

# COMPANY NAME

## SOFTWARE PROJECT TRACKING AND OVERSIGHT PROCEDURE

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## Revision History

<b>Document Version</b>	<b>Revision Date</b>	<b>Originator</b>	<b>Revision Description</b>
1.0	xx-xx-20xx	Originator's Name, Flo Samuels	Initial Release.
1.1	xx-xx-20xx	Flo Samuels	Reasons for revision

# SOFTWARE PROJECT TRACKING AND OVERSIGHT PROCEDURE

## 1. Introduction

### 1.1. Purpose

This procedure details the activities required to ensure a project is on schedule, defines deviations that will require senior management review, and ensures projects are re-planned as needed to reflect changed conditions.

### 1.2. Objectives

1. To identify the activities that must be tracked, describe the groups responsible for each activity, and outline the schedule to be followed in tracking these activities.
2. To describe how to update actuals and status a project plan.
3. To identify the sources of information used to compare actuals to baseline.
4. To define deviations from the plan and determine actions to be taken.

### 1.3. Definitions

**Development Manager:** Responsible for the design, code development, testing, and defect correction of new and existing systems prior to deployment to production. May also be responsible for use cases and/or requirements.

**Product Manager:** Responsible for interface with internal and external customers relative to the development of use cases and requirements for new systems, for changes to systems under development, or for enhancements to systems in production. Responsible for managing the overall product direction, scope, and market timing of product releases.

**Project Manager:** Responsible for ensuring the project plan is developed according to written procedures. Organizes, tracks, updates, and communicates the status of a project. Maintains the balance between scope, schedule, and resources. Manages issues and their timely resolution. Advises the appropriate senior management on potential deviations in scope, schedule, and resources, and elevates unresolved issues to ensure the appropriate action plans are developed to alleviate problems. Negotiates commitment changes with affected parties and reports the results to senior management. Ensures negotiated action plans are implemented and project plans are adjusted accordingly.

## 2. Procedure Description

### 2.1. Overview

**When** Project plans are statused on a weekly basis when the product, development, or project manager authorizes the release of team members' time from the timekeeping system to the MS Project plan. This is typically done on Mondays to capture the previous week's work. The plan is then analyzed, comparing Milestone baseline schedule dates to actuals. A status report is prepared detailing current milestones and deviations, if any, from the baseline plan of  $\pm 15\%$ . This report, with any

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recommended corrective actions, is submitted to senior management at the next scheduled Weekly Status Meeting.

On a periodic basis, generally at the end of each major stage, additional analysis is made of changes to software size and critical computer resource usage, software engineering technical activities, project risks, and internal reviews by the software engineering group of technical progress, plans, performance, and issues. The results of this analysis are submitted to senior management at the next scheduled Weekly Status Meeting.

Reviews are also conducted with customers and other affected groups at major milestones in the project.

<b>Trigger</b>	Within one week of the initial preparation of the MS Project plan.
<b>Who</b>	The product, development, or project manager is responsible for comparing the actual status of the project to the project plan, analyzing the results, and reporting those results.
<b>Inputs</b>	Data from the automated timekeeping system MS Project Plan Status Meeting Template Risk Management Plan Project Estimating Worksheet Data on critical computer resource use Reports from the software engineering group
<b>Outputs</b>	Updated MS Project plan Weekly Status Report Corrective Action Plan (if needed) Revised/Approved Software Development Plan (if needed) Revised/Approved MS Project Plan (if needed)

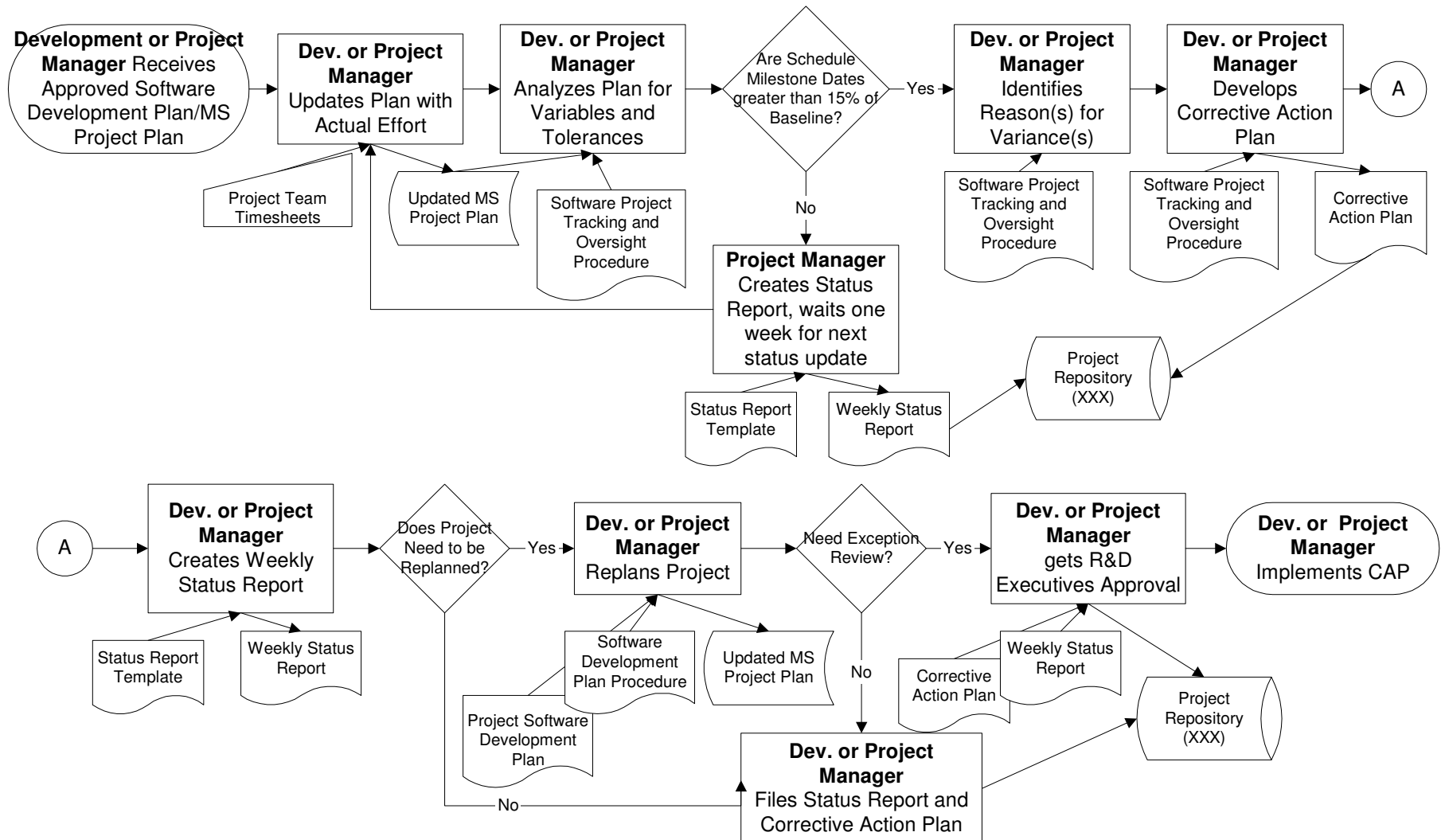
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## 2.2. Flow Chart

### Software Project Tracking and Oversight



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## 3. Procedure Steps

### 3.1. Date and Effort Status

#### 3.1.1. Preliminary Review

##### 3.1.1.1. Review MS Project Plan to ensure that:

- all tasks have resources assigned and estimated effort entered.
- milestones have been entered for each major work product.
- the plan has been baselined.

##### 3.1.1.2. Verify in the Software Development Plan that all work products have an assigned responsible resource. This is the person who will explain variances and re-plan that part of the schedule, if necessary.

#### 3.1.2. Date and Effort Status Analysis.

##### 3.1.2.1. In the timekeeping system, authorize the release of team hours to the MS Project plan. This will update the hours for each team member in each activity for which time was charged.

##### 3.1.2.2. Use a layout that displays dates of baseline start, actual start, and early start (early start reflects current schedule), and baseline finish, actual finish, and early finish (early finish reflects current schedule).

Task Name	Duration	Baseline Start	Actual Start	Start	Baseline Finish	Actual Finish	Finish
1 [Application Name]	141 days	NA	NA	Mon 9/18/00	NA	NA	Mon 4/2/01
2 Project Kick-Off Meeting	1 day	NA	NA	Mon 9/18/00	NA	NA	Mon 9/18/00
3 Project Planning	34.25 days	NA	NA	Mon 9/18/00	NA	NA	Mon 11/6/00
4 Complete baselined Requirement	10 days	NA	NA	Tue 9/19/00	NA	NA	Mon 10/2/00
5 Requirements Review	1 day	NA	NA	Mon 10/2/00	NA	NA	Tue 10/3/00
6 Requirements Review Comp	0 days	NA	NA	Tue 10/3/00	NA	NA	Tue 10/3/00
7 Project Team WBS Identification	5 days	NA	NA	Mon 10/9/00	NA	NA	Mon 10/16/00
8 Produce Project Plan	3 days	NA	NA	Tue 10/17/00	NA	NA	Thu 10/19/00
9 Review project plan with project	2 hrs	NA	NA	Fri 10/20/00	NA	NA	Fri 10/20/00
10 Review Project Plan with SQA	1 day	NA	NA	Fri 10/20/00	NA	NA	Mon 10/23/00
11 Develop Test Plan & Test Cases	10 days	NA	NA	Mon 10/23/00	NA	NA	Mon 11/6/00
12 Status Reports	0 days	NA	NA	Mon 9/18/00	NA	NA	Mon 9/18/00
13 Training (if applicable)	0 days	NA	NA	Mon 9/18/00	NA	NA	Mon 9/18/00
14 Project Plan Draft Complete	0 days	NA	NA	Mon 10/23/00	NA	NA	Mon 10/23/00
15 Application Development	97 days	NA	NA	Mon 9/18/00	NA	NA	Tue 1/30/01
16 Design Documentation	20 days	NA	NA	Wed 10/4/00	NA	NA	Tue 10/31/00
17 Review requirements/use cat	4 days	NA	NA	Wed 10/4/00	NA	NA	Mon 10/9/00
18 Logical Data Model	3 days	NA	NA	Tue 10/10/00	NA	NA	Thu 10/12/00
19 Physical Data Model	1 day	NA	NA	Fri 10/13/00	NA	NA	Fri 10/13/00

Prepare a table of dates for the next 90 days that calculates dates with a  $\pm 15\%$  difference.

##### 3.1.2.3. Find milestones with baseline dates within the next 90 days. Compare these dates to the calculated table and note any milestones with a variance of $\pm 15\%$ . Positive variances indicate milestones ahead of schedule while negative variances indicate schedule slippage.

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- 3.1.2.4. If the variance date is greater than the calculated table, calculate the actual variance.
- 3.1.2.5. Create an Excel spreadsheet for the variances with columns for Milestone, Baseline Date, Start or Finish (Enter S or F), Date (for the actual date), Variance %, and Cause.
- 3.1.2.6. Repeat this process to determine variances in effort. Use a layout that displays the Baseline Finish date, Baseline work (effort), Actual Work (Effort), Work Variance, and Resources.

Task Name	Base Finish	Base Work	Actual Work	Work Var.	Resource Names
1 [Application Name]	9/18/00	1,764.33 hr	0 hrs	1,764.33 hr	
2 Project Kick-Off Meeting	9/18/00	8 hrs	0 hrs	8 hrs	Project Team
3 Project Planning	9/18/00	252.33 hrs	0 hrs	252.33 hrs	
4 Complete baselined Functional Requirements Document (FRD)	9/19/00	80 hrs	0 hrs	80 hrs	Product Mgr
5 Functional Requirements Document Review	10/2/00	8 hrs	0 hrs	8 hrs	Product Mgr, Project Team(C
6 Requirements Approval by Customers	10/3/00	0 hrs	0 hrs	0 hrs	
7 Requirements Approval by Development	10/3/00	0 hrs	0 hrs	0 hrs	
8 Project Team WBS Identification	10/9/00	40 hrs	0 hrs	40 hrs	SAW Proj Mgr, Project Team(C
9 Produce Software Development Project Plan (SDP)	10/17/00	40 hrs	0 hrs	40 hrs	SAW Proj Mgr
10 Review SDP with project team	10/23/00	0 hrs	0 hrs	0 hrs	SAW Proj Mgr
11 Review Project Plan with SQA	10/24/00	4.33 hrs	0 hrs	4.33 hrs	QS TBD(50%), SAW Proj Mgr
12 Develop Test Plan & Test Cases	10/25/00	80 hrs	0 hrs	80 hrs	QS TBD
13 Status Reports	9/18/00	0 hrs	0 hrs	0 hrs	SAW Proj Mgr
14 Training (if applicable)	9/18/00	0 hrs	0 hrs	0 hrs	Project Team
15 Project Plan Draft Complete	10/24/00	0 hrs	0 hrs	0 hrs	
16 Application Development	9/18/00	984 hrs	0 hrs	984 hrs	
17 Design Documentation	9/18/00	232 hrs	0 hrs	232 hrs	
18 Review requirements/use cases	10/4/00	32 hrs	0 hrs	32 hrs	Project Team
19 Logical Data Model	10/10/00	24 hrs	0 hrs	24 hrs	R&D DBM
20 Physical Data Model	10/13/00	8 hrs	0 hrs	8 hrs	R&D DBA
21 Functional/Object Decomposition	10/18/00	40 hrs	0 hrs	40 hrs	Project Team

- 3.1.2.7. Find milestones with baseline dates within the next 90 days. Calculate the variances by dividing the baseline work into the work variance. Note any milestones with a work variance of  $\pm 15\%$ . Positive variances indicate completion of work activity at less than estimated while negative variances indicate work activity that is exceeding the estimate.
- 3.1.2.8. Add to the Excel variance spreadsheet columns for Baseline Work, Actual Work, Variance %, and Cause.
- 3.1.2.9. From the manager/developer, determine the cause for each variance. Investigate both positive and negative since a positive variance could indicate that some activity, such as quality review, was omitted.

## 3.1.3. Date and Effort Variance Corrective Actions:

- 3.1.3.1. Corrective Actions can include:
  - Determine if tasks can be worked on concurrently.
  - Increase resources
  - Reassign resources from tasks with large float to tasks with small or no float (critical path tasks).
  - Decrease scope

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- 3.1.3.2. Enter variance, date and effort information, and corrective action intentions in the Status Meeting Template, Project Tracking and Oversight Section, to be presented at the next meeting with the project manager and/or senior management.
- 3.1.3.3. Proposed changes to the software development plan or MS Project schedule that will affect commitments to customers or other groups require the approval from senior management and the customers or groups affected. Any Status Meeting addressing commitment issues must have all parties present. Any approvals must be documented in the Status Meeting Minutes.
- 3.1.3.4. See MS Project Plan Procedure and Software Development Plan Procedure for instructions on changing the schedule and plan.

## 3.2. Other Plan Verifications

### 3.2.1. Software Size

- 3.2.1.1. On a periodic basis, such as the end of major stages or the delivery of a major work product, software size should be evaluated and re-estimated based on work accomplished and work still planned. See the Estimating Template for more information on estimating software size. The re-estimate should include:
  - Sizes for all major work products or the size of changes.
  - Actual size of code (generated, fully tested and delivered).
  - Actual units of delivered documentation and online help.
- 3.2.1.2. Deviations of  $\pm 15\%$  from the baselined software size as detailed in the Software Development Plan should be investigated. Corrective actions are entered in the Status Meeting Template, Project Tracking and Oversight Section, and presented at the next Status Meeting.

### 3.2.2. Critical Computer Resources

- 3.2.2.1. On a periodic basis, critical computer resources should be re-estimated based on work accomplished, changes in scope, or other factors that may affect computer use. See Estimating Template for estimating method. Deviations of  $\pm 15\%$  from the baselined critical computer resource needs as detailed in the Software Development Plan, should be investigated. Corrective actions are entered in the Status Meeting Template, Project Tracking and Oversight Section, and presented at the next Status Meeting.

### 3.2.3. Risk Management Plan

- 3.2.3.1. On a periodic basis, the Risk Management Plan should be re-evaluated to determine if risk mitigation plans are being utilized or if new project risks have occurred. See Risk Management Plan Procedure for instructions on analyzing and completing the Risk Management Plan assessment. Any significant changes to project risk that could affect commitments must be analyzed for mitigation alternatives and brought to the attention of senior management at the



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next Status Meeting. Proposed Risk Management Corrective Actions are entered in the Status Meeting Template, Risk Management Section. Decisions about mitigation efforts are documented in the Risk Management Plan.

- 3.2.3.2. Any changes to commitments must be negotiated with and approved by the affected groups and the approvals must be documented in Status Meeting or other meeting minutes. Changes to software size and critical computer resources must be incorporated into the Software Development Plan according to the Software Development Plan Procedure.

## 3.2.4. Software Engineering Group Activities

- 3.2.4.1. Members of the software engineering group must report their technical status to their manager on a regular basis. Technical status is the progress on technical development (coding) as opposed to project progress against milestones.
- 3.2.4.2. Software release contents for successive builds are compared to the plans documented in the Software Development Plan. Deviations from the plan of  $\pm 15\%$  (amount in build compared to amount planned to be in build) are investigated. Corrective actions are entered in the Status Meeting Template, Project Tracking and Oversight Section, and presented at the next Status Meeting.
- 3.2.4.3. All problem reports (defects/bugs) are logged and tracked to closure per the Change and Release Management Procedure. For each build, these reports are analyzed as to cause and summarized for presentation to senior management at Status Meetings. Summaries are entered in the Status Meeting Template, Software Quality Assurance Section, and presented at the next Status Meeting.
- 3.2.4.4. The software engineering group conducts internal reviews at major plan milestones to track technical progress, plans, performance, and issues against the Software Development Plan. These reviews should be documented and signed by the project manager and parties involved in the review process.

## 3.2.5. Formal Reviews with Customers and Affected Groups

- 3.2.5.1. Formal reviews with customers and affected groups are conducted at major milestones that represent delivery of significant work products.
- 3.2.5.2. Reviews address project accomplishments, progress, risks, and any issues that might affect project commitments in the future.
- 3.2.5.3. Issue identification, action items, decisions, and resolution of problems are documented. Unresolved issues are followed to closure and reported at subsequent review meetings.

## 3.2.6. Document Storage

- 3.2.6.1. All reports, plans, etc. are stored in the Configuration Management software system per the SCM Procedures.