COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES



The Office of Information Technology

Project Methodology and Lifecycle Guide

Version 4.4

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IT Project Management Office

This guide is owned and managed by the IT PMO. It is designed to provide viewers with an understanding of the Information Technology System Development Lifecycle and Methodology and supporting project management tools. Included are how to instructions for submitting new IT Project Requests, project reviews and code drop deployments; and lists key Shared Services contacts to ensure you get off to great start.

Please email your questions concerning this guide or to request additional information to the PMO at EHSITPMO@state.ma.us.

Revision History

| Date | Version | Description | Author |
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| | | Quick start guide | |
| | | Project Lifecycle | |
| | | EHS IT PMO Review process guide | |
| 04/13/2011 | 2.0 | Merge of IT Dev Methodology guide | Lisa Vallier |
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| 6/10/11 | 4.3 | QA Performance Waiver Workflow update | Sheika Babin |
| 11/15/11 | 4.4 | Update PMO Reviews Weekly Schedule | Sheika Babin |
| | | Add Environment Request Workflow | |
| | | Update to Intake process (added Patch and additional Lifecycle) | |

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1. Introduction

1.1 Purpose

This document is the primary detailed description of the Executive Office of Health and Human Services (EOHHS) Information Technology (IT) development Methodology created as part of the Virtual Gateway initiative (hereafter VG). The EOHHS Methodology is prescribed and maintained by the IT Project Management Office (IT PMO). It provides a set of guidelines that outline the workings of a team-oriented approach to specifying, constructing, and assembling software and hardware components into a working system that meets well-defined requirements.

As per the IT PMO mission, this guide should be read, understood and followed to the extent possible by all project team members involved in the development of a system to ensure alignment with the VG initiative. Project team members need to become familiar with the guidelines, principles, and procedures contained herein. In addition, the concepts described in this document may be tailored to accommodate project size, complexity, and risk.

This guide is not static, and is expected to evolve as business, technology, and information system's needs change. It is equally important for the users of this guide to provide feedback, suggestions, and ideas on how to improve and enhance this material and its content. Suggested enhancements can be directed to the IT PMO for consideration.

1.2 How this document is organized

This document is intended to provide a high-level overview about the PMO, describe UP methodology and supporting workflows, and explain how to use EOHHS common tools to submit support requests, review requests and code drop requests.

2. What is the IT PMO?

The IT PMO governs IT project activity across the sixteen EOHHS agencies; providing project management oversight to help minimize risks to project design, scope creep, cost overruns and schedule impact.

In addition, the IT PMO also manages the project portfolio to ensure a mix of project and program initiative investments and alignment with the Commonwealth and EOHHS Secretariat goals.

2.1 Why should you contact the IT PMO?

The IT PMO is the starting point to working with IT. Our services include but are not limited to the following:

- IT Process Guidance: Help you submit new IT project request, create a project plan; define project roles, and access and schedule key IT Shared Resources.
- Methodology and Standards Guidance: Provide project guides, templates, and presentations through the <u>IT PMO Services MassForge</u> site. Meet with the business sponsors, project managers and teams to help guide through the project lifecycle. And will assist you with questions about team collaboration or enterprise tools, i.e., MassForge, Clear Quest and Clarity

- Environment Setup: Guide you through the process of requesting a development environment and then work with your team as you move your developed project into the System Test, Quality Assurance and Production environments.
- Shared Services: Direct you to the appropriate shared services groups. These groups will work with your team to develop the best approach to integrate shared enterprise services from document management to public access to security.

2.2 How do I contact the IT PMO?

Send an e-mail to <u>EHSITPMO@state.ma.us</u> and a PMO representative will contact you. Please include your phone number and a description of your request/question.

3. Unified Process Methodology Key Concepts

EOHHS Project Methodology is based on *The Unified Software Development Process,* I. Jacobsen, G. Booch, J. Rumbaugh. The Methodology is based on 6 main themes:

- 1. *Use-case Driven* Use cases provide a means for capturing functional requirements, organizing activities, and keeping the entire team focused on the end result.
- 2. *Architecture-Centric* The central technical activity is architecture, which is developed and validated early, and the rest of the system is built around it.
- 3. *Emphasis on Systemic Qualities* The system is architected to meet the Service Level Requirements at each layer and each tier. The Systemic Qualities are prioritized, architected for and validated early.
- 4. *Iterative and Incremental* The bigger system is evolved from a series of smaller systems, each of which extends the previous one.
- 5. *Focus on Early Risk Mitigation* Risks are identified early and tracked. Early activities are focused on risk reduction.
- 6. *Focus on High vs. Low Value Artifacts* Intermediate and transient artifacts such as analysis models and design documents are not kept up-to-date and formalized. More important artifacts such as the System Architecture Document (SAD) are signed off and maintained.

The Methodology builds on the concepts of phases and workflows. The partitioning of the project timeline into phases serves to clarify and emphasize the priorities both internally and externally to the project. Each phase is defined by its deliverables, which drive the activities that must occur within that phase. A workflow is a grouping of closely related activities. See the sections below for details on the Methodology phases and workflows.

3.1 UP Phases

Four phases are defined for each product release. The four phases are:

- Inception defines the project's scope, its risks, and estimates its major milestones. It is also the beginning of requirements gathering and defining the architecture strategy.
- Elaboration follows Inception. It focuses on mitigating risks through architectural prototyping and on fleshing out the requirements.
- Construction follows Elaboration. This is where the bulk of the system's functionality is designed and built.

• Transition initiates the final preparations for making the system productionready.

4. EOHHS IT PMO Project Lifecycle

Virtual Gateway Projects go through a series of cycles which correspond to the Unified Process phases and workflows as detailed in Section 4. Listed below are the cycles, in order of process, the artifacts developed during each cycle, the responsible parties, and the outcome of each cycle.

4.1 Inception

4.1.1 <u>New project/ initiative request</u>

Primary: Business sponsor

Once complete, the Vision document should be emailed to EHSITPMO@state.ma.us. The sender will be notified of receipt of the Vision document. The IT PMO offers assistance in drafting Vision documents.

| Activities | Entrance criteria | Phase Outcomes |
|---|--------------------------------------|--|
| New project/initiative request submitted to PMO by Business Owner | <u>Vision document</u> (template) | E-mail confirmation will be sent from PMO to business upon receipt of complete Vision document |

Table 1 - New Project/initiative request

4.1.2 PMO review

Primary: PMO

Once a project's Vision has been submitted, the PMO will review and prioritize the request based on a standard set of criteria as determined by EOHHS strategic goals alignment and budgetary considerations.

| Activities | Entrance criteria | Phase Outcomes |
|-------------------------------|--|--|
| Prioritization of request | New Project tracker in IT PMO Services - with Vision document attached | Summary evaluation created and sent to Governance Board |
| Procurement APD assessment | New Project tracker is assigned to Procurement | Procurement will assess whether the project is applicable for APD reimbursement funding. |
| | | ✓ Upon completion of assessment the tracker is updated with the results and reassigned to the PMO |

Table 2 - PMO Review

4.1.3 Governance Board review

Primary: PMO

Once a project has been approved, the IT PMO will contact the business sponsor and/or project manager to arrange an Intake Review.

| Activities | Entrance criteria | Phase Outcomes |
|--|--|---|
| Governance Board review Disposition determination | Review of request by Governance board based on summary evaluation by PMO Update New Project Tracker with disposition | PMO updates tracker with disposition If pending/denied - E-mail sent to PM If approved - E-mail generated including "Project Methodology and Lifecycle Guide" |

Table 3 - Governance Board review

4.1.4 Project Inception

Primary: Project Manager, Secondary: PMO

During project inception the listed entrance criteria is reviewed by the various IT resources to ensure a shared understanding of the scope of the project.

At the Intake Review the IT Shared Services stakeholders review the project in terms of business scope, issues driving the project, availability of funding, cost estimates, and proposed timeline. The team is then able to determine and propose technological approaches, inter-agency data and functional dependencies, and capacity needs for the project.

The architecture and methodology reviews are held to delve further into the artifacts specific to each group's discipline. After each review suggestions may be made for the project team to incorporate in their documentation prior to moving to the elaboration phase.

| Activities | Entrance criteria | Phase Outcomes |
|-----------------------------|---|--|
| 1.Intake review | Create project in MassForge | ✓ Project available in MassForge |
| | using UP standard template | Business given access to all documentation |
| | Project Presentation (high- level) preferably PowerPoint | Status reports available on demand |
| | | ✓ Access to standard templates |
| | Vision document stored on site | Access to EHS IT projects and artifacts |
| | Project Lifecycle Tailoring | PM grants IT Shared Service leads access to project site |
| | Plan | ✓ Project is on Shared Services radar |
| 2.Inception Architecture | System Architecture Document (SAD) | Architecture provides review summary to project team |

| Activities | Entrance criteria | Phase Outcomes |
|-----------------------|---|-------------------------------------|
| review | Environment Plan | |
| | Security Workbook | |
| 3.Inception | Requirements document | ✓ Quality Assurance provides review |
| Methodology review | Use Case document | summary to project team |
| Teview | Change and Configuration Management Plan | |
| | Virtual Gateway (VG) Intake Questionnaire | |
| | Project Plan | |
| | Construction Iteration plan | |
| | Project Org Chart | |

Table 4 - Project Inception

4.2 Elaboration

4.2.1 Analysis

Primary: Project manager

Project team performs project analysis and document creation. Reviews and code drops must be requested at the appropriate intervals by the project manager. Please see review section of this document for complete information.

| | Activities | Entrance criteria | Phase Outcomes |
|----|--|---|---|
| 1. | Project Manager begins attending Monday 11am PMO meeting | | |
| 2. | Elaboration Architecture review | Updated: • Environment Plan • Security Workbook • System Architecture Document | Architecture ✓ One-on-one with architecture team including corrective action as necessary ✓ Architecture design approved ✓ PM given approval to request development environment from release management group Security ✓ Firewall requirements identified and approved |

| Activities | Entrance criteria | Phase Outcomes |
|--|---|--|
| 3. Elaboration Methodology review (See Project Reviews section for more information) | Requirements Use Case Change and Configuration Management Plan Transition plan Project Plan Construction Iteration Plan Project Org Chart User & Operations manual(s) Master Test Plan Integration Testing System Test Plan & Cases UAT Test Plan & Cases Performance Test Plan & Cases ADA Test Plan & Cases Vulnerability Test Plan & Cases | QA ✓ One-on-one with QA team including ADA and vulnerability direction ✓ QA resource assigned PMO ✓ Project included in PMO status reporting ✓ Baseline schedule created and signed off by Shared Services, business, and PMO |

Table 5 - Analysis

4.3 Construction

4.3.1 Project Development

Primary: Project Manager

In this cycle the application is developed, or coded, based on the successful completion of:

- Inception review
- Elaboration review
- Architecture reviews
- All entrance criteria from the listed phases has been completed
- All phase outcomes have been completed
- Timeline posted and agreed upon by Shared Services teams

| Activities Entrance criteria Phase Outcomes | |
|---|--|
|---|--|

| Activities | Entrance criteria | Phase Outcomes |
|---|---|--|
| Application/ initiative is developed based on artifacts | All documentation must be final and signed off prior to start of developments | Development environment made available by Release management Code regularly checked in to secure shared code repository |
| Changes to dates/timelines tracked in review/code drop trackers - <i>(see section 5 for</i> | | Shared Services, PMO, and development resources available based on agreed upon timeline |
| more information) | | Project timeline updated in real time by PM |

Table 6 - Project development

4.3.2 Testing

Primary: Project Manager, Secondary: QA, Tertiary: Release Management

The standard testing software used by QA is Rational Test Manager. There are five test processes that must be successfully completed prior to release to production:

| Type of Testing | Environment | Resource |
|---|----------------------------------|------------------|
| Unit Testing | Local/Development environment | Developer |
| Integration Testing | Local/Development environment | Business Analyst |
| System Testing | System Test Environment | QA |
| QA Testing (includes vulnerability and ADA testing) | QA Environment | QA |
| Performance Testing | QA Environment | QA |

Table 7 - Testing cycles

✓ Code drop meetings are held prior to code release to each environment.

✓ Go-No-Go (GNG) meetings are held prior to a production release. During this meeting a final decision is made on release to production.

| Activities | Entrance criteria | Phase Outcomes |
|---|--|---|
| Project managers must attend daily QA 10am call | n/a | ✓ Updates on environment status and Shared Services |
| 2. ST code drop requested | Integration Test Results ReportMaster Test Plan | ✓ System testing completed |
| | Test Cases Release Management Guide ST task list Code checked in to SVN | Quality assurance testing completed |

| Activities | Entrance criteria | Phase Outcomes |
|------------------------------|---|---|
| 3. QA code drop requested | QA task list ST test results Code checked in to SVN | ✓ Performance testing completed ✓ ADA testing completed ✓ Vulnerability |
| | | testing completed |

Table 8 - Testing

4.4 Transition:

4.4.1 Production

Primary: Release Management, Secondary: Project Manager

PM works with IT Shared Services to complete integration, environment transition and testing of production release. There are specific dates assigned each month as "Production windows" which can be found on the IT PMO Services MassForge site.

| Activities | Entrance criteria | Phase Outcomes |
|--|--|--|
| GNG/Production code | User Manual Operations | Application/initiative moved into |
| drop requested | Manual Transition Plan | secure production environment Business sign-off attained and stored |

Table 9 - Production

4.4.2 Project Closure

Primary: Project Manager

Project closure notification should be sent to all stakeholders.

| Activities | Entrance criteria | Phase Outcomes |
|---|-------------------|---|
| Review trackers and update with proper status Send project closure notification to all shareholders | n/a | Successful project/initiative delivered Lessons learned document posted to project site User sign-off on production release |

Table 10 - Project Closure

5. Project artifact organization

Projects are expected to post artifacts to the following folders in order to ensure easy access for all shareholders. When creating a new MassForge project, it is recommended that a project manager select the "UP Template". This will ensure these workflows are created for proper document storage in the document module.

| MassForge folder | Artifacts |
|--------------------|--|
| Requirements | Vision |
| | Requirements |
| | Use Cases |
| | Firewall requests |
| | Traceability Matrix |
| Architecture | System Architecture Document |
| | Security Workbook |
| | Environment Plan |
| Verification | Integration Test Results |
| | Master Test Plan |
| | Test scripts |
| Deployment | Transition Plan |
| | Release Management Guide |
| | Task lists (ST, QA and Prod) |
| | User Manuals |
| | Operations Manual |
| | Configuration & Change Management Plan |
| Project Management | Project Plan |
| | Construction Iteration Plan |
| | Project Organizational Chart |

5.1 Environment Requests

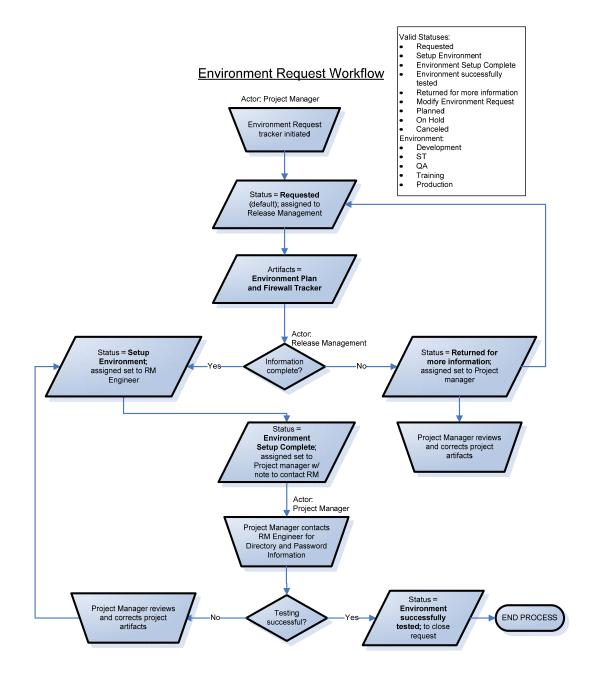
The "Environment Request" tracker will facilitate creation of new or changes to existing environments for Development, ST, QA, Training and Production. Individual trackers must be submitted for each environment and associated of the required artifacts which include Environment Plan and the Firewall tracker (see section 7 for instructions on how to submit a Firewall Requests).

NOTE: Planning your project, add 4 - 5 weeks (wks) prior to first code drop for new environment requests. This timeline include 2wks for processing of Firewall request and 2wks to complete environment setup. Changes to a firewall request after a request is completed, will take an additional 4 wks to setup environment.

5.1.1 How to submit a request

PREREQUISITE: Project will have completed Elaboration phase and submitted Firewall Requests 2 weeks in advance.

- 1. Access MassForge IT PMO Services project site, and click on Trackers. Next click on the Environment request tracker and then click on the "Submit New Artifact" button
- 2. Complete all fields
- 3. Leave default status as "Requested"
- 4. Associate required artifacts, i.e., Environment Plan and Firewall Request tracker.
 - NOTE: For new projects that have not completed both Inception and Elaboration phases, approval from the Architect Team will need to be obtained and a copy attached to the tracker.
- 5. Assign the tracker to the Release Management resource
- 6. Press the Save button to submit tracker
- 7. Release Management (RM) will review request
- 8. If approved, Release Management will reassign the tracker to a RM Engineer and change the status of the tracker to "Setup Environment".
- 9. If not approved, Release Management will reassign tracker back to Project Manager and change the status to "Returned for more Information".
- 10. When the environment is complete, the RM Engineer will update the tracker status to "Environment Setup complete" and reassign to the PM. A note will be added for the PM to contact the RM Engineer for details about the request, i.e., password and directory information.
- 11. The project team must verify the environment setup is complete, and then change the tracker status to "Environment successfully tested" to close the request.



5.2 How to Submit a Review or Code Drop Request

Reviews and code drops are managed and scheduled through the IT PMO utilizing MassForge.

Each review and code drop requires that the project manager open a tracker and assign the tracker to a PMO resource for scheduling. Every effort will be made to accommodate all requests but, in some cases, an alternate date may be given based on the volume of projects (see section 6.2 PMO reviews - weekly schedule).

All inception and elaboration reviews must be completed prior to scheduling Code Drop reviews unless approval has been given by a team lead to bypass one or more of these reviews.

5.3 Instructions to submit review and code drop requests

The project manager is expected to open a tracker for each review or code drop using the following steps:

- 1. Go to the <u>IT PMO Services</u> site in MassForge.
- 2. Click on the **Trackers** module (if you do not see the Trackers module, check to make sure you are logged in to MassForge. If you still do not see the Trackers module, click on the 'Join this **Project**' button and submit a request to be granted permission. Your request will be approved as soon as possible, normally within minutes.)
- 3. Select the tracker for your review type (in this example an Elaboration Methodology Review is being requested).

| | | | | | ••• | | | • | - | • | | | - | | | | | |
|---------------------------------|--|-------------------|------------|-------|--------------|--|-------------------|----------------|----------|-------------|--|-------------|-------------|-----|---------|-------------|--------------|---------------|
| 🔾 TeamForge : L | List Trackers and Pla | anning Folders | | | | | | | | | | | | 20 | • 🖾 • L | 1 🖷 - | Sade - Say | ety - Tools - |
| MassFcrg | ge Project (| Collabora | ation | Site | | | | | | | | | | | | | | 060MI 😗 t |
| Projects - N | My Workspace | Admin 3 | Search | Histo | ny 🔻 OR3 | operCollab? | et | | | | | | | | | | | |
| Project: IT | PMO Service | es | | | | | | | | | | | | | | د | ump to ID: 🖻 | x: artf2345 |
| Project Home | 2 Tracker | Documents | - Casi | | Source Code | Discussions | Reports | File Releases | Wiki | Project Adm | n Calenda | OpenReports | Tracker Cal | | | | | |
| | Trackers and Plan | nning Folders | | | | | | | | | | | | | | | | Search Track |
| Trackers | | | | | Tracker Su | - | | | | | | | | | | | | |
| Tracker Sun | | | | - | Tracker Nan | ie . | | | | 0 S | ummary | | | | | pen Priorit | | |
| New P | Project Request | | | | 0.0 | | | | | | | | 1 | 0 2 | 0 3 | • 4 | 0 5 | None |
| PM Ite | ems | | | | | oject Request | | | | | Open, 2 Close | | 1 | 3 | 4 | 28 | 0 | 0 |
| Projec | ct Inquiry | | | | PM Item | | | | | | Open, 14 Close | | 0 | 2 | 3 | 4 | 0 | 0 |
| Report | | | | | Project I | inquiry | | | | 0 | Open, 0 Closed | : 0 Total | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | 🗎 Report r | requests | | | | 1 | Open, 4 Closed | : 5 Total | 0 | 1 | 0 | 0 | 0 | 0 |
| | e Review request | | | | 📄 🛛 Intake R | Review request | | | | 0 | Open, 0 Closed | : 0 Total | 0 | 0 | 0 | 0 | 0 | 0 |
| Archite | ecture review requi | est (inception or | r elaboral | tion) | Architec | h | est (receptor to | eleboration) | | 0 | Open, 0 Closed | : 0 Total | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | v alabora | tion) | L Methode | ology review requ | est (inception or | r elaboration) | ` | 0 | Open, 0 Closed | 0 Total | 0 | 0 | 0 | 0 | 0 | 0 |
| Metho | dology review requ | vest (inception o | | | | | | | | | | | | | | | | |
| | | Jest (inception c | | | | Drop request | | | | 0 | Open, 0 Closed | : 0 Total | 0 | 0 | 0 | 0 | 0 | 0 |
| ST Co | odology review requ de Drop request ode Drop request | Jest (inception c | | _ | Code | e Drop request e Drop request io request | | | | 0 | Open, 0 Closed Open, 0 Closed Open, 0 Closed | 0 Total | 0 | 0 | 0 | 0 | 0 | 0 |

4. Select Methodology review request (inception or elaboration).

- 5. In the lower right of the screen, click the **Submit New Artifact** button. Using the screen shot on next page, complete the form using the following steps.
- 6. Enter your project's Title in the "Title field". Use the <u>exact name as it appears on your</u> <u>MassForge project</u> (to assist in creating reports).

| TeamForge : Submit Artifact rackers > Methodology review request (inception or elaboration |) > Submit Artifact | |
|--|------------------------------|---|
| Submit Artifact | | |
| Trides" | | × |
| Status:" Date requested (select a Thursday): JP Phase: | Requested | |
| Inception - Requirements document checked in: Inception - Project plan or tasks greated and checked in: Inception - Urg Sintake Questionnaire checked in (if needed): | 160 x 160 x 160 x | |
| Baboration - Requirements document signed and checked in: Etionexton - Lise Case with POC signed and checked in: Baboration - Release Man, Guide checked in: Baboration - Opsignment plan interelixed in: Baboration - Castorato Iteratoria man checked in: Baboration - Castorato Iteratoria man checked in: | No a No a No a No a | |

- 7. Enter a **Description**.
- 8. The status field for a new request should remain "Requested".
- 9. Select a date based on the "Date Requested" field label (for example, in the screen shot above the PM should only select a Thursday date from the calendar).
- 10. Select the UP Phase (when applicable).
- 11. Confirm the required artifacts have been checked in to MassForge by selecting 'Yes' for each artifact listed.
 - NOTE: In order to allow time for all parties to review artifacts documentation should be associated to the request tracker a week prior to a requested review (task lists for code drops should be checked in as soon as they are available). If artifacts are not complete at time of request, update artifact readiness fields as soon as artifacts have been posted in MassForge and associate them to request tracker.
- 12. Change the 'Assign to' field to a PMO resource for scheduling.
- 13. Once the necessary edits have been made to the tracker, press the Save button.
- 14. The PMO will monitor review requests and schedule reviews based on a project's strategic priority and resource availability.
- 15. Once a review has been scheduled the PMO will change the tracker Status to "Meeting scheduled by PMO" and notification will be sent to the PM via MS-Outlook with the date of the scheduled meeting. This notification will come from the EHS IT PMO calendar.
 - NOTE: In some cases the PMO will need to assign an alternate date based on resource availability. PMs are encouraged to forward the meeting invite to additional members of their team who may want to attend the meetings.
- 16. Upon completion of the review, the review leads will update the tracker with a summary and assign to it back to the PMO to close. For code drop and GNG reviews the leads will assign to the designated resource to complete the deployment.

5.3.1 Changes to a scheduled review or code drop

In the event a review or code drop date needs to be changed the project manager is responsible for updating the appropriate tracker.

- 1. Open the existing tracker,
- 2. Change the status from "Meeting scheduled by PMO" to "Date Change Requested",
- 3. Select the new date in the "Date Requested" field,
- 4. Next change the 'Assign to' field and assign the tracker to a PMO resource,
- 5. Save the tracker, and
- 6. The PMO will cancel the previous date and schedule the new date following the scheduling process as detailed in "Review and Code drop request process" section.

5.4 PMO Reviews - Weekly Schedule

In order to streamline requests for the reviews listed in section 5.2, a standard schedule has been created. This schedule is subject to change based on resource availability and volume of requests. Refer to section 5.4 for detailed workflows.

| Time | Monday | Tuesday | Wednesday | Thursday | Friday |
|--------------------|--------------------|--|--|---|---|
| 11a m - noon | | Architecture reviews (Inception/Elabora tion) | Intake Reviews (alternate week) | Methodology reviews (Inception/Elabora tion) | MA-21 Elaboration Reviews Code Drops (Training) |
| 1pm - 2pm | Code drops (ST) | Code Drops (QA) | Unplanned Slot / Emergencies | Go No-Go | Code Drops (MA- 21Non VG) |

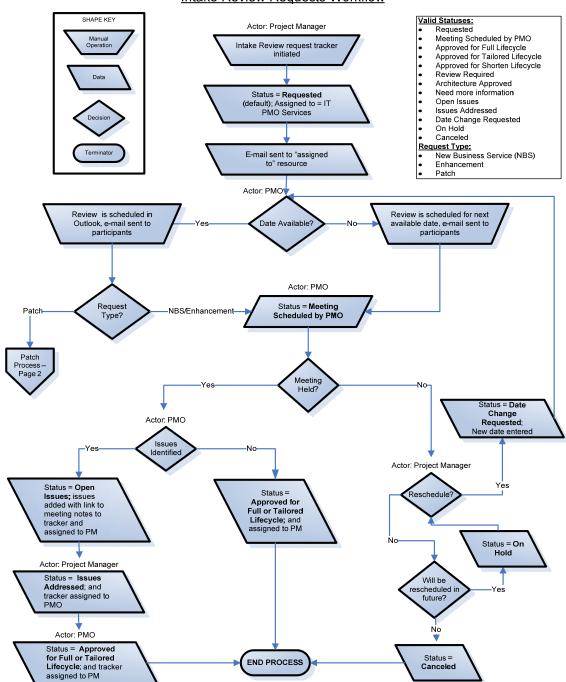
5.4.1 <u>Review Participants</u>

| Review | IT Participant Groups |
|----------------------|---|
| Intake Reviews | PMO, Shared Services, QA, Security, Architecture, Helpdesk Operations, Training Services, VG On-Boarding; Database Administration, ACIO |
| Architecture reviews | Architecture, PMO, Security, Shared Services, VG Ops, QA; Database Administration |
| Methodology reviews | QA, PMO, Shared Services, Security, VG Ops, Helpdesk Operations, Training Services, VG On-Boarding; Database Administration |
| Code drops | QA, Release Management, PMO, Database Administration, Security |
| Go No-Go | QA, Release Management, VG Ops, PMO, Helpdesk Operations, VG On- Boarding; Database Administration, Security |

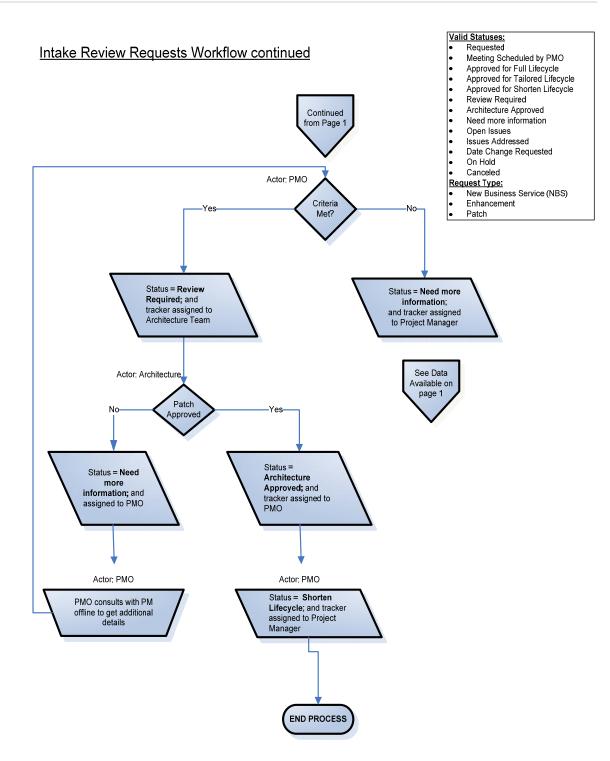
5.5 Review workflows

Each review is tracked through MassForge as it is processed through the IT groups. Each review's process is detailed in a workflow in this section.

5.5.1 Intake review request (New, Enhancement, and Patch) workflow

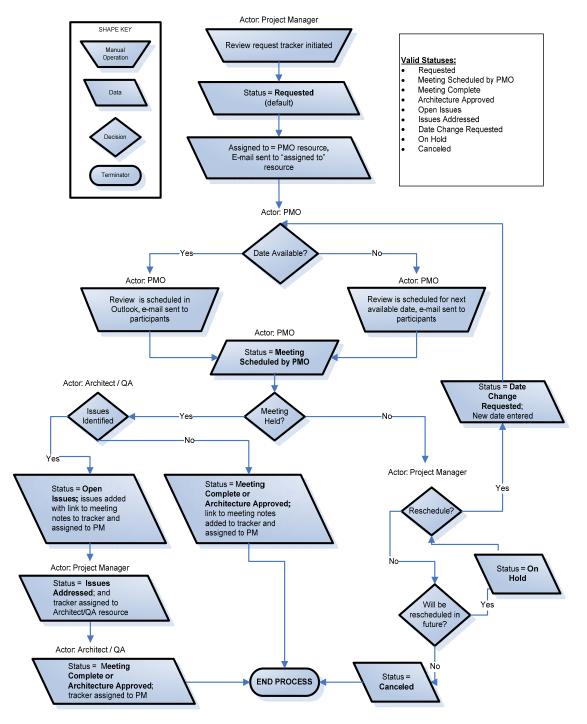


Intake Review Requests Workflow



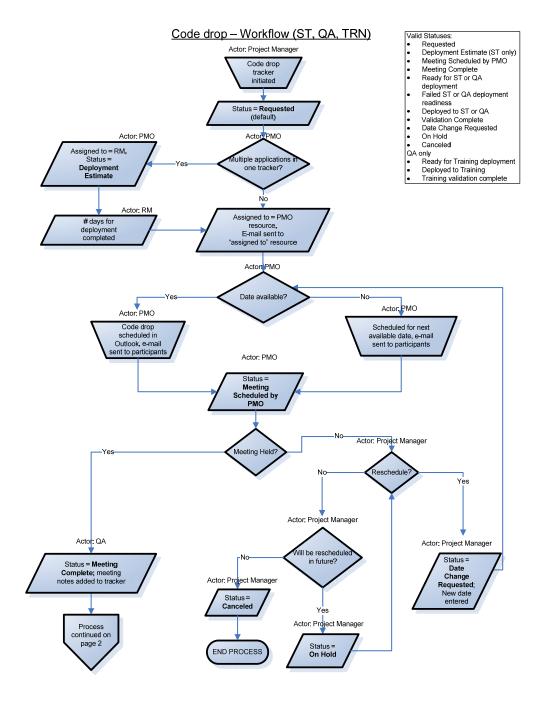
5.5.2 Architecture, Methodology review request workflow

Architecture and Methodology Review Requests Workflow

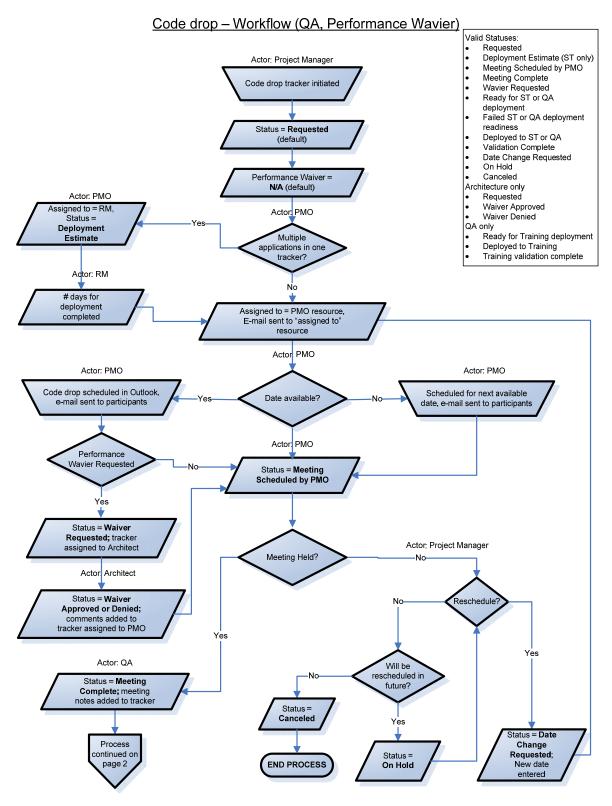


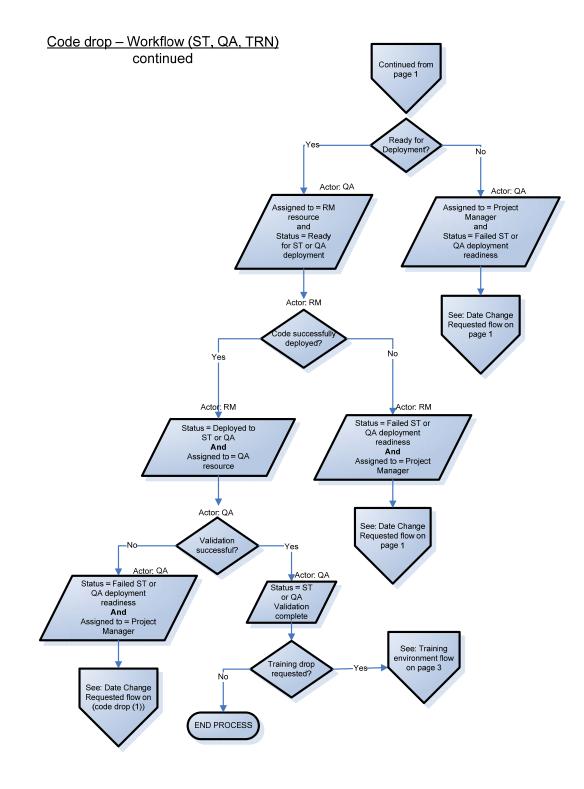
NOTE: The "Architecture Approved" status indicates no additional review for that release is required.

5.5.3 ST Code drop - workflow

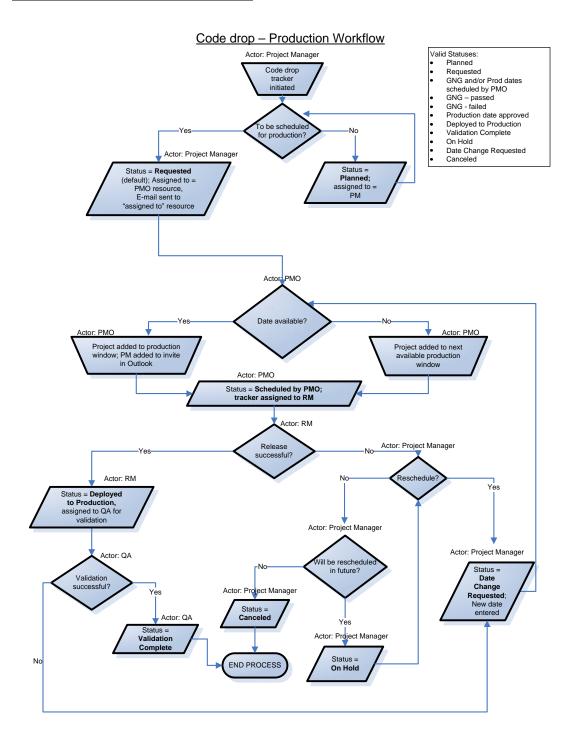


5.5.4 QA, Performance Waiver & TRN Code drop - workflow





5.5.5 GNG and Production Code Drop review



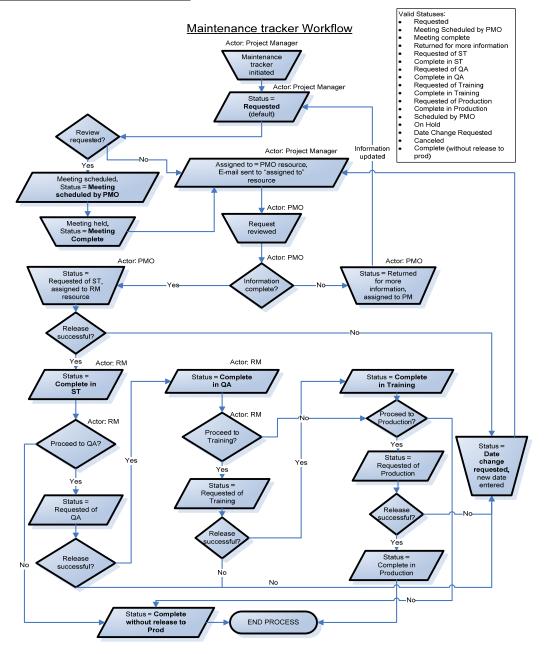
5.6 Maintenance Requests

Maintenance requests are used to facilitate post-production script updates, defect fixes, or other issues that are either emergency request or to be updated outside of the standard process. To submit a maintenance request, use the instructions outlined in section 5.2.

Note: All emergency requests require an electronic approval from the Agency CIO and a copy needs to be attached in the request. Email approvals need to include the following:

- Description of Issue
- Impact to the business
- Availability of workaround
- Why fix cannot wait until the next planned release of the application

5.6.1 Maintenance request workflow



6. PM Items tracker: How to request support from IT shared resources

When a PM identifies an *action item*, *risk* or *issue* requiring IT support, the PM must open a 'PM Items' tracker from within their project MassForge site, assigned a category 1 or 2, and assign it to the PMO team. The item will be displayed on the Enterprise status report which is reviewed during the Monday 11am IT PMO weekly conference call. The PMO will review open PM trackers with the group and assign the tracker to the appropriate resource based on discussions held during this meeting.

NOTE: If the PMO Monday 11am conference call is not on your calendar, send an email to EHSITPMO@state.ma.us.

6.1 To open a PM items tracker:

- 1. From your MassForge project site,
- 2. Click on the Tracker module,
- 3. Select the PM Items tracker,

| 1 | 1 | (| - 🐣 | 8 | - | line . | | 1 | - <u>-</u> | 1 | |
|--|---------|-----------|-------|---------------------------|-------------|---------|---------------|----------|---------------|-------------|----------|
| Project Home | Tracker | Documents | Tasks | Source Code | Discussions | Reports | File Releases | Wiki | Project Admin | OpenReports | |
| Trackers > List Trackers and Planning Folders Search Tracker | | | | | | | | | | | |
| Trackers Tracker Summary | | | | | | | | | | | |
| Tracker Su | mmary | Tracker N | ame | \$ | Summary | | | | Ope | n Priority | |
| PM It | ems | | - | | | | | 1 4 | 2 🗘 3 | 4 \$\$ | 🗢 None 🗢 |
| | | PM I | :ems | 0 Open, 4 Closed: 4 Total | | | | 0 | 0 0 | 0 0 | 0 |

4. Next, create an artifact by clicking the "Submit New Artifact" button in the right corner,



5. Complete the form fields (see field descriptions below),

| Field | Description |
|---------------------------|---|
| Title | Descriptive name of the item |
| Description | Full description of item, including any historical background that would be useful |
| Category | Issue: an item that is currently an issue but is not critical at this point - issues can become risks |
| | Risk: use this option to identify known risks |
| | Action Item: items that need action taken and can be assigned to group members for mitigation |
| | Operational: items that are routine maintenance or support oriented |
| Group | Use the "project team" group option to identify an item for internal tracking only. All other groups will be displayed on the Enterprise Services report |
| Status | Requested is the default status. Update status as item is mitigated. |
| Priority | Use priority options to identify level of criticality |
| Assigned To | Assign to a PMO resource initially (unless the item is for internal tracking only). Once the item has been reviewed by PMO it will be assigned to a resource for mitigation |
| Mitigation Strategy | Identify a planned course of action to resolve the item. |
| Target Resolution Date | Date by which the item must be resolved |
| Planning folder | **Currently not being used** |

| Field | Description |
|------------------|--|
| Calculate effort | **Currently not being used** |
| Attachment | Add any files to the tracker for history or action |

6. When finished, click the "Save" button.

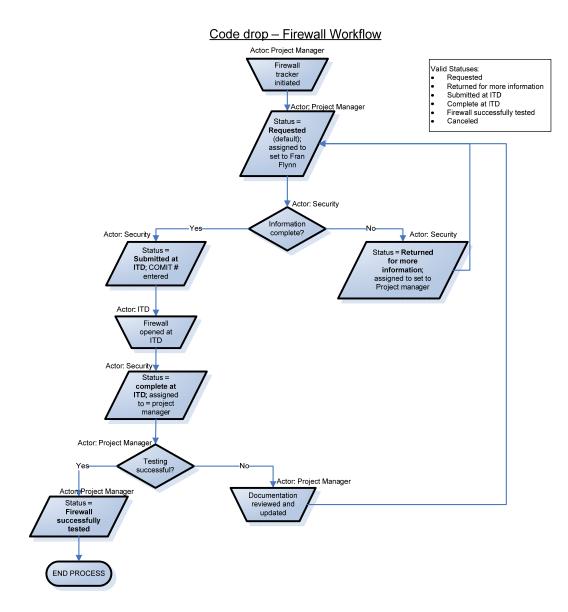
7. Firewall Request Process

Firewall requests must be created in order to allow each environment in which your project resides to access external environments. Detailed information on firewall requests is available from the <u>Web Application Security</u> Testing project in MassForge. The IT Architect team will provide PAA input and sign off either during or following the Elaboration Review.

7.1 How to submit a firewall request

- 12. Submit a "Firewall request" tracker
- 13. Assign the tracker to a security resource (for a current list of resources contact the IT PMO)
- 14. Leave default status as "Requested"
- 15. Attach a PAA or Firewall request form to the tracker (see IT PMO Services page for links to PAA and Firewall forms)
- 16. Edit additional fields as necessary
- 17. Submit the tracker (save)
- 18. The Security resource will review the request with the architecture and security teams
- 19. If approved, Security resource will open a COMIT at ITD, enter the number into the tracker, and change the status of the tracker to "Submitted to ITD"
- 20. When ITD has completed the firewall request, the Security resource will update the trackers status to "Complete at ITD" and assign the tracker back to the PM of the project.
- 21. The project team must test the firewall connection and, upon success, change the status of the tracker to "Firewall successfully tested". Security resource will then notify ITD of the successful test and the COMIT will be closed.

7.2 Firewall Workflow



8. EOHHS IT Enterprise Tools

This section outlines the tools currently utilized by the IT PMO. To request a user ID or support for any of these tools contact EHSITPMO@state.ma.us.

8.1.1 <u>MassForge (https://massforge.state.ma.us)</u>

MassForge is the IT PMO project management and collaboration site. MassForge is an online project repository enabling project teams to collaborate, track workflows, store code, and project artifacts. MassForge also hosts Discussion forums, Release Management, Tasks Wiki and project site reporting.

In order to view MassForge documentation please request a user account at:

https://massforge.state.ma.us

Note: User ID is first initial plus last name.

8.1.2 EOHHS IT Lifecycle Matrix

This document describes standard request types processed through IT and the lifecycle paths. Use this matrix to identify the request for new releases before submitting an Intake Request.

8.1.3 Project Release Planning Process

This document describes the process for providing IT with insight to planned releases to support forecast planning.

8.1.4 Project Planning Guidelines

IT has established guidelines for Project Managers in scheduling the reviews and code drops throughout the project lifecycle. This guidelines are use to help ensure quality and consistency.

8.1.5 <u>Maintenance Requests</u>

This document describes standard maintenance request types and the process for request emergency deployments.

8.1.6 Clarity (http://eohhsclarity.ehs.state.ma.us)

Clarity is an IT Portfolio & Resource Management System. Clarity enables IT PMO to assign resources to projects and track the time resources spent on each project. Clarity provides enterprise-level reporting of IT projects and resource utilization across IT.

IT management depends on Clarity reporting for resource availability assessment and capacity planning.

To utilize Clarity the project manager must request and be granted a Clear Quest user ID by contacting the IT PMO.

8.1.7 <u>Clear Quest (http://www.clearquest.ehs.state.ma.us/cqweb/login)</u>

Clear Quest is a management and tracking system that tracks defects detected in production or the lower testing environments (system testing, quality assurance, and training).

To utilize Clear Quest the project manager must request and be granted a Clear Quest user ID by contacting the Quality Assurance Team.

9. Glossary

Listed is a glossary or acronyms that can be found throughout this document.

| Acronym | Description |
|---------|---|
| EOHHS | Executive Office of Health and Human Services |
| ITD | Information Technology Division |
| PAA | Public Access Account Questionnaire |
| PAQ | Public Access Account Questionnaire |
| PM | Project Manager |
| PMO | Project Management Office |
| QA | Quality Assurance |
| RM | Release Management |
| VG | Virtual Gateway |