Software Conceptual Writing Sample

Background

[Application] provides a cloud-based solution for managing capital projects, facilities, and assets of any size in every vertical market. It combines cost management and control, document management, schedule and resource management, fund management, and more.

Prior to the 22.10 upgrade of the [Application], users were not able to use the [Application] to analyze their construction-project performance. With the 22.10 release of the application, the users could analyze their project performance by way of using the newly embedded feature called: "Earned value management and earned value analysis."

Audience

Users responsible for calculating earned value and related measures (planned value, actual cost, variances, performance indexes, and at completion values) for their projects.

Administrators responsible for setting up and configuring the features and modules in the administration mode the [Application].

Designers responsible for creating and publishing shells, managers, workflows, and business processes.

Developers responsible for integrating [Application] with external systems using web services and operations.

Scope

My task was to update the user guide by:
- including information about the concept of earned value management and earned value analysis and
- writing the procedures for using the feature.

To gather the pertinent information, I interviewed product management, curriculum, and development team members.

About software conceptual writing sample

The following software conceptual writing sample is an excerpt from the user guide that included the information about the concept of earned value management and analysis.

Note: To prevent proprietary issues, I have removed the original formatting and changed the company name, document name, product names, licenses, trademarks, components (including third-party components), applications, guides, codes, and sample codes where applicable.

Earned value management and earned value analysis

Earned value management is a project management methodology that integrates schedule, costs, and scope to measure project performance. Based on planned and actual values, earned value management predicts the future and enables project managers to adjust accordingly.

Earned value analysis is a technique that a project manager uses to evaluate the project performance and to measure the amount of work actually performed on the project, beyond the basic review of cost and schedule reports provided by the person who is in charge of the project such as a General Contractor.

Earned value analysis involves analyzing the project schedule and project cost variances. Based on the outcome of the earned value analysis, a project manager can determine if corrective action (such as changing the project scope, schedule, or resources) is needed to ensure that the project can be completed within its constraints, or not.

Earned value management uses the computed values determined by earned value analysis to provide comprehensive project analysis and project forecasting reports.

Earned value analysis

The earned value analysis is an industry standard for analyzing project performance, and it can be used to track:

- Progress to date
- Forecast completion date
- Forecast completion cost
- Schedule variances
- Budget variances
- Performance

As a feedback tool, the earned value analysis helps you to:

- Identify where the problems may occur and whether the problems are critical or not.
- Determine what needs to be done to put the project back on track.

Prerequisite

To be able to use the earned value analysis feature, you need:

- A license for the feature.
- [Database] partition for [Application], with the "DB Partition" option enabled.
- Connectivity to the following third-party applications:
    - [Application A]
    - Gateway
- Established integration between [Application] and [Application A], through Gateway.

Check to ensure that:

- You have configured [Application A], Gateway, and [Application] integration based on the instructions stated in the [Application Integration Interface Guide].
- [Application A] has at least one project that you can integrate with.
    - If a project baseline is available, then you can use it for analysis.
    - If a project baseline is not available, then you must use the current schedule as baseline.
- The option to enable multiple projects mapping between [Application A] and [Application] is included in the **Attributes** form.
  In the **Shell Attributes** form, use the **Integration** tab to map multiple [Application A] projects with the respective shell in [Application] using [Application A] **Project ID**.
- The **Integration** tab in the **Attributes** form enables you to use [Application A] **Project ID** to map multiple [Application A] projects with the respective project in [Application].

Earned Value Analysis module

The **Earned Analysis Value** module in the [Application] uses the earned value management method to enable the project manager to measure the amount of work actually performed on a project.

The **Earned Value Analysis** module (**Earned Value Manager** > **Earned Value Analysis**) contains data based on the project schedule (activities and assignments) and company rates (resources and roles) imported from [Application A] through integration.

Note: The instructions and information presented in this document is based on an out-of-the-box setup and before being
customized by the user.

The **Earned Value Analysis** module:

- Optimizes the use of cost control features.
- Calculates earned value and other related measures for a project, such as planned value, actual cost, variances, performances indexes, and at completion values using rates defined in [Application].

Managing earned value analysis

Managing the earned value analysis requires database partition tables in [Database]. The partition feature is only available in [Enterprise Database] and should be enabled with license.

To generate ANSI reports, navigate to the **Earned Value Analysis Report** module **(Earned Value Manager** > **Earned Value Analysis Report**) and follow the prompts.