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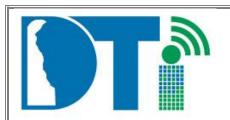|	
Synopsis:	This procedure implements the Change Management Policy established to manage changes introduced into the test and production operating environments under the direct control of the DTI in a way that appropriately balances the risk of disruption to DTI customers and the effective introduction of necessary changes. It describes the methodology for introducing change into the DTI production environment. These changes can affect applications, networks, hardware, software, databases, physical infrastructure, and other technology assets used by the state of Delaware and the DTI. The guiding principle of Change Management Policy is to protect the DTI's customers from undue risk of service disruption.
Authority:	Change Management Policy, 1/29/2003, as revised June 2023
Applicability:	This procedure applies to all employees of the Department of Technology and Information (DTI) as well as contractors, agents, vendor service representatives and other state employees authorized to implement changes to the environments that DTI manages (hereafter referred to as Change Agents).
Recension Information:	Supersedes all previous versions.
Effective Date:	8/21/2003	Expiration Date:	None
POC for Changes:	DTI Change Management Team
Approval By:	Chief Technology Officer
Approved On:	6/7/2023

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Dover, Delaware 19904

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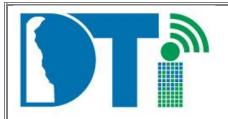Dover, Delaware 19904

PROCEDURE

Overview

This procedure supports the Department of Technology and Information's (DTI's) Change Management Policy. The Change Management Procedure provides a structured method of controlling, reporting, and measuring changes to the test and production operating environment. A change is any action that results in an addition to, alteration of, and or deletion of but not limited to one (1) or more of the following: hardware, software, application, network, or infrastructure of a computer environment or configurable item. It can be any change made to the existing system, application, configuration, or other configurable item, whether the change is a system upgrade, hardware/software addition or deletion, modification to code, or an alteration of networks or infrastructure.

The automated tool, ServiceNow, enhances facilitation of the Change Management procedures and process described in this document.

Federal Tax Information Requirement

When Federal Tax Information (FTI) and related systems are involved in a requested change, the retention period of information and handling of the change document is available in the IRS Publication 1075, Tax Information Security Guidelines for Federal, State and Local Agencies. The publication is located on the IRS website at https://www.irs.gov/forms-pubs.

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Roles and Responsibilities

Roles include the Change Manager, Changer Requester, Implementer, and Approver (s), See Appendix: Change Management Process Flow – High Level

Change Manager

Leads the CAB and has accountability for the change review meetings along with the approval process for normal and expedited tickets.

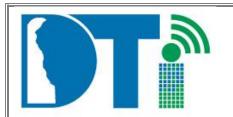| Change Manager Responsibilities		
Manages the change approval process	Convene CAB meetings	Rejects unacceptable changes
Reviews change requests for consideration or awaiting action	Communicates with all necessary parties to coordinate change	Reviews to confirm completion and accuracy of close code of normal and expedited tickets – See Post Implementation Review
Maintains the change management procedure and policy	Produces regular and accurate change management reports	Ensures retention is handled based on Retention section of this document
Provides reports and documentation for compliance/auditing		

Change Requester (Opened by)

This is the resource opening the change ticket. If this resource is not the Initiator, the Change Requester and Initiator will partner to fill out the information in the change ticket.

Implementer (Assigned to)

This is the resource implementing the change. This resource is responsible for documenting the change request and for getting approval from the client on the testing results prior to implementation. The Implementer or initiator creates the Implementation plan, the Back-out plan, and all other required documentation to support the implementation of the change. The Implementer is responsible for closing the ticket after implementation.

Initiator (Requested by)

This is the resource that provides the rational for the change ticket, identifying the required communication and the appropriate test plans. This resource will work with the Change Requestor to ensure that the ticket is accurately filled out.
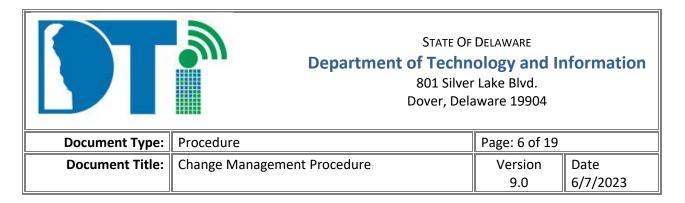
Approvers

This role represents the different functional areas in DTI and applicable agencies. Approvers review the change request to ensure the implementation will not have an adverse impact on their area of responsibility and the client they support.

Change Type Criteria

Normal	*Expedited	Standard
Impacts a production operating environment normally with an outage	Impacts a production operating environment normally with an outage	Low impact change to the production operating environment with no outage
Requested and approved at least 14 days in advance of implementation date	Can be requested and approved for implementation the same day with justification	Must use a pre-approved template
Attendance at the CAB meeting is required	Attendance at the CAB meeting may be required	Attendance at CAB meeting is NOT required
Appendix: Normal Change Workflow	Appendix: Expedited Change Workflow	Appendix: Standard Change Workflow
Documentation Required		
Implementation Plan	Implementation Plan	Implementation Plan
Back Out Plan	Back Out Plan	Back Out Plan
Test Plan	Test Plan	Test Plan
*In emergency situations, the change can be completed with management approval and afterwards an expedited ticket can be submitted to review the work.		

Automated Change Request – ServiceNow

The Request for Change (RFC) is captured with the below listed information as entered by the Initiator and members of the assignment group. Below are screenshots of the fields/information that is captured in a change request.

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Planning fields

Refer to Appendix: Implementation & Back-Out Plan Sample. The Implementation Plan is a detailed systematic plan that the Implementer follows to move the change request into production. The plan should include Go/No-Go points. Go/No-Go points are established based on the following criteria:

- The implementation time requires more than 1/2 of the allotted change timeframe.
- The back-out requires more than 1/3 of the implementation timeframe.
- The back-out impacts the entire system (e.g., IPL or server reboot).

The Back-out Plan is detailed with the conditions under which a back out must be executed, the timeframe needed to perform the back-out, a step-by-step procedure for reversing the change, and a plan to mitigate the severity of any potential negative impact resulting from implementation reversal.

The Test Plan is a description of how the technical and business team will verify that the change was successful.

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Change Approval

Impact and Resource Assessment

The CAB meeting members assess the impact on the customer's business operations and services due to the change; the impact on other services that are dependent on same infrastructures such as a software development project; and the impact on the non-IT infrastructure.

Authorization

The Change Manager is responsible for reviewing all change submissions. Part of this review is to ensure that different individuals are not making multiple changes to the same software, hardware, and or application at the same time. For situations with change conflicts the following will occur:

- The Change Requester, owner or a representative for the change is responsible for negotiating resolution with the Change Manager.
- The Change Manager communicates conflict resolution to the appropriate parties.
- If additional support is required to resolve the conflict, the Change Manager will convene a meeting of the CAB. The meeting will include the Change Manager, Requester and or Implementer, the implementer's supervisor and other supervisors as needed.
- The CAB has final approval authority for conflict resolution.

Approval

The approver(s) assess the impact of a change on their group and customers and must either approve or deny a change request. Customer approved, correctly completed change requests are evaluated based on information included in the change request:

- Date/Time/Duration of change
- Description of change
- Impact to customers/organizations and to other scheduled changes
- Testing of the change
- Potential conflicts—if concurrent changes are occurring, schedule a separate meeting to discuss.
- Security relevance
- Attached, relevant documentation
- Any other information included with the change ticket

For denied change requests, the Change Managers annotates issues surrounding the denial in the change ticket. All issues require resolution prior to resubmitting the request.

Appealing for Denied Change Request(s)

The Change Requestor can request an appeal to the Change Manager.

- The Change Manager schedules a CAB meeting to discuss the appeal.

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- A decision is reached
  - If the appeal is successful, an implementation timeframe will be assigned
  - If the appeal is not approved the request is closed with a completion code of cancelled
- The Change Manager communicates to the Requester the status of the appeal

Delaying a Change Window
There may be Instances when a change request has met all the criteria outlined in this document, but the change is delayed to not allowed is not allowed in a specific change window of time.

Scheduling
Every member of the CAB is required to review all change requests on the CAB agenda.

ServiceNow Users: Refer to ServiceNow.

For those that do not have access to the ServiceNow please contact the DTI Change Management Team via the mailbox at: DTI_System_Control@delaware.gov

Service Level Agreement (SLA)
For expedited tickets, once the assignment group approvals have occurred, the CAB manager will review and approve the expedited ticket within one business day of the planned start date.

For normal tickets, once the assignment group approvals have occurred, the CAB and CAB manager will review and approve the normal change ticket within 1-3 weeks of the scheduled change.

Implementation

Implementation Activity	
Activity	**Activity Definition**
Implement the Change	The change execution follows the implementation plan
Go or No-Go	The Implementer makes the decision on going ahead with the change or backing it out
No-Go or Back Out	The Implementer notifies the Change Manager immediately of a decision to stop or back out the change
Post Implementation Testing	If multiple components change, each component is tested to verify success
Status Update	The implementer of the change is required to update the work notes as needed and close the ticket.

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Post-Implementation Review

The Change Manager is responsible for reviewing all normal and expedited changes after they are closed. Additionally, the Change Manager is responsible for reviewing all standard changes that were not successful. As a part of these reviews, the Change Manager will reach out to the Implementer to clarify any potential issues.
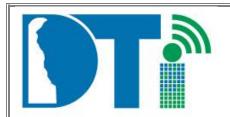
Completion Codes		
Code	**Completion Status**	**Definition**
1	Successful	Implemented according to the implementation plan
		Meets the requirements of the request
2	Successful with Issues	Implemented with minor deviations from the implementation plan due to issues
		Change meets business requirements
3	Unsuccessful	Cannot be implemented due to issues
		Change was backed out
5	Cancelled	Not implemented because the Requester withdrew the change request

Management Information

The Change Management Team is responsible for tracking and communicating a variety of data points related to change activities. This information is made available via reports and dashboards in ServiceNow and a PowerBI dashboard.

Retention

Change Management Documentation Retention Schedule		
Record Type	**Retention**	**Disposition**
Records pertaining to Change Request	Kept for a period of three (3) years from the date of entry of the Change Ticket	Shredded and/or electronically purged for confidentiality purposes
IRS Federal Tax Information	Per IRS Publication 1075, 9.3.5.3. Configuration Change Control (CM-3)	
Configuration Controlled Changes	Per IRS Publication 1075, 9.3.5.3. Configuration Change Control (CM-3)	

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DEFINITIONS

See Appendix: Glossary

LISTING OF APPENDICES

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Appendix: Expedited Change Workflow
Appendix: Standard Change Workflow
Appendix: Standard and Exempt Lists and Additions
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DEVELOPMENT AND REVISION HISTORY

REVIEWER	UPDATE	VERSION #	VERSION DATE
	Initial Version		1/29/2003
Dorothy Kope	Revised Version	7.0	2/2/2017
Charles Mason	Revised Version	8.0	9/16/2020
Tony Collins	Revised Version	9.0	6/7/2023

APPROVAL

Name & Title: Greg Lane Chief Technology Officer Department of Technology and Information	**Date of Signature** 6/7/2023

Appendix: Change Management Process Flow – High Level

1. The Initiator submits a change request.
2. The Implementer *requests approval of the change request.
3. The Approvers including CAB review and approve the change request.
4. The Implementer performs the work.
5. The Implementer closes out the ticket.
6. The CAB manager reviews the closed ticket.

*Not all standard tickets require approval

Appendix: Change Advisory Board (CAB)

The CAB is a group of people with the decision authority to deny, delay or approve changes. Members include:

- Change Manager (a member of Change Management Team)
- Technical resources from System Administration
- DTI Service Desk representative
- Customer Relationship Specialist

The Change Manger is role, not a position, and can be assigned to a member of any team. The CAB chairperson is the Change Manager, and is responsible for CAB meeting agendas, minutes, scheduling, and facilitating the meeting.

The purpose of CAB meetings is to review the changes planned for implementation in the upcoming change window and the status of changes implemented in the previous change window.

Each DTI technology area should send a representative to the CAB meeting. Each representative is responsible for reporting on all changes implemented by their area and communicating back to their team any pertinent changes implemented by others.

The Change Manger will publish an agenda one day prior to each CAB meeting and will make the CAB meeting results available within 1 business day.

The Change Implementer will attend the CAB and explain the reason for the change, discuss planned start and end times, provide a brief description of events, summarize the impact assessment, and provide implementation, and back out plans.

MEETING GUIDELINES	Agenda can include:	Minutes include:
- Meeting starts promptly - Participants are free to excuse themselves after their review is completed. - Participants are to be prepared to explain changes in an open forum - Participants can join remotely	- Review of Changes with issues since last CAB meeting - Review of Pending Requests for Change (RFC) - Outstanding Business and or Action Items - Review of outages for the prior 7 days - Outage Reminders for the Next 7-days	- Meeting date, time, location, and facilitator - Attendance - Review of Pending Requests for Change

Appendix: Normal Change Workflow

1) Change requester – From the Models or All list in native ServiceNow, the normal ticket is clicked. From the ServiceNow portal and 'Create a New Change' catalog item, the 'Change Type' normal is selected.
2) Change requester – At a minimum, the mandatory fields (Configuration Item, Assignment group, Short Description, Description, and Schedule) are entered. Then, the 'Submit' button is clicked or the 'Save' function is clicked via the right click menu feature in ServiceNow.
3) Members of the assignment group – A member of the assignment group is selected for the 'Assigned to' field.
4) Implementer – Before the Implementer can request approval of this work, the implementation plan, backout plan and test plan will need to be entered into the Planning section/tab. Once those plans are entered the 'Assigned to' can click the 'Request Approval' button.
5) Approvers – One member of the 'Assignment group' other than the Implementer needs to approve the ticket.
6) Change manager approval – A member of the 'Change Admin – Approval' group needs to approve the ticket based on the dialog and decision during a CAB meeting.
7) Implementer – Once any change tasks are completed, the Implementer will select a 'Close code' and add information into the 'Close Notes' field. Then, the Implementer will click on the 'Close' button.
8) Change manager – The change manager reviews the ticket.

Appendix: Expedited Change Workflow

1) Change requester – from the Models or All list in native ServiceNow, the expedited ticket is clicked. From the ServiceNow portal and 'Create a New Change' catalog item, the 'Change Type' expedited is selected.
2) Change requester – at a minimum, the mandatory fields (Configuration Item, Assignment group, Short Description, Description, Justification, and Schedule) are entered. Then, the 'Submit' button is clicked or the 'Save' function is clicked via the right click menu feature in ServiceNow.
3) Members of the assignment group – a member of the assignment group is selected for the 'Assigned to' field.
4) Implementer – Before the Implementer can request approval of this work, the implementation plan, backout plan and test plan will need to be entered into the Planning section/tab. Once those plans are entered the 'Assigned to' can click the 'Request Approval' button.
5) Approvers – one member of the 'Assignment group' other than the Implementer needs to approve the ticket.
6) Change manager approval – a member of the 'Change Admin – Approval' group needs to approve the ticket based on the dialog and decision during a CAB meeting.

7) Implementer – Once any change tasks are completed, the Implementer will select a 'Close code' and add information into the 'Close Notes' field. Then, the Implementer will click on the 'Close' button.
8) Change manager – The change manager reviews the ticket.

Appendix: Standard Change Workflow

1) Change requester – from the Pinned, Preapproved or All list, the appropriate standard ticket is clicked. From the ServiceNow portal and 'Create a New Change' catalog item, the 'Change Type' standard is selected.
2) Change requester – at a minimum, the mandatory fields (Configuration Item, Assignment group, Description, and Schedule) are entered. Then, the 'Submit' button is clicked or the 'Save' function is clicked via the right click menu feature in ServiceNow.
3) Members of the assignment group – a member of the assignment group is selected for the 'Assigned to' field. Then, the 'Authorize' button is clicked. (Only members of the assignment group can add or update the 'Assigned to' field. If the Assignment group is configured for approvals, then, the standard ticket will go thru an approval process where a member of the assignment group (other than the 'assigned to') needs to approve the ticket before it is moved to the Implement status.
4) Implementer – Once any change tasks are completed, the Implementer will select a 'Close code' and add information into the 'Close Notes' field. Then, the Implementer will click on the 'Close' button.
5) Change manager – The change manager reviews the tickets that were not successful.

Appendix: Standard Templates and Exempt Lists and Additions

Exempt List Location:

State Users: Change Management Exempt List.pdf

For those that do not have access to the above location please contact the DTI via the mailbox: DTI_System_Control@delaware.gov

Standard Templates Location:

The standard templates are managed and available in ServiceNow.

Standard Templates Approval Procedure:

The request, review and approval process are managed in ServiceNow. From the Standard Change Catalog, a user selects the Template Management. From the Template Management form, the user selects to propose a new Standard Template, Modify a Standard Template or Retire a Standard Template.

Exempt Additions Approval Procedure:

A request for an addition to the Exempt Change list must meet all the following requirements:

- Change is simple in nature
- Implementation contains low to no risk.
- Potential impact from a failed change is minimal.
- Requires no service outage, unless the system has an administrative purpose only (non-customer facing, only used by engineers/technical personnel, and is not a dependency of other services.)
- Easily validated (change results), implemented, tested, and backed out.

If the request meets the requirements, the Change Manager will share it with the CAB during a weekly meeting. If the CAB does not voice any concerns, the Change Manager will approve the request, and update the exempt list.

All decisions are final. The Exempt List is a living document that requires maintenance and version control.

Appendix: Implementation and Back Out Plan Sample

Completed Form Example:

Planned Implementation	Date: 5/30/2023	Time: 10:00 AM
List in detail, the steps required to implement your change: 1. Mount server in rack and plug in new server. 2. Connect to the LAN and boot up server. 3. Test connectivity from NEW server to the Network. 4. Verify customer's connectivity to the new server using new IP address and DNS name. 5. Test the check printing application. 6. Verify dummy checks printed properly. 7. Verify customer satisfaction. 8. After verification, turn off old server and leave in place as a spare for the time being. It will be removed at a time TBD.		
Back-Out Plan		
List in detail, the steps required to back-out your change: If install of new server fails, then the existing server will continue to be used until the change is rescheduled. Total back-out time should be less than 10 minutes.		

Appendix: Glossary

The following acronyms and terms may be used in this or associated documents or within ServiceNow and are provided for clarification.

DTI	Department of Technology and Information
RFC	Request For Change

Terminology / Acronym	Definition
Change	For this procedure, a change is any action that results in an addition to, alteration of, and/or deletion of but not limited to one (1) or more of the following: hardware, software, application, network, infrastructure of a computer environment, or a configurable item. The change can involve a system upgrade, hardware/software addition or deletion, modification to code, or an alteration to the network or infrastructure.
Change Advisory Board (CAB)	See Appendix: Change Advisory Board (CAB)
Change Approver(s)	The persons representing internal DTI teams or external agencies.
Change Implementer or Implementer	The person that is going to implement the change. The Change Implementer and the Change Requester can be the same person.
Change Initiator or Initiator	The person that opens the Change Request ticket in ServiceNow. The Initiator can be the same person as the Requester and/or Implementer.
Change Manager or Manager	A member of the Change Management Team within the DTI. See Roles and Responsibilities section.
Change Requester or Requester	The person that is requesting the change. The Change Requester and the Change Initiator can be the same person.
Change Type	Normal, Scheduled, or Standard. See Change Type Definitions section.
Change Window	A block of time set aside to perform hardware and software maintenance, upgrades, etc.; the maximum allow duration of a change from start to finish.
Configurable Item	Hardware, software, documentation, or a set of related products broken down into the smallest manageable unit that requires administrative and change control. Includes but is not limited to system applications software, database, system hardware, system software, network hardware, network software, security, facilities, and operating procedures.
DTI Internal Teams	Department of Technology and information technology teams, e.g., Applications Delivery, Customer Engagement Team, Telecommunications, etc.
Go/No Go Points	Points in the decision-making process where a determination is made to move forward with the change implementation or implement the back-out process.
Production Operating Environment	A complete integrated set of networks, hardware, and associated software tools used by the customer organization to execute applications. The

Terminology / Acronym	Definition
	production environment is different from development, test, and integrated environments.
Change Management Team	The DTI team that is responsible for the management and day-to-day activities of the Change Management Process and associated procedures.