IT Change Management Life Cycle

Revision History

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# Introduction

This documentation outlines Gabriella White defined the IT Change Management process, and it serves as reference for both users and IT staff on how the process works. To implement a successful Change Management Process business owners and managers must commit to the new operations and measure performance on a continuing basis.

## Communication

Gabriella White will be implementing a Change Management process using ServiceDesk Plus. The new process will be effective **November 04, 2021.** The new process will enable IT to orchestrate major and minor IT changes with ease. The automated workflow and easy approvals will ensure minimal business risks.

## Benefits a Change Management Program

The proposed workflow will benefit Gabriella White by ensuring changes are properly authorized, enhancing communication across divisional boundaries and departments, and providing a tracking mechanism and audit trail for each change.

* Encourage the discipline and consistency to change process across the different divisions and departments within Gabriella White.
* Ensure proper level of validation and approval is done prior to the change being implemented
* Ensure proper level of Post Implementation Review is performed and documented
* Reduce the amount of unplanned work as a percentage of total work done
* Minimize the risk associated with implementing changes
* Provide the IT Management Staff and Teams with insight into the implemented changes which will increase the change success rate

## Definitions, Acronyms and Abbreviations

| Term | Definition |
| --- | --- |
| IT | Information Technology |
| Change Request | A request to move changes to production |
| App Dev | Application Development |
| CRM (Customer Relationship Management) | Customer Relationship Management |
| BI | Business Intelligence |
| SDLC | Software Development Life Cycle |
| Benchmark Estimate Date | Ready for User Acceptance testing |
| SDM | ServiceDesk Management |
|  |  |

# Change Management Workflow

* **Requester submits the request**. The Requester will complete a ServiceDesk Ticket using the following link [My Instances (summerclassics.com)](https://servicedesk.summerclassics.com/home)or from the ADP home page
* **Requester is Notified.** The requester receives an email that the ticket has been created
* **IT reviews the request**. The ticket has been placed in the assigned technician group queue for review. The ticket will be reviewed to ensure the information provided is understood and sufficient to assign a technician. If additional information or clarification is needed, someone within the technician group will reach out to the requestor to gather such information or clarity.
* **Periodically review the Request Queue Log** – IT managers on a weekly basis will review all open requests. During the review, requests are reviewed to ensure they are completed within a reasonable amount of time. The review may also determine reprioritized or reallocating to another technician.
* **Execute the work.** The technician is assigned.
  + *Issue (Defect)* – The technician will reach out to the requestor, depending on the severity of the issue the actual execution of the work begins immediately
  + *Enhancement* - The technician will reach out to the requestor and collectively determine a Benchmark Estimate Date after evaluating the level of effort.
    - Business priorities, technician current workload, the level of effort are all factors in determining the Benchmark Estimate Date.
    - If the Requester is not in agreement with the Benchmark Estimate Date, the technician, requester, and the technician manager will meet to discuss.
  + *Maintenance Request* – The technician will reach out to the requestor to determine a Benchmark Estimate Date after evaluating the level of effort.
    - Depending on business priorities, technician current workload the actual execution of the maintenance can be carried out immediately or scheduled using the Benchmark Estimate Date to determine the date of execution.
* **Manage the work.** The IT Managers will manage the work and priorities of their team
* **Work is Complete.** When the technician has completed the work to satisfaction, the requestor will be notified
* **User Acceptance Testing.** Depending on the type of request, user acceptance testing is requested.
  + *Testing a Fix/Defect* - Test plans should specify the system (s) to be tested and define the scope of the tests to be carried out. In the case of a program update or change, the test plan should identify both the components and the function to be tested. In some cases, a test plan which tests each function of the system may be substituted or added to unit testing. Once testing is successfully completed a test document and final approval via email from the requestor and other affected business units should be included in a *Change Control Request*.
  + *Testing an Enhancement* - Test plans should specify the system (s) to be tested and define the scope of the tests to be carried out. In the case of a program update or change, the test plan should identify both the components and the function to be tested. In some cases, a test plan which tests each function of the system may be substituted or added to unit testing. Once testing is successfully completed a test document and final approval via email from the requestor and other affected business units should be included in a *Change Control Request*. If for any reason the enhancement testing yields unfavorable results, a review of the original enhancement proposal, specification, and defect should be completed. If the testing of the enhancement is deemed to be a failure, a review with the requestor and other affected business units should be convened and a decision should be made on a course of action.

*Maintenance Testing.* - Because maintenance includes activities necessary to sustain the operation of a system, most circumstances will bypass the testing phase. Where applicable, testing of a maintenance defined activity should be done as needed and limited to the best practice.

* **Change Management Process.** -The Technician will complete the Change Request form in ServiceDesk and attach the requester’s approval, user acceptance testing results, and any additional supporting documents.
* **Approve for Production.** - The Manager will approve the change request form in ServiceDesk
* **Promote production.** – Promotions are scheduled for Mondays and Thursdays only with the following exceptions. The technician will mention the scheduled production change during IT Monday and Thursday check-in calls.
  + *Promoting code for an issue/defect.* – The promotion may occur anytime if the change does not require a production system outage during business hours for an extensive period unless it is resolving the outage.
  + *Promoting code for Maintenance* – The promotion may be scheduled any weekday after hours or on a weekend if the request was approved and discussed during IT standard daily check-in call.
  + *The promotion day is a holiday* – an alternate promotion day will be assigned if needed.
  + *Periodically Code Change Freeze* – Any change that does not address operational issues and high-priority changes including security related changes are not permitted. Emergency changes will be evaluated on a case by case basic to determine if it is addressing an operational.
    - Reasons to invoke a code change freeze
      * Major Application System upgrades
      * End of Year (Usually the week of Christmas and New Year’s)
      * Day before a Company Holiday

* **Postproduction Review** – The postproduction review is conducted after the request has been promoted to production. A postproduction review checklist could be used as a guide for verifying all changes were promoted and behaving as expected.
* **Close the Request** - The requester will be notified the request has been promoted to production, the technician will log the resolution and change the request status to *“Resolved.”*

# Change Control Types

The goal of Change Management is to accomplish changes in the most efficient manner while minimizing the business impact, costs, and risk to the production environment. Gabriella White will implement three change types to accomplish this goal.

* **Standard -** A preapproved change that is low-risk and adheres to an approved, typically well-tested procedure or work instruction. It should be documented on a main list of approved standard changes. This could also be an “informational” change.
  + Examples of a standard change
    - mass maintenance
    - monthly patches
    - adding data to a table, that does not alter the structure of the table
* **Emergency-** A change request to repair an immediate failure or prevent an imminent failure. Associated with a critical priority (severe impact and urgency) SDM ticket that affects production, causes outages, or significant degradation in business, or is accompanied by sufficient business justification. The change request form should only be used for production issue/defect request types.
* **Normal –** A change that does not meet any of the criteria for a Standard or Emergency change.

# Business Owner Request

The Business Owner reports a need for a new application, enhanced application, current environment modifications, fix for production outage and/or a new product. This need could be based on perceived business needs, competitive advantages, regulatory/compliance requirements, or financial justifications. All requests should be funneled through IT ServiceDesk Plus or Company initiative projects under the direction of a project manager. Gabriella White will have four categories (Request Type Field) to define a request.

## Request Categories

* **Enhancement**—any improvement made to a software package or hardware, which provides an increase in the capabilities of the software or hardware. Enhancement may also be a change to the functionality of an information system, a new software package/application or any modification to the software including functional, non-functional, or design changes that increase the business value of the software.
* **Maintenance**– All activities that are necessary to sustain the operation of a system or hardware without modifying its functionality. Maintenance work may extend to the environment in which the system operates and may include a multitude of activities, sometimes concerning technical infrastructure, that are not related directly to the functionality of the system.
* **Scheduled Maintenance** *-* All maintenance activities that are scheduled to sustain the operation of a system or hardware without modifying its functionality. IE: Back-ups.
* **Fix/Defect** –A change to a program or system that is intended to permanently resolve an issue and/or its supporting data which may include improving the usability and/or performance.

## Submit a Request

* Log a ticket for Application Development, select the **IT – Business Applications template** and complete the necessary information to document your request for Applications Development.

Graphical user interface, text, application, email

Description automatically generated

The following values are required to submit a ticket request

**Requester Name** – Required - Select from a list of business usernames reporting the request

**Subject** – Required – Enter a brief description of request

**Description** – Required – Enter additional details about the request.

* Technician requested
* When did the issue/defect occur?
* How long has the issue been occurring?
* Describe any additional details on the issues?
* What production outage is occurring?
* Detail requirements
* Requested completion date

**Request Type** - Required – Select the type that best fits the definitions from the Request Categories defined above.

|  |  |
| --- | --- |
| TYPE | Description |
| Fix/Defect | Production issue |
| Enhancement | New functionality |
| Maintenance | Current maintenance request |
| Scheduled Maintenance | Future Date Maintenance request |

**Priority** - Required - Field options to help identify the level of importance for the request

|  |  |
| --- | --- |
| TYPE | Description |
| 1: Urgent – Business Critical | Major Production Outage |
| 2: High- Significant Impact | Minor Production Outage |
| 3: Med – Normal/Minor Impact | No Production Outage/ Normal request |
| 4: Low - No rush | No rush / Nice to have |

**Affected Area** - Required - Please select from the options listed that best describes the business area for the request.

|  |  |
| --- | --- |
| TYPE | Description |
| Business Development – Contract |  |
| Business Development – Customer Experience |  |
| Business Development – National Accounts |  |
| Business Development – Private Label |  |
| Business Development – Regional Retail |  |
| Business Development – Retail |  |
| Business Development – Wholesale |  |
| Finance - Controller |  |
| Finance – Credit & A/R |  |
| Finance – Finance |  |
| HR (Human Resources) - Retail |  |
| HR – Corporate |  |
| HR- Training and Development |  |
| IT -Network and Security | Infrastructure, Connectivity, Spam/Phishing issues |
| IT-Application Development | Programming |
| IT–Business Intelligence | Reporting |
| IT-Business Process | Need to understand how a business process works within the system |
| IT-Customer Relationship | Sugar, B2B Software |
| IT-Data Processing | Stock Codes |
| IT-Helpdesk | Computer issues, System Access |
| Marketing – Brand |  |
| Marketing – Category | - |
| Marketing – Channel Marketing |  |
| Marketing – Creativity |  |
| Marketing – Digital Marketing |  |
| Marketing – eCommerce |  |
| Marketing - Marketing |  |
| Marketing – Marketing Ops |  |
| Marketing – Merchandising |  |
| Marketing – Photo & Video |  |
| Marketing – social media |  |
| Marketing – Special Project |  |
| Marketing – Visual Services |  |
| Ops – Asia Operations |  |
| Ops – Distribution |  |
| Ops – Electrician |  |
| Ops – Fabric Purchasing |  |
| Ops - Facilities |  |
| Ops - Gabby Purchasing |  |
| Ops – Logistics |  |
| Ops - Maintenance |  |
| Ops – Manufacturing |  |
| Ops – Operations |  |
| Ops – Purchasing |  |
| Ops – Quality Assurance |  |
| Process Improvement – PM |  |
| Process Improvement – Process Improvement |  |

**Group** – Required - Field option helps identify the group responsible for completing the request. Field defaults to “IT – Applications Development” if the Technician is within the Application Development Department.

|  |  |
| --- | --- |
| TYPE | Description |
| IT - Application Development | Programming, Business Applications |
| IT - Network and Security | Infrastructure, Connectivity, Spam/Phishing issues |
| IT - Technical Services | Computer issues, System Access |
| IT - Customer Relationship | Sugar, B2B Software |
| IT - Reporting | Reports - New and Modifications |

The following values are not required to submit a ticket

**Status** - Field Options helps identify the status for the Request. The value will default to “New” and will be modified by the Technician assigned

|  |  |
| --- | --- |
| TYPE | Description |
| NEW | New issue |
| In Progress | Currently Working |
| On Hold | Placed on Hold |
| Resolved | Ticket has been resolved |
| Canceled | Added in Error/ No longer need |

**Technician Category** – This field helps identify the specific related sub-category within the define group.

|  |  |
| --- | --- |
| TYPE | Description |
| IT - App Dev - Syspro | The request is related to Syspro |
| IT - App Dev - SPS (EDI) | The request is related to EDI |
| IT - App Dev – E-Cat | The request is related to E-Cat |
| IT – App Dev – Sugar CRM | The request is related to Sugar |
| IT – App Dev - | Additional Categories to add |
|  |  |

**Technician** –The IT department will assign the technician

**Work in Progress this week**  Optional – Technician will check this box if this task is scheduled to be worked on the following week. This field will be determined during the Technician weekly review of task, usually the Friday before.

**Benchmark Estimate Date** Optional – The technician will determine this date after, they have completed an analysis to determine the level of effort to complete the development phrase of SDLC and move the code changes to the test environment for user acceptance testing.

**Work Association** Optional - **FOR DEVELOPER USE ONLY** Technician will select the option that best describes the current ticket.

* ROCK – The ticket is one of your quarterly rocks
* SDM ticket only – Original as a service desk management ticket
* Project – Ticket is association with a project

**Current Update** – Optional – **FOR IT USE ONLY** Technician will provide a quick update on the current progress of the ticket. This field is only updated for “work in progress.”

Example of how to add a quick update.

12/20/21- Meeting schedule with Business user to discuss questions about requirements

12/17/21 – Reviewing requirements to determine a benchmark estimate date

**Attachments** – Attach any additional notes, examples, emails, reports that would be helpful to resolving the request.

## Documentation

* **Requirement –** This will be a Word or other document detailing specific requirements for the request including expected deliverables. If the request is small or a fix, these details can be outlined in the ServiceDesk Ticket.
* **Examples -** This will be a document with mocks up explaining the outcome after the change is implemented. The expected results can include printouts of existing reports, mockup of new enhancement, screen shots of issue, etc.). These examples should be attached to the ServiceDesk ticket

# Application Development Change Management Controls

Gabriella White Application Development Team will use Azure DevOps for all source code management. All code migrations to production will be implemented by our Network and Security team using Azure DevOps. In cases where our Network and Security team is not available, the Database administer and/or Application Development Manager will migrate the changes to production using Azure DevOps. However, during emergency after-hours situations where code migrations are necessary to correct a major issue, a developer may promote his/her own program to productions.

## Azure DevOps Workflow

The IT Team will have a Developer and Test environment that will be periodically updated with Applications and Data from our production environment. These environments will be used for unit and quality assurance testing in conjunction with Azure DevOps. A defined list of applications and last refreshed date for each environment will be maintained and stored in Microsoft Teams.

* **Branch Setup** -
* **DevOps Structure –** 
  + All reports should reside within GWC Apps Report (Project)
    - Create or use existing folder for report name under the Business Group folder under the repo (Ex: Accounting Warehouse
      * Create or use existing folder for report name under the Business Group folder (EX: This is my SQL Report)
        + Create a folder with the SDM + ticket number + brief description for your changes and documentations (EX:SDM12345 this is my SQL Report)
  + All code should reside within GWC Apps Repo (Project)
    - create or use existing System Application folder. (Ex: Syspro, EDI, eCat, Datascope)
* then create a folder with the SDM + ticket number + brief description for your changes and documentations under the System Application folder (ex. SDM12345 this is my change)

## Change Control Request in SDM

A change request or change control request is a document containing a call for an adjust of a system, it is important in the change management process. It states what needs to be accomplished but leaves out how the change should be carried out.

* **Submit a change request –** select the **Change Control Request template** and complete the necessary information to create your request for approval

Graphical user interface, table

Description automatically generatedGraphical user interface, text, application, email

Description automatically generated

The following values are required to submit a change control request

**Subject** – Required – Defaults to “Change Control Move to Production”

**Requester Name** – Required - Select from a list of business usernames reporting the request for the original ticket

**Date Required** – Required – Select the date these changes will be implemented to production

**Change Type** - Required - Field options to help identify the level of importance for the change

|  |  |
| --- | --- |
| TYPE | Description |
| Normal Change | No production outage, scheduled for normal implementation (Mondays and Thursdays) |
| Emergency Change | Fix for a Detect for a production outage |
| Standard Change | Data updates to table with no structure changes |

**Environment** – Required – Select the System the changes are affecting. Examples: integration between Ecat and Syspro, EDI, Sugar, etc.

**Project/Program/Initiative** – Required – Enter the SDM ticket number and title of task or project. Example SDM:12345 Task ABC

**Group** – Required – Select the group of technicians. Currently defaults to “IT - Application Development”

**Technician** – Required – This is the developer the completed the request

**Case for Change Section** – Required

* Justification – explain the need for the change control request
* Pre-Deployment test – How was did test and who signed off on the changes
* Implementation plan – Copy the DevOps link or details for execution
* Post Deployment Test plan – Describe how the changes will be verified after implementation
* Back-out Plan - Describe or list steps to reverse changes if a major issue occurs after the changes are implemented

**Risk Assessment** – Required

* Answer all questions to assess the level of risk with implementing these changes.

The following values are not required to submit a ticket

**Priority** - Optional - Field options to help identify the level of importance for the request. Defaults to “Med”

|  |  |
| --- | --- |
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| 2: High- Significant Impact | Minor Production Outage |
| 3: Med – Normal/Minor Impact | No Production Outage/ Normal request |
| 4: Low - No rush | No rush / Nice to have |

**Status** - Field Options helps identify the status for the Request. The value will default to “New” and will be modified by the Technician assigned

|  |  |
| --- | --- |
| TYPE | Description |
| NEW | New issue |
| In Progress | Currently Working |
| On Hold | Placed on Hold |
| Resolved | Ticket has been resolved |
| Canceled | Added in Error/ No longer need |

**Reason for Change** – Optional -Describe change

**Description** – Enter additional comments about the change control request.

* Additional links
* Any additional information needed for this change control request

## Vendor Change Management

Vendor program and database changes are managed by the appropriate vendors. Business Department personnel will ensure changes are tested, documented, and approved before migration to production occurs. These changes will also require a change request ticket to be created and approved in ServiceDesk.

## Documentation

Any changes migrated to production will require the change manage workflow with the appreciate approvals and documentation. User/SME review, testing participation and testing documentation will be required for changes to be approved. When feasible, a pilot in production may be conducted for an appropriate period before a complete rollout of the change(s) occurs.

* **Technical Design Specifications –** This will be a Word document detailing the technical and workflow design. This document should contain design details at each stage, including Development, test, and production. It should be reviewed by the Business owner, Application Development Manager and/or project team. If the request is small or a fix, these details can be outlined in the ServiceDesk Ticket.
* **Root Cause for FIX request –**
* **Test Plan –**
* **Code Migration Form -**