledge contained in other valuable courses.

- **Navigation Course** - This course introduces navigational aspects of the Epicor application's user interface. Designed for a hands-on environment, general navigation principles and techniques available in two user interface modes - **Classic Menu** and **Modern Shell Menu**. Workshops focus on each of these modes and guide you through each navigational principle introduced.
- **System Flow Course** - This course introduces a basic quote to cash scenario that includes the process from the initial customer quote to final cash receipts and payment of supplier invoices. This course emphasizes the series of processes that make up the quote to cash process by using a simple scenario to highlight various transactions. Your organization may have more complex processing routines than those described in this course.
- **Project Management Course** - This course covers how to accomplish a specific goal through a series of interrelated tasks and effective utilization of resources, such as people, time, and money.
- **Sales Order Management Course** - This course discusses the Order Management module and how it facilitates the flow of manufactured items from inventory or jobs to the customer. A shipping transaction is performed whether items are shipped from stock or from work in process (WIP). Shipping transactions are captured during invoicing in the Accounts Receivable (AR) module, creating financial transactions that post to the general ledger (GL). Order entry and shipping are directly affected by the nature of the product and the process, specifically whether the items are built-to-order or shipped from stock.

- **Purchase Management Course** - This course focuses on the Purchase Management process. This process includes the creation and approval of purchase orders (POs) and requisitions, managing suppliers and their price lists, working with purchase order suggestions, and monitoring the purchase order process using related reports and trackers. The advanced functionality in the Supplier Relationship Management and Purchase Contract modules also aids in managing purchase orders.
- **Job Management Course** - This course describes the features and functionality of the Job Management module. Job Management provides a comprehensive manufacturing control system designed for routing, scheduling, costing, and tracking custom or repetitive parts produced for inventory or shipped to the customer from the site floor.
- **Time and Expense Management Course -** This course reviews the **Time Management** and **Expense Management** modules used to enter and manage employee labor hours and expense.
- **Accounts Payable Course** - This course is designed to review the concepts and reporting tools available in the Accounts Payable (AP) module. Topics of discussion include maintenance program setup and the creation and payment processes for various invoice types. This course also describes how AP invoices and payments impact the general ledger (GL).
- **Accounts Receivable Course** - This course reviews the Accounts Receivable (AR) module's concepts and reporting tools. Topics of discussion include maintenance program setup, various AR processes, and how to recognize the impact these processes have on the general ledger (GL). Throughout the course, hands-on workshops guide you through these topics.

## Environment Setup

The environment setup steps and potential workshop constraints must be reviewed in order to successfully complete the workshops in this course.

Your Epicor training environment, in which the Epicor demonstration database is found, enables you to experience Epicor functionality in action but does not affect data in your live, production environment.

The following steps must be taken to successfully complete the workshops in this course.

1. Verify the following or ask your system administrator to verify for you:
   - **Your Epicor training icon (or web address if you are using Epicor Web Access) points to your Epicor training environment with the Epicor demonstration database installed.** Do not complete the course workshops in your live, production environment.

     **Note** It is recommended that multiple Epicor demonstration databases are installed. Contact Support or Systems Consulting for billable assistance.

   - **The Epicor demonstration database is at the same service pack and patch as the Epicor application.** Epicor's education team updates the Epicor demonstration database for each service pack and patch. If your system administrator upgrades your Epicor application to a new service pack or patch, he or she must also download the corresponding Epicor demonstration database from EPICweb > Support > Epicor > Downloads and install it. If this is not performed, unexpected results can occur when completing the course workshops.
   - **Your system administrator restored (refreshed) the Epicor demonstration database prior to starting this course.** The Epicor demonstration database comes standard with parts, customers, sales orders, and so on, already defined. If the Epicor demonstration database is shared with multiple users (that is, the database is located on a server and users access the same data, much like your live, production environment) and is not periodically refreshed, unexpected results can occur. For example, if a course workshop requires you to ship a sales order that came standard in the Epicor demonstration database, but a different user already completed this workshop and the Epicor demonstration database was not restored (refreshed), then you will not be able to ship the sales order. Epicor's education team has written

the course workshops to minimize situations like this from occurring, but Epicor cannot prevent users from manipulating the data in your installation of the Epicor demonstration database.

2. Log in to the training environment using the credentials **manager/manager**. If you are logged in to your training environment as a different user, from the Options menu, select Change User.

3. From the Main menu, select the company **Epicor Education (EPIC06)**.

4. From the Main menu, select the **Main Site**.

# Overview

The Project Management module provides accuracy for tracking costs and managing project phases. Use this functionality to gain more oversight over the progress of each project.

Project Billing is functionality within the Project Management module that allows for the creation, tracking, and invoicing of non-manufacturing projects.

As project details are entered in Project Entry, contract parameters are entered to set the invoice method. The invoice method is the project billing method. Invoice options include:

- Fixed Fee
- Time and Materials
- Cost Plus
- Progress Payments

Each Project WBS phase contains features that improve accuracy and simplify time entry:

- You can define multiple activities against each WBS phase. These activities have resource requirements and estimated time costs for each resource assigned to the phase.
- The interface is simplified so users can quickly enter the project number and the WBS phase. The Epicor application then automatically assigns the job number, and this job automatically records the labor placed against this phase of the project. Users select the operation they need to record time against, and the labor expense is automatically placed against the job that contains the operation.

When you run the Project Analysis, you can also increase the revision level of a project. The current project and its data is then archived into history. You can then view historical information in the Project Tracker.

The enhanced Project Management module also allows material costs to be further broken down into Other Direct Costs (ODC). These material costs are entered as miscellaneous charges. For job costing purposes, these separate direct costs are totaled within the overall material cost for the job; however, within the Project Management module, these costs are separated into Material and ODC categories.

# Application Setup

Project Billing requires the configuration of certain options within the Epicor application. This section of the course reviews the Company and Site Configurations as well as the setup of maintenance programs that relate to Project Billing.

**Note** For more information on Project Billing configuration, refer to the Application Help.

## Company Configuration

Use **Company Configuration** to define options for companies in the Epicor application. Use these options to customize the application to best fit each company within your organization. This section of the course reviews the configurations and tables specific to Project Billing.

Use Company Configuration to configure how Project Billing operates within your company. You can set the default invoice method, as well as the defaults for role codes, revenue recognition, rates, and tax category settings. Each section below provides options to establish your project billing needs.

### Contract

Use the Contract section to set the default invoicing method you want to use for Project Billing.

### Role Codes

Use the Role Code section to determine how Role Codes are used for Project Billing. Establish the following settings:

- **Default Validate Employee Role to Operation Role** - If you select this check box, an employee entering time against a job must use a role code assigned to the particular operation.
- **Allow Validate Role Code to be Changed per Project** - If you select this check box, the application reviews and validates the role code assigned to the project against the role code of the employee entering information against that particular project.
- **Default Location for Role Code in Labor Booking** - This option identifies the location of the default role code. The available options are Operation or Employee.

### Revenue Recognition

The Revenue Recognition section includes the following settings:

- **Default Revenue Recognition Method** - This setting determines the default revenue recognition method for Project Billing. The choices include:
  - Labor Booking Recognition
  - Manual Recognition
  - Actual Burden Recognition
- **Allow Revenue Recognition Method to be Changed per Project** - If you select this check box, you can change the revenue recognition method during project entry.
- **Revenue Recognition Journal Reversal** - Two options are available for journal reversal: Reverse on Project Close (default) or Reverse in Following Month.

When this option is set to Reverse in Following Month, the journal you create is marked as a reversing journal.

#### Rates

The Rates section includes settings that establish where the project billing rates derive from and if you can override the determined rates at the project level.

#### Tax Categories

Each field populates with Tax Product Categories. The value selected is the default in Project Entry.

If the selected Tax Category is changed, existing projects are not updated. The new values default in for new projects with the applicable Invoicing Method. Tax categories include:

- Material
- Labor
- Other Direct Cost
- Burden
- Subcontract
- Fees

#### Menu Path

Navigate to this program from the Main Menu:

- System Setup > Company/Site Maintenance > Company Configuration

## Workshop - Update Company Configuration

Review and update Company Configuration fields and settings.

Navigate to **Company Configuration**.

**Menu Path:** System Setup > Company/Site Maintenance > Company Configuration

1. Navigate to the **Modules > Services > Project Billing** sheet.
2. In the **Default Invoicing Method** field, verify **Customer Shipment** displays.
3. Enter or verify the following information:

| Field | Data |
|---|---|
| Default Validate Employee Role to Operation Role check box | Clear |
| Allow Validate Role to be Changed per Project check box | Clear |
| Allow Revenue Recognition Method to be Changed per Project check box | Select |

4. In the **Tax Categories** pane, change all fields to **Products**.
5. Click **Save** and exit Company Configuration.

# Site Configuration Control

Use **Site Configuration Control** to set up how each site interacts with various functions such as the Inventory Management, Production Management, Shipping/Receiving, Time Management, and Expense Management modules.

Project Billing utilizes both the Time and Expense functionality of the Epicor application. In order to post time and enter project expenses, you must first configure the Time and Expense sheets in Site Configuration Control.

The Time and Expense settings determine whether labor hours and/or incurred expenses employees enter require approval by other authorized employees. If approval is required, you must define approver rights to change or delete transactions, the methods to use to approve time entries and expense entries, and the default workflow groups to use for time entries and expense entries when they are unspecified for employees.

### Menu Path

Navigate to this program from the Main Menu:

- System Setup > Company/Site Maintenance > Site Configuration

**Important** This program is not available in the Epicor Web Access.

# Update Site Configurations

In this workshop task, update Site Configuration Control to allow automatic approval of time entries and expense entries.

Navigate to **Site Configuration Control**.

**Menu Path:** System Setup > Company/Site Maintenance > Site Configuration

**Important** This program is not available in the Epicor Web Access.

1. In the **Site** field, search for and select **Main Site**.
2. Navigate to the **Modules > Time and Expense > Time** sheet.
3. Clear or verify the **Approval Required** check box is cleared.

   All time entries are now set to automatic approval.
4. Click **Save**.
5. Navigate to the **Modules > Time and Expense > Expense** sheet.
6. Clear or verify the **Approval Required** check box is cleared.

   All expense entries are now set to automatic approval.
7. Click **Save** and exit Site Configuration Control.

# Maintenance Programs

This section of the course reviews the most significant maintenance programs applicable to Project Billing. In many cases, some fields in a program are not discussed. If you are interested in learning more about a specific program, refer to the Application Help.

**Note** Please note that each of the project billing methods explore different functionality within the application. This does not mean that if functionality is not utilized within a billing method that the feature(s) do not apply. To learn about different ways of establishing projects and available functions review other billing method sections, courses, or Application Help topics.

## Role Code Maintenance

Use **Role Code Maintenance** to create role codes. Assign role codes to employees, customer service representatives or sales representatives. Role codes are useful when you want to track each resource's assigned capabilities.

**Tip** Use the Rates > Detail sheet to define the project role code rate details such as the effective and end dates, the currency associated with the charge rate, and the time type code associated with the role.

Role codes are used when creating a customer account and are associated with customer contacts and work force members.

Roles define the position of the contact within this customer's organization. Each contact record established at either the sold to or ship to level can be further detailed by assigning them to a predefined role.

Work force members are also assigned a role.

Roles are optional within the Epicor ERP application, but you can use them for internal reference.

Role codes are used in Time and Expense to define an employee role. For example:

- Time and Expense Approval Role
- Project Manager Approval Role
- Supervisor Role
- Employee Submit Role

**Note** If you select more than one approver role option, tasks are created for individuals who match that role criteria.

### Menu Path

Navigate to this program from the Main Menu:

- Financial Management > Accounts Receivable > Setup > Role Code
- Production Management > Engineering > Setup > Role Code
- Sales Management > Customer Relationship Management > Setup > Role Code
- Sales Management > Order Management > Setup > Role Code
- Sales Management > Quote Management > Setup > Role Code
- Service Management > Expense Management > Setup > Role Code
- Service Management > Project Management > Setup > Role Code
- Service Management > Time Management > Setup > Role Code

For CRM users, the Main Menu appears as:

- Customer Relationship Management > Sales and Marketing Management > Setup > Role Code
- Customer Relationship Management > Order Management > Setup > Role Code
- Customer Relationship Management > Quote Management > Setup > Role Code

## Employee Maintenance

Employee Maintenance > Role Codes > Detail

Use **Employee Maintenance** to enter employee records. Before entering a project in **Project Entry**, in Employee Maintenance use the **Role Codes > Detail** and **Role Codes > Role Rates > Detail** sheets to set role codes and rates to a specific employee.

Role codes provide project billing with the role rates to be invoiced. A role code (and accompanying role rate) can be assigned to a specific operation to limit the amount of employees that are authorized for time entry based on the role code tied to an operation.

You can create multiple role rates to reflect multiple currencies and time types. If you do not define a time type, the charge rate becomes the default rate for all time types.

Role rates are entered with an effective date and end date. This setup allows for future rate changes or for exception rates to be applied for a specific period of time.

### Menu Path

Navigate to this program from the Main Menu:

- Material Management > Data Collection > Setup > Employee
- Material Management > Inventory Management > Setup > Employee
- Production Management > Data Collection > Setup > Employee
- Production Management > Job Management > Setup > Employee
- Service Management > Expense Management > Setup > Employee
- Service Management > Field Service > Setup > Employee
- Service Management > Field Service > Setup > Employee
- Service Management > Project Management > Setup > Employee
- Service Management > Time Management > Setup > Employee

### Workshop - Create a Project Manager

In this workshop, create a project manager who will manage the project process.

Navigate to **Employee Maintenance**.

**Menu Path:** Service Management > Project Management > Setup > Employee

1. From the **New** menu, select **New ID**.
2. In the **ID** field, enter **XXX** (where XXX are your initials).
3. In the **Name** field, enter your name.
4. Navigate to the **Production Info** sheet.
5. Enter the following information:

| Field | Data |
| --- | --- |
| Shift | Morning |
| Expense | On Site Installation |
| Department | Professional Services |
| Labor Rate | 25.00 |
| User Name | System Manager |
| Resource Group | Project Managers |
| Resource | PM0001 |
| Allowed to book to direct jobs check box | Select |

6. Accept all other defaults and click **Save**.
7. From the **New** menu, select **New Role Code**.
   The **Roles Codes > Detail** sheet displays.
8. Enter the following information:

| Field | Data |
| --- | --- |
| Role Code | Project Manager |
| Primary check box | Select |

**Note** Multiple role codes can be assigned to an employee, but only one role code can be selected as the primary role.

9. Click **Save**.
10. From the **New** menu, select **New Role Rate**.
    The **Role Codes > Role Rates > Detail** sheet displays.
11. Enter the following information:

| Field | Data |
| --- | --- |
| Effective Date | First day of the current year |
| Currency | United States Dollar |
| Charge Rate | 225.00 |

**Note** If rates are not selected here at the employee level, the role rates in Role Code Maintenance default.

12. Click **Save** and exit Employee Maintenance.

## Time Type Maintenance

Use **Time Type Maintenance** to create and maintain codes used with Project Billing. These codes are used to establish different charge rates for labor hours.

For example, you may want to define a time type for overtime or for labor performed on weekends which have a higher rate. You can use time types in Time Entry to enter time for project labor and apply a different charge rate to the hours worked instead of the charge rate associated with the employee's project role code.

Time Types are used within the application as follows:

- **Project Role Maintenance** - Establish different charge rates for work outside regular hours.
- **Employee Maintenance** - Override normal rates or use multiple rates for different time periods.
- **Project Contract** - Override rates at the contract level for a Project Role or use multiple rates for different time periods.
- **Labor Entry, Start Production** and **Start Set Up** - When entering time on a project job that uses Project Role codes, the Project Role assigned to the operation is the default. You can override the Project Role or define a different Time Type during time entry. These changes affect the charge rate used during the invoicing process.

**Note** Time Types are only required for time transactions outside normal charge rates. The normal charge rate is used when no Time Type is defined.

### Menu Path

Navigate to this program from the Main Menu:

- Financial Management > Accounts Receivable > Setup > Role Code
- Production Management > Engineering > Setup > Role Code
- Sales Management > Customer Relationship Management > Setup > Role Code
- Sales Management > Order Management > Setup > Role Code
- Sales Management > Quote Management > Setup > Role Code
- Service Management > Expense Management > Setup > Role Code
- Service Management > Project Management > Setup > Role Code
- Service Management > Time Management > Setup > Role Code

For CRM users, the Main Menu appears as:

- Customer Relationship Management > Sales and Marketing Management > Setup > Role Code
- Customer Relationship Management > Order Management > Setup > Role Code
- Customer Relationship Management > Quote Management > Setup > Role Code

## Burden Code Maintenance

Use **Burden Code Maintenance** to set up Burden codes. Assign Burden codes used in Burden Set Maintenance to track burden details within your project.

Define burden codes you use to track the burden during project invoicing. For example:

- Project Management
- Direct Manufacturing Overheads
- Cost of Money

You can further refine burden categories to calculate burden for labor, materials, contract labor, subcontract, and other direct costs.

**Menu Path**

Navigate to this program from the Main Menu:

- Service Management > Project Management > Setup > Burden Code

## Burden Set Maintenance

Use **Burden Set Maintenance** to define burden sets. Define burden calculation rules using burden codes to track burden details within your project.

The Burden set controls the provisional percentages used during the Invoice Preparation process.

Burden sets allow you to update actual percentages you use at the end of a project to realign the project with the actual burden amount. The actual percentages are maintained in Burden Actual Percentage Maintenance.

Use burden sets to define burden codes to report on in an invoice. Examples of burden codes include:

- Fringe
- Project Management
- Cost of Money
- Direct Manufacturing Overheads

Each of the above categories can be set to calculate the burden on:

- Labor
- Material
- Subcontract
- Contract Labor
- Other Direct Costs

Within the process, it is possible to define the following information:

- Unique ID.
- Burden Set Description.
- Burden codes that relate to this burden set. These codes can be entered on a one to many relationship
- Provisional burden rate percentage with an effective date.
- Processing rules for how to calculate the burden for each burden code and in which sequence to process the burden codes.

**Menu Path**

Navigate to this program from the Main Menu:

- Service Management > Project Management > Setup > Burden Set

# Project Billing Invoicing

Within Project Management, the Epicor application offers various Project Billing invoicing methods. As projects are entered, users select the appropriate project billing invoice method which include:

- **Time and Materials** - This method is used when you use the rates for each role assigned to the project to calculate the total cost on the project.
- **Cost Plus** - This method uses the defined rates for labor and burden as the base value for all costs. You can add a series of markup percentages to the labor, burden, and material costs to calculate the total invoice amount.
- **Fixed Fee** - This method defines costs that occur during each milestone level within the project. Use this method to divide the costs between each milestone.
- **Progress Payments** - Use this method to invoice a customer for a percentage of the labor, material, and burden costs during a specific time period. You typically use this method when product quantities are shipped before a contract is formally negotiated. The shipment is sent first and then the final price is agreed upon within the contract. You can then invoice the difference between the amounts on the progress payments and the final negotiated contract amount. The costs created for each invoice depend on a percentage defined on the **Contract > Project Billing Invoicing > Progress Payments** sheet.

Manufacturing projects continue to have the invoicing method options of Customer Shipment and Milestone Billing.

## Fixed Fee

Use the Fixed Fee billing method to define and maintain costs at each project milestone. Fixed fees established continue throughout the life of the project.

In the construction industry, project billing generally takes place throughout the life of a project based on progress that has been made. Periodically, the project manager determines the current progress of the project, either as a whole, or major elements of the project, and produces a claim for payment based on the percent complete and the fixed project price:

**[Current Progress (% complete) - Previous Progress (% complete)] * Fixed Price**

The percent complete is calculated outside the application and entered by the project manager. Either the project, or major elements of the project, have a contract-based fixed price.

**Example** If a $1,000,000 project is 25% complete this month, and 17% complete the previous month, the amount to bill this month, before retention, is $80,000. This amount cannot be negative. The same calculation can take place for each of the major elements (WBS phases) of the project.

### Project Entry - Contract - Project Billing Invoicing - Fixed Fee - Billing Schedule

Project Management > Project Entry > Contract > Project Billing Invoicing > Fixed Fee > Billing Schedule

Use the **Billing Schedule** sheet to define a fixed fee billing schedule against a project. This billing schedule controls the frequency of invoice generation.

You can also click the Retrieve button on the Billing Schedule > History sheet to view the billing schedule invoices that have been generated.

The fields on the Billing Schedule sheet are only enabled when the Invoicing Method is set to Fixed Fee on the Contract Detail sheet.

## Project Entry - Contract - Project Billing Invoicing - Fixed Fee - Schedule of Works

Project Management > Project Entry > Contract > Project Billing Invoicing > Fixed Fee > Schedule of Works

Use the **Schedule of Works** sheet to define the schedule of works agreed upon with the customer.

The schedule of works can have any number of measured work records associated with them. There is no limit to the number of schedule of works that can be defined for a project.

The fields on the Schedule of Works sheet are only enabled when the Invoicing Method is set to Fixed Fee on the Contract Detail sheet.

## Project Entry - Contract - Project Billing Invoicing - Fixed Fee - Measured Works

Project Management > Project Entry > Contract > Project Billing Invoicing > Fixed Fee > Measured Works

Use the sheets under the **Measured Works** tab to create records for measured work activities for the project. You can record the amount of work completed against these records.

The fields on the Measured Works sheets are only enabled when the Invoicing Method is set to Fixed Fee on the Contract > Detail sheet.

## Workshop - Create a Fixed Fee Project

In this workshop, create a project using the Fixed Fee invoicing method.

You are managing the project of a basic home construction for Clarke Construction Company. In this workshop, manage the building process through each of the four distinguished phases, the invoicing process, the entry of time and expense, and the final analysis of the project.

**Important**

For the purpose of this course and time consideration, you will follow this project through 80% completion of the first phase. This project will take you through all major pieces of a fixed fee project setup, time entry, invoicing, and project analysis of project costs for the first phase. It is optional to use the workshops to complete each of the four phases to view the total project roll-up.

### Create the Project

In this workshop task, create a the project plan for Clarke Construction Company's home construction.

Navigate to **Project Entry**.

**Menu Path:** Service Management > Project Management > General Operations > Project Entry

1. From the **New** menu, select **New Project**.
2. In the **Project ID** field, enter **XXX.Home.Fixed.Fee** (where XXX are your initials).
3. In the **Description** field, enter **XXX Home Construction FFB** (where XXX are your initials).
4. In the **Start Date** field, select today's date.
5. In the **End Date** field, select the date five weeks from the **Start Date**.
6. Click the **Create Project Job** button.

7. Click **Save**.

   The **Job** and **Mtl** fields populate.

8. Record the job number _________.

## Create WBS Phase 1 - Foundation

In this workshop task, create WBS Phase 1 - Foundation. This phase has two phase operations, setting the foundation forms and pouring the concrete.

1. From the **New** menu, select **New WBS Phase**.

   The **WBS Phase > Detail** sheet displays.

2. In the **WBS Phase ID** field, enter **PHASE 1**.

3. In the **Description** field, enter **Phase 1 - XXX Foundation** (where XXX are your initials).

4. Enter the following information:

| Field | Data |
| --- | --- |
| Start Date | Today's Date |
| Due Date | One week from the Start Date |
| Duration | 40 Hours |

5. Click **Save**.

6. From the **New** menu, select **New WBS Phase Operation**.

7. Enter the following information:

| Field | Data |
| --- | --- |
| Operation | Form |
| Role Code | Production Engineer Grade 1 |
| Hours | 16 |

8. From the **New** menu, select **New WBS Phase Operation**.

9. Enter the following information:

| Field | Data |
| --- | --- |
| Operation | Concrete |
| Role Code | Production Engineer Grade 1 |
| Hours | 24 |

10. Click the **Create WBS Phase Job** button.

11. Click **Save**.

12. In the tree view, under the **Jobs** node, review the newly created job number.

13. Record the job number ________.

## Create WBS Phase 2 - Framing

In this workshop task, create WBS Phase 2 - Framing. This phase has one phase operation, framing.

1. From the **New** menu, select **New WBS Phase**.

2. In the **WBS Phase ID** field, enter **PHASE 2**.

3. In the **Description** field, enter **Phase 2 - XXX Framing** (where XXX are your initials).

4. Enter the following information:

| Field | Data |
| --- | --- |
| Start Date | One week from today's date |
| Due Date | One week from the Start Date |
| Duration | 40 Hours |

5. Click **Save**.

6. From the **New** menu, select **New WBS Phase Operation**.

7. Enter the following information:

| Field | Data |
| --- | --- |
| Operation | Frame |
| Role Code | Builder |
| Hours | 40 |

8. Click the **Create WBS Phase Job** button.

9. Click **Save**.

10. In the tree view, under the **Jobs** node, review the newly created job number.

11. Record the job number ________.

## Create WBS Phase 3 - Electrical and Plumbing

In this workshop task, create WBS Phase 3 - Electrical and Plumbing. This phase has two phase operations, wiring the electrical work and installation of the plumbing.

1. From the **New** menu, select **New WBS Phase**.

2. In the **WBS Phase ID** field, enter **PHASE 3**.

3. In the **Description** field, enter **Phase 3 - XXX Elec/Plumbing** (where XXX are your initials).

4. Enter the following information:

| Field | Data |
|---|---|
| Start Date | Two weeks from today's date |
| Due Date | Two weeks from the Start Date |
| Duration | 80 Hours |

5. Click **Save**.

6. From the **New** menu, select **New WBS Phase Operation**.

7. Enter the following information:

| Field | Data |
|---|---|
| Operation | Electrical Engineering |
| Role Code | Production Engineer Grade 2 |
| Hours | 40 |

8. From the **New** menu, select **New WBS Phase Operation**.

9. Enter the following information:

| Field | Data |
|---|---|
| Operation | Plumbing |
| Role Code | Production Engineer Grade 2 |
| Hours | 40 |

10. Click the **Create WBS Phase Job** button.

11. Click **Save**.

12. In the tree view, under the **Jobs** node, review the newly created job number.

13. Record the job number ________.

### Create WBS Phase 4 - Exterior

In this workshop task, create WBS Phase 4 - Exterior. This phase has two phase operations, installation of the roof and siding.

1. From the **New** menu, select **New WBS Phase**.

2. In the **WBS Phase ID** field, enter **PHASE 4**.

3. In the **Description** field, enter **Phase 4 - XXX Exterior** (where XXX are your initials).

4. Enter the following information:

| **Field** | **Data** |
|---|---|
| Start Date | Four weeks from today's date |
| Due Date | One week from the Start Date |
| Duration | 40 Hours |

5. Click **Save**.

6. From the **New** menu, select **New WBS Phase Operation**.

7. Enter the following information:

| **Field** | **Data** |
|---|---|
| Operation | Roof |
| Role Code | Builder |
| Hours | 20 |

8. From the **New** menu, select **New WBS Phase Operation**.

9. Enter the following information:

| **Field** | **Data** |
|---|---|
| Operation | Siding |
| Role Code | Builder |
| Hours | 20 |

10. Click the **Create WBS Phase Job** button.

11. Click **Save**.

12. In the tree view, under the **Jobs** node, review the newly created job number.

13. Record the job number _________.

## Define the Home Construction Contract

In this workshop task, define the fixed fee home construction project's contract details.

1. Navigate to the **Contract > Detail** sheet.

2. In the **Customer** field, enter **Clarke** and press **Tab**.

3. In the **Project Level Invoicing Method** field, select **Fixed Fee**.

4. Enter the following information:

| Field | Data |
|---|---|
| Contract Reference | XXX House FFB |
| Total Contact Value | 100,000 |
| Contract Start Date | Today's date |
| Contract End Date | Five weeks from the Start Date |
| Project Manager | XXX (where XXX are your manager's initials) |
| Hours To Be Used For Invoicing | Labor |

5. Click **Save**.

## Create the Billing Schedule

In this workshop task, create the billing schedule for the fixed fee housing project.

1. Navigate to the **Contract > Project Billing Invoicing > Fixed Fee > Billing Schedule > Detail** sheet.
2. From the **New** menu, select **New Billing Schedule**.
3. Enter the following information:

| Field | Data |
|---|---|
| Schedule ID | XXX Home (where XXX are your initials) |
| Description | XXX Home FFB Project (where XXX are your initials) |
| Manager | XXX (where XXX are your manager's initials) |
| Schedule Frequency | Weekly |
| Start Date | Today's Date |
| Total Value of Schedule | 100,000 |

4. In the **Order Number** field, right-click and select **Open With > Sales Order Entry**.
   **Sales Order Entry** displays.
5. From the **New** menu, select **New Order**.
6. In the **Customer** field, search for and select **Clarke**.
7. Navigate to the **Header > Credit Card** sheet and clear the **Credit Card Order** check box.
8. Navigate to the **Lines > Detail** sheet.
9. From the **New** menu, select **New Line**.
10. Enter the following information:

| Field | Data |
|---|---|
| Part/Rev | XXX Home (where XXX are your initials) |
| Description | XXX Home FFB Project (where XXX are your initials) |
| Order Quantity | 1 |
| Unit Price | 100,000 |

11. Click **Save**.
12. Record the sales order number ________________.
13. Exit Sales Order Entry.

    If the **Order has make direct releases without a job link, return to order?** message displays, click **No**.
14. In the **Contract > Project Billing Invoicing > Fixed Fee > Billing Schedule > Detail** sheet, in the **Order Number** field, enter the sales order number noted above and press **Tab**.
15. In the **Line** field, enter **1** and press **Tab**.

    The **You are about to assign the Order Line number to the project. Continue?** message displays.
16. To the message, click **Yes**.
17. Click **Save**.

## Define the Schedule of Works

In this workshop task, create the Schedule of Works for the project that Clarke Construction Company has agreed upon.

1. Navigate to the **Contract > Project Billing Invoicing > Fixed Fee > Schedule of Works > Detail** sheet.
2. From the **New** menu, select **New Schedule of Work**.
3. Enter the following information:

| Field | Data |
|---|---|
| Schedule of Work ID | XXXHome |
| Description | XXX Home FFB Project |
| Details | Basic home construction schedule |

   In all instance of XXX, replace with your initials.
4. In the **Estimated Complete Date** field, select the date five weeks from today.
5. Click **Save**.

## Create the Measured Works Schedules

In this workshop task, create the Measured Works Schedule to define the specific activities for the project. Once the activities are defined, you can use this schedule to record the amount of work completed for each phase.

### Define the Measured Works Schedule - Foundation

1. Navigate to the **Contract > Project Billing Invoicing > Fixed Fee > Measured Works > Detail** sheet.
2. From the **New** menu, select **New Measured Work**.
3. Enter the following information:

| Field | Data |
| --- | --- |
| Measured ID | 100 |
| Description | Phase 1 - Foundation |
| Details | Phase 1 - Foundation include setting the forms and pouring the concrete for the foundation |
| Activity Unit | Percentage |
| Total Amount | 25,000 |
| Quantity Surveyor | XXX |
| Parent Billing Schedule | XXX Home FFB Project |
| Parent Schedule of Works | XXX Home FFB Project |
| Percentage of Contract | 25 |

   In all instance of XXX, replace with your initials.

4. Click **Save**.
5. From the **New** menu, select **New Measured Work WBS Phase Link**.
6. In the **Linked Project WBS Phases** grid, in the **Project Phase** field, enter **PHASE 1** and press **Tab**.

   The **Description** field populates.

7. Click **Save**.

### Define the Measured Works Schedule - Framing

1. From the **New** menu, select **New Measured Work**.
2. Enter the following information:

| Field | Data |
| --- | --- |
| Measured ID | 200 |
| Description | Phase 2 - Framing |

| Field | Data |
|---|---|
| Details | Phase 2 - Framing includes the framing and structural work |
| Activity Unit | Percentage |
| Total Amount | 25,000 |
| Quantity Surveyor | XXX |
| Parent Billing Schedule | XXX Home FFB Project |
| Parent Schedule of Works | XXX Home FFB Project |
| Percentage of Contract | 25 |

In all instance of XXX, replace with your initials.

3. Click **Save**.
4. From the **New** menu, select **New Measured Work WBS Phase Link**.
5. In the **Linked Project WBS Phases** grid, in the **Project Phase** field, enter **PHASE 2** and press **Tab**.

   The **Description** field populates.
6. Click **Save**.

## Define the Measured Works Schedule - Electrical and Plumbing

1. From the **New** menu, select **New Measured Work**.
2. Enter the following information:

| Field | Data |
|---|---|
| Measured ID | 300 |
| Description | Phase 3 - Elec/Plumbing |
| Details | Phase 3 - Elec/ Plumbing includes the wiring of all electrical work and installation of plumbing |
| Activity Unit | Percentage |
| Total Amount | 25,000 |
| Quantity Surveyor | XXX |
| Parent Billing Schedule | XXX Home FFB Project |
| Parent Schedule of Works | XXX Home FFB Project |
| Percentage of Contract | 25 |

In all instance of XXX, replace with your initials.

3. Click **Save**.
4. From the **New** menu, select **New Measured Work WBS Phase Link**.

5. In the **Linked Project WBS Phases** grid, in the **Project Phase** field, enter **PHASE 3** and press **Tab**.

   The **Description** field populates.

6. Click **Save**.

## Define the Measured Works Schedule - Exterior

1. From the **New** menu, select **New Measured Work**.

2. Enter the following information:

| Field | Data |
|---|---|
| Measured ID | 400 |
| Description | Phase 4 - Exterior |
| Details | Phase 4 - Exterior includes the installation of roof and siding |
| Activity Unit | Percentage |
| Total Amount | 25,000 |
| Quantity Surveyor | XXX |
| Parent Billing Schedule | XXX Home FFB Project |
| Parent Schedule of Works | XXX Home FFB Project |
| Percentage of Contract | 25 |

   In all instance of XXX, replace with your initials.

3. Click **Save**.

4. From the **New** menu, select **New Measured Work WBS Phase Link**.

5. In the **Linked Project WBS Phases** grid, in the **Project Phase** field, enter **PHASE 4** and press **Tab**.

   The **Description** field populates.

6. Click **Save**.

7. Minimize Project Entry.

## Enter Time for Completion of Phase 1 - Foundation

The first phase (foundation) of the housing project is now complete. In this workshop task, submit the labor and complete the phase.

Navigate to **Time and Expense Entry**.

**Menu Path:** Service Management > Project Management > General Operations > Time and Expense Entry

1. In the **Employee ID** field, enter **PE100** and press **Tab**.

2. From the **New** menu, select **New Time Detail**.

The **Time > Daily Time > Detail > Detail** sheet displays.

3. In the **Job** field, right-click you mouse and select **Open With > Job Entry**.
   **Job Entry** displays.

4. In the **Job** field, enter the job for **WBS Phase 1** and press **Tab**.

5. Select the **Released** check box and click **Save**.

6. In the **Job** field, enter the job for **WBS Phase 2** and press **Tab**.

7. Select the **Released** check box and click **Save**.

8. In the **Job** field, enter the job for **WBS Phase 3** and press **Tab**.

9. Select the **Released** check box and click **Save**.

10. In the **Job** field, enter the job for **WBS Phase 4** and press **Tab**.

11. Select the **Released** check box and click **Save**.

12. Exit Job Entry.

13. Verify the **Time and Expense Entry > Time > Daily Time > Detail > Detail** sheet displays.

14. Enter or verify the following information:

| **Field** | **Data** |
|---|---|
| Labor Type | Project |
| Project | XXX.Home.Fixed.Fee |
| WBS Phase | Phase 1 - XXX Foundation |
| Operation | 10 |
| Clock In | Accept default |
| Clock Out | Accept default |
| Role Code | Production Engineer Grade 1 |

In all instance of XXX, replace with your initials.

15. Click **Save**.

16. Click **Submit**.

17. In the tree view, in the **Calendar** pane, select tomorrow's date.

18. From the **New** menu, select **New Time Detail**.

19. Enter or verify the following information:

| **Field** | **Data** |
|---|---|
| Labor Type | Project |

| Field | Data |
|---|---|
| Project | XXX.Home.Fixed.Fee |
| WBS Phase | Phase 1 - XXX Foundation |
| Operation | 10 |
| Clock In | Accept default |
| Clock Out | Accept default |
| Role Code | Production Engineer Grade 1 |

In all instance of XXX, replace with your initials.

20. Click **Save**.

21. Click **Submit**.

22. In the tree view, in the **Calendar** pane, select the date two days from today's date.

23. From the **New** menu, select **New Time Detail**.

24. Enter or verify the following information:

| Field | Data |
|---|---|
| Labor Type | Project |
| Project | XXX.Home.Fixed.Fee |
| WBS Phase | Phase 1 - XXX Foundation |
| Operation | 10 |
| Clock In | Accept default |
| Clock Out | Accept default |
| Role Code | Production Engineer Grade 1 |

25. Select the **Opr Complete** check box.

26. Click **Save**.

27. Click **Submit**.

28. Exit Time and Expense Entry.

## Record Activity Detail - Foundation

In this workshop task, record the Measured Works activity detail for the foundations phase. Recording the detail and approving the first week of work allows you to invoice for the work completed, and begin looking at the project analysis.

Due to rain the first week, one day of work was not able to be completed. The first construction phase is not yet complete as you cannot pour concrete in the rain. Even though the first phase is not complete, it is time to analyze and invoice for the amount of work that has been completed on the project.

Maximize **Project Entry**.

1. From the tree view, under the **Measured Works** heading, select **Phase 1 - Foundation**.
2. From the **New** menu, select **New Measured Work Activity Detail**.

   The **Contract > Project Billing Invoicing > Fixed Fee > Measured Works > Activity Detail** sheet displays.
3. Enter the following information:

| Field | Data |
|---|---|
| Measured Work ID | 100 |
| Description | Phase 1 - Foundation (100%) |
| Date on Site | Five work days from the start date |
| Activity Amount | 100 |
| Activity Units | Percentage |
| Date Approved | Same date as the Date on Site |
| Activity Status | Approved |
| Activity Notes | Phase one completed ahead of time |
| Customers Quantity Surveyor | Richard Clarke |
| Approved Amount | 100 |

4. Click **Save**.

## Perform the Project Invoice Preparation Process

In this workshop task, perform the analysis of the project by processing the project invoice preparation process for the first completed phase.

1. From the **Actions** menu, select **Project Invoice Preparation**.

   The **Project Invoice Preparation Process** window displays.
2. In the **Period End Date** field, select today's date.
3. In the **Invoice Type** pane, verify the **Fixed Fee** check box is selected.
4. Accept all other defaults.
5. Click **Submit**.
6. Close the Project Invoice Preparation Process window.
7. Minimize Project Entry.

## Review and Approve the Fixed Fee Invoice

This process allows the preparation of project invoices for a specified period and provides the invoice date used for posting. These detailed audit records are used in the invoicing data on the actual invoice document. In this workshop task, review the fixed fee invoice for the first completed phase.

Navigate to **Fixed Fee Invoice Review**.

**Menu Path:** Service Management > Project Management > General Operations > Fixed Fee Invoice Review

1. In the **Project** field, search for and select the **XXX.Home.Fixed.Fee** (where XXX are your initials) project.
2. In the **Invoice Details** grid, select the **Phase 1** line.
3. Navigate to the **Line** sheet.
4. Review details for Phase 1.
5. In the **Activity Amount Invoiced** field, verify **100.00** displays.
6. In the **Extended Amount** field, verify **25,000.00** displays.

   This is the approved amount for the 100% completion of the first phase.
7. From the **Actions** menu, select **Approve Invoice**.
8. To the **Do you want to Approve the Invoice** message, click **Yes**.
9. Exit Fixed Fee Invoice Review.

## Create an AR Invoice for the First Project Phase

In this workshop task, create the Accounts Receivable (AR) invoice for the 100% completion of the first project phase.

Navigate to **AR Invoice Entry**.

**Menu Path:** Financial Management > Accounts Receivable > General Operations > Invoice Entry

1. From the **New** menu, select **New Group**.
2. In the **Group** field, enter **XXX-1** (where XXX are your initials).
3. Click **Save**.
4. From the **Actions** menu, select **Get > Project Billing**.

   The **Get Project Billing Invoices** window displays.
5. Click the **Manual Selection** button.
   The **Project Billing Browser** window displays.
6. In the **Project Billing** grid, select the fixed fee project line and click **OK**.
7. To the **Are you sure** message, click **Yes**.
8. To the **1 Invoices created** message, click **OK**.

9. Navigate to the **Summary** sheet.
10. Review the invoice details.
11. From the **Actions** menu, select **Group > Post**.
    The **AR Invoice Post Process** window displays.
12. On the **Standard** toolbar, click **Submit**.
13. Close the AR Invoice Post Process window.
14. Exit AR Invoice Entry.

### Build the Project Analysis

In this workshop task, review the project cost roll up for the first completed phase.

Maximize **Project Entry**.

1. Navigate to the **Project Costs** sheet.
2. From the **Actions** menu, select **Build Project Analysis**.
   The **Build Project Analysis** window displays.
3. On the **Standard** toolbar, click **Submit**.
   **Important** The process may take up to one minute to complete.
4. Close the Build Project Analysis window.
5. In **Project Entry**, click **Refresh**.
6. Review the values that display in the **Estimated**, **Actual**, and **Calculated CTC** columns.
7. Exit Project Entry.

## Reports

The following reports are available for Project Billing.

**Inventory/WIP Reconciliation Report**

Use the **Inventory/WIP Reconciliation Report** to reconcile the General Ledger (GL) with costs from Inventory and work-in-process (WIP). As inventory transactions are generated, the costs accumulate in WIP and Inventory. You can summarize the costs in this report and review the GL accounts used for each transaction. Most cost amounts in the Epicor application, including Cost of Sales and WIP, are calculated using the base unit of measure (UOM) assigned to the part for which the specific cost is being calculated.

**Menu Path:** Service Management > Project Management > Reports > Inventory/WIP Reconciliation

### Project Billing Project Status Report

Use the **Project Billing Project Status Report** to create a summary of a project contract and the cost activity that took place against it. This report also displays the values for a specified period, prior year values, and year to date values.

**Menu Path:** Service Management > Project Management > Reports > Project Status Report

**Note** This report is only available for projects that use the project billing invoicing types.

# Conclusion

Congratulations! You have completed the Project Billing course.

Additional information is available at the Education and Documentation areas of the EPICweb Customer Portal. To access this site, you need a Site ID and an EPICweb account. To create an account, go to http://support.epicor.com.