

SSI Tools Test Method for DECM 10A104a

Are %Start-%Finish EVTs applied to incomplete WPs with two accounting periods of budget?

SSI Tools inspects the baseline start and finish of incomplete Work Packages (WP) using the Earned Value Technique (EVT) of X/Y.

Findings for this test include:

- Incomplete, X/Y WPs with baseline dates in more than 2 accounting periods.

Setup Instructions using SSI *DECM Audits* form

1. Enter the identification method for Work Package tasks using the drop-down list named **Work Package (WP) code or id**
2. Enter the identification method for Earned Value Technique using the drop-down list named **Earned Value Technique (EVT) Codes**
3. Enter the location and name of your **Fiscal / Accounting Calendar***

The screenshot shows the 'DECM Audits' application window with the 'Project Fields for EV' tab selected. The form is titled 'Fields used for Earned Value Metrics'. It contains several fields with drop-down menus and a text input field. The fields are: Control Account(CA) code or id: Text3 (WP Parent); Control Account Manager (CAM): Contact; Control Account Org Breakdown Structure (OBS): Text2 (OBS); Control Account Work Breakdown Structure (WBS): WBS; Work Package (WP) code or Id: Text1 (WP ID); Earned Value Technique (EVT) Codes: Text4 (EVM); Element of Cost (EOC) Identification: Resource Group; Calendar Location: C:\Users\Public\SSI_Tools\TSV; Fiscal / Accounting Calendar: TSV_2019_2024-Fiscal_Cal.csv. There is a button with three dots next to the 'Earned Value Technique (EVT) Codes' field. A mouse cursor is pointing at the 'Text1 (WP ID)' field.

4. Enter the code or value used to identify a X/Y EVT in the **Earned Value Technique (EVT) Codes** field in Microsoft Project (from #2 above)

The screenshot shows the 'DECM Audits' application window with the 'Earned Value Code Map' tab selected. The form contains instructions: 'DECM assesses your schedule for correct use of Earned Value Technique (EVT). Use this form to list the codes you use in: TextX'. Below this, it says: 'Separate each value with a comma if using more than one code in this project's EVT field. If these fields are showing Examples, replace the examples with the codes used in your project.' There are two sections for input: 'What value or values in are used to identify a 0/100 Earned Value Technique?' with a text input field containing 'Replace these Examples with your codes: F, 0/100'; and 'What value or values are used to identify a X/Y Earned Value Technique?' with a text input field containing 'Replace these Examples with your codes: E, H, 25/75, 50/50'. A mouse cursor is pointing at the second text input field.

5. *This test requires the use of a Fiscal or Accounting calendar. **Calendar Location** is a folder on your system. **Fiscal / Accounting Calendar** is the name of a comma separated values (.csv) text file with three values; Period Label, Period Start and Period End. This file has no headers so it just shows these values without titles. An example of this file comes with SSI Tools named “TSV_ExampleAccountingCal.csv”. You will find this file a folder named “TSV” in the SSI_Tools installation folder (this is the default location - C:\Users\Public\SSI_Tools\TSV).

You can make your own **Fiscal / Accounting Calendar** like the example below using Microsoft Excel. Just save the file in the .csv format and begin the name of the file with the letters “TSV_”.

Example of a **Fiscal / Accounting Calendar** with three columns for Period Label, Period Start and Period End (no titles are needed)

2020-01	12/28/2019	01/24/2020
2020-02	01/25/2020	02/21/2020
2020-03	02/22/2020	03/27/2020
2020-04	03/28/2020	04/24/2020
2020-05	04/25/2020	05/22/2020
2020-06	05/23/2020	06/26/2020
2020-07	06/27/2020	07/24/2020
2020-08	07/25/2020	08/21/2020
2020-09	08/22/2020	10/02/2020

References from EVMS Test Metric Specification

5. Attribute: 10A1: Work packages have the following characteristics:

- Represent the scope of work at the level where work is performed or aggregated.
- Are distinguishable from all other work packages.
- Are assigned to a single organizational element.
- Include scheduled start and completion dates; and as applicable, interim milestones, all of which are representative of technical accomplishment.
- Have a time-phased budget or value expressed in terms of dollars, labor hours, or other measurable units that is substantiated in terms of supporting project plans.
- Have durations that are limited to a span of time that is practical for the work scope. Longer-duration work packages have interim objective measures, such as points of technical achievement, to enable accurate performance assessment.
- Are identified within the Integrated Master Schedule (IMS) and other supporting schedules.

6. Test Step: Are 0-100 EVTs applied to incomplete WPs with one accounting period of budget?

7. Test Metric:

X = Count of 0-100 EVT incomplete WPs with more than one accounting period of budget

Y = Total count of 0-100 EVT incomplete WPs

8. Metric Threshold: $X/Y \leq 5\%$

10. Data Elements Required:

02 Accounting/Fiscal Calendar

02A Accounting Month Dates

13 EV Cost Tool Data

13H BAC

13Q BCWP_{CUM}

13U BCWS (time-phasing)

13AP EVT

SSI Report

SSI Report shows the following headers referring to the DCMA EVMS Test Metric Specification

- Metric ID – Block 2 **Unique Test Metric ID**
- Name – Block 6 **Test Step**
- Metric Threshold – Block 8 **Metric Threshold**
- Numerator (X) – Block 8 **Metric Threshold X Value**
- Denominator (Y) – Block 8 **Metric Threshold Y Value**
- Score – Block 8 **Metric Threshold X/Y Value**
- Pass/Fail – Block 8 **Metric Threshold X/Y Pass/Fail determination**
- Metric Spec Link – Link to the **EVMS Test Metric Specification**
- SSI Test Link – Link to SSI Test method and description (this document)

SSI Report shows the following Details:

- **Unique ID** – Task Unique ID in Microsoft Project
- **Name** – Task Name in Microsoft Project
- **PopPeriods** – shows the number of baseline accounting periods for each listed X/Y work package
- **Baseline Start/Finish** – shows the work package's baseline dates

Report Example

A	B	C	D	E	F	G	H	I
Metric ID	Name	Metric Threshold	Numerator (X)	Denominator (Y)	Score	Pass/Fail	Metric Spec Link	SSI Test Link
10A104a	Are %Start-%Finish EVT's applied to incomplete WPs with two accounting periods of budget?	5%	4	10	40%	Fail	DECM Spec	SSI Spec
Unique ID	Name	PopPeriods	BaselineStart	BaselineFinish				
76	Develop Test Case Specifications	> 2 Periods	03/26/2019	05/20/2019				
81	Perform Module Testing	> 2 Periods	05/28/2019	07/01/2019				
88	Verify and Validate User Documentation	> 2 Periods	07/25/2019	08/07/2019				
100	Deploy Solution to Production Environment	> 2 Periods	09/18/2019	10/08/2019				