

Reclamation Manual

Directives and Standards

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| Subject: | Information Technology Lifecycle Management |
| Purpose: | Establish Bureau of Reclamation (Reclamation) lifecycle management requirements for information technology (IT) assets to ensure they are replaced prior to developer, vendor, or manufacturer end-of-life and end-of-support deadlines. The benefit of this Directive and Standard (D&S) is a consistent process and accountability for managing IT lifecycles throughout Reclamation. |
| Authority: | Clinger-Cohen Act of 1996, February 10, 1996, Division E-Information Technology Management Reform (Pub. L. 104-106; 110 Stat. 679; 40 USC 1401(3)) ; Federal Information Security Management Act of 2002 (44 USC 3541); Federal Information Cybersecurity Modernization Act of 2014 (Pub. L. 113-283); National Defense Authorization Act for Fiscal Year 2015 , January 3, 2014, Division A, Title VIII, Subtitle D-Federal Information Technology Acquisition Reform Act (FITARA), Sections 831-837 (Pub. L. 113-291; 128 Stat. 3439); Office of Management and Budget (OMB) Circular A-130, Management of Federal Information Resources ; National Institute of Standards and Technology (NIST) Department of the Interior (Department) Departmental Manual (DM) 112 DM 24 , 212 DM 24 , 375 DM 19 , and 376 DM 4 ; OCIO Directive 2013-001, <i>Promoting Efficient Spending by Limiting Workstations Assigned to the Department of the Interior Employees</i> ; OCIO Directive 2020-006, <i>Standardizing Computer Purchases to Reinvest Savings in Bureau Missions</i> ; Information Management and Technology (IMT) Circular 18-01 version 4, <i>Information Management and Technology (IMT) Procurement Procedures and Approvals</i> ; Reclamation Manual (RM) Policy, <i>Reclamation Information Management and Technology (IMT) Portfolio Management</i> (IRM P03) |
| Approving Official: | Associate Chief Information Officer (ACIO) Information Resources Office (IRO) |
| Contact: | Enterprise Operations Division, Enterprise End User Management Tower (84-21130) |

1. **Introduction.** This D&S establishes Reclamation-wide requirements for lifecycle management of IT that balance the need to keep technology current with the need to reduce electronic waste.
2. **Applicability.** This D&S applies to Information Resources Management Council (IRMC) members, and all supervisors and employees who are involved in the procurement, inventory, configuration, maintenance, use, or disposal of IT. This D&S does not supersede

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any existing Department, OMB, or other legal requirements regarding IT procurement or lifecycle management.

3. **Standard Suite of Information Technology Equipment for Reclamation Employees.**

The following is the standard suite of IT equipment that supervisors are authorized to provide their employees without additional justification. As noted on the list below, supervisors have discretion to provide certain items where there is a business need but do not require additional justification. IT not identified on the list below is not considered “standard” and requires additional supervisory justification addressing specific business needs and risk mitigation strategies. All requests and justifications must receive IMT approval. See Paragraph 6.A. for IT procurement requirements. Employees using Government-furnished IT equipment must comply with all Department *Rules of Behavior for Computer Network Users* (Form DI-4002) and [410 DM 2, Limited Use of Government Office Equipment and Library Collections](#).

- A. one laptop¹ loaded with Reclamation standard software² (see OCIO Directive 2013-001) (does not include iPhones and iPads, see Paragraph 4);
- B. single or dual monitors (supervisory discretion);
- C. one keyboard;
- D. one mouse;
- E. one headset (supervisory discretion);
- F. one webcam (supervisory discretion);
- G. one docking station; and
- H. necessary cables to connect IT equipment outlined above.

4. **Mobile Devices.** Mobile devices (e.g., iPhone, iPads) are not considered standard IT. Purchase of these items requires supervisory approval and justification and must follow the procurement requirements of IMT Circular 18-01 version 4 (Appendix A).

¹Desktops are not considered part of the standard suite of IT and must only be purchased if the computing or position needs will not be met by a laptop. Supervisors must include position-specific justification for procurement of desktops.

²All software must be purchased in accordance with IMT Circular 18-01 version 4 (Appendix A) and installed by the servicing IT office. Employees are prohibited from downloading or installing software on government-furnished IT equipment.

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5. Lifecycle Management.

- A. **Personal Computers.** Reclamation personal computers (PCs), including the PC power cords and docking stations, have a 4-year lifecycle which starts from the date the property asset is received. Supervisors and IRMC members must ensure PCs older than 4 years are not connected to Reclamation's network and are disposed of in accordance with Paragraph 6.E. See Appendix C for a diagram of PC lifecycle.
- B. **iPhones and iPads.** Reclamation iPhones and iPads have a 4-year lifecycle which starts from the device's release date. Supervisors and IRMC members must ensure iPhones and iPads older than 4 years are not connected to Reclamation's network and are disposed of in accordance with Paragraph 6.E. See Appendix D for a diagram of iPhone and iPad lifecycle.
- C. **Telecommunications Equipment.** Reclamation's telecommunications equipment will have a set lifecycle replacement schedule which starts from the date the property asset is received. Supervisors and IRMC members must ensure telecommunications equipment older than the lifecycle age is replaced and disposed of in accordance with Paragraph 6.E. Supervisors and IRMC members must coordinate the replacement of the telecommunications equipment with the Enterprise Telecommunications Management Branch. The lifecycle is determined by operability and supportability constraints defined by hardware manufacturers. If specific hardware is identified to have a shorter lifecycle age due to manufacturer determination, the shorter lifecycle replacement schedule will be followed on a case-by-case basis. This lifecycle plan enables Reclamation to deliver a secure network platform that meets operational demands of evolving technology.
- (1) **Local Area Network and Wide Area Network.** Reclamation's local area network (LAN) and wide area network (WAN) equipment, which includes network switches, routers, wireless LAN controllers, wireless access points, firewalls, and all other LAN/WAN computing hardware, will have a 7-year lifecycle replacement schedule which starts from the date the property asset is received.
 - (2) **Voice (Internet Protocol Based Voice Infrastructure Equipment).** Reclamation's Voice over Internet Protocol computing hardware to include voice gateway devices, call manager hardware, and all supporting hardware appliances, will have a 7-year lifecycle replacement schedule which starts from the date the property asset is received.
 - (3) **Video (Video Equipment to Support all Internet Protocol Based Video Conferencing).** Reclamation's audio/visual teleconference computing hardware will have a 5-year lifecycle replacement schedule which starts from the date the property asset is received.

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- D. **Operational Technology.** Although there are many components within Operational Technology (OT) systems considered to be consumable (e.g., replaced regularly due to wear, limited warranty), the overall system is procured with the expectation of a long service life, and it can take several years to fully upgrade due to potential incompatibilities of system components. OT systems include industrial control systems (such as Supervisory Control and Data Acquisition systems), building management systems, fire control systems, and physical access control mechanisms.
- (1) IRMC members and System Owners must ensure adequate planning and budgeting occurs to continuously support OT and associated system components, including all OT-specific hardware, software, and firmware. IRMC members and System Owners must ensure all OT system assets within the investment are included in the overall lifecycle management plan.
 - (2) IRMC members and System Owners must evaluate OT systems annually to identify hardware and software that are nearing end-of-life and provide sufficient time to plan for upgrades or replacements. The evaluation must consider the availability of vendor or manufacturer support and the availability of compatible consumable parts, along with the effective functionality of the OT.
 - (3) If the continued use of unsupported or end-of-life system components is required to satisfy mission or business needs, IRMC members and System Owners must document the justification and work with the Risk Management Services Division to open an associated Plan of Action & Milestone (i.e., POA&M). Unsupported or end-of-life system components must also be annotated in Section 3.4 Risk Management in the IT Lifecycle Management Plan Template (Appendix B).
 - (4) IRMC members and System Owners must review their OT system component inventory quarterly, to include licenses.
- E. **Other Information Technology.** Supervisors and IRMC members must ensure all other IT not identified in Paragraphs 5.A. through C. are replaced before support is no longer available from the developer, vendor, or manufacturer. Supervisors and IRMC members must ensure unsupported hardware is disposed of in accordance with Paragraph 6.E. Supervisors and IRMC members must also ensure unsupported software and operating systems are removed or upgraded to a supported version. When replacing peripheral equipment, supervisors and IRMC members must use prudence to avoid wasteful spending for still operable and supported IT.
- F. **Warranty Extension.** Prior to purchasing a warranty extension on IT, supervisors and IRMC members must consult with the Risk Management Services Division to ensure there are no security or support issues.
- G. **Lifecycle Management Plans.** Regional IRMC members must develop and maintain lifecycle management plans for all IT in their region and the IRO IRMC member must

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develop and maintain lifecycle management plans for all IT in the Washington and Denver offices. All IRMC members must use the lifecycle management plan template provided in Appendix B. The template may be modified to include additional information; however, at a minimum, the information from the template must be included. IRMC members must review lifecycle management plans annually and update as needed. The IRO IRMC member consolidates these plans to create a Reclamation-wide lifecycle management plan. IRMC members must ensure adequate planning and budgeting occurs to replace IT prior to it reaching the end of its defined lifecycle, reaching its end-of-life deadline, or becoming unsupported by the developer, vendor, or manufacturer. Lifecycle management plans must be consistent with lifecycles established in RM D&S, *Reclamation Information Management and Technology (IMT) Portfolio Management* ([IRM P03](#)).

6. **Procure, Manage, Configure, Maintain, and Dispose of Information Technology.** The following steps are required for all IT lifecycle management.

A. **Procure.**

- (1) Supervisors must request the procurement of IT following the requirements set forth in IMT Circular 18-01 version 4 (Appendix A). If the IT is beyond the standard suite of IT equipment identified in Paragraph 3, the request must include additional justification of the business need.
- (2) Supervisors and IRMC members must ensure IT purchases align to the appropriate IT work breakdown structure. See RM D&S, *Administrative Cost Tracking: Information Management and Technology (IMT) Cost Tracking in the Financial and Business Management System (FBMS)* ([IRM 03-02](#)).

B. **Manage.**

- (1) **Local Servicing Property Office.** The local servicing property office addresses all functions of the Personal Property Management Program necessary for the property, including receipt, accountability, storage, distribution, and disposal of Government personal property (Interior Property Management Directives 114--60.1), specifically, all moveable equipment, both accountable and non-accountable.
 - (a) Upon delivery to the local servicing property office, the local servicing property office must complete the receiving process to include assigning accountable IT personal property with a property tag, obtaining the custodial property officer (CPO) and cognizant employee (CE) signature upon physical delivery of the equipment to the CPO or CE, and entering the information into FBMS. The Reclamation Enterprise Service Center assigns all iPhones and iPads to the user through the Mobile Device Enterprise

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Management Platform. iPhones are not accountable IT personal property and do not receive a property tag.

- (b) The CE must be assigned by the local servicing property office in the Asset Master Record for accountable IT personal property within FBMS to adhere to the requirements established in Paragraphs 3 and 4 above.
 - (c) The local servicing property office will coordinate with the CPO to conduct the required annual physical inventory or special property inventory as required during a change of accountable property office or CPO for accountable personal property (Reclamation Supplement 114S-60.3). The resulting inventory report displays the specific accountable asset information including received date and model year. The local servicing property office will provide the inventory report to the IRMC member upon request to use as a basis for IT lifecycle management.
 - (d) The cellular point of contact (CPOC) or the area office cellular point of contact (AOCPOC) inventories iPhones through the Mobile Device Enterprise Management Platform reports and cellular invoices. The resulting inventory report displays the specific cellular telephone information including the activation date and the model year. The CPOC/AOCPOC will provide the inventory report to the IRMC member upon request to use as a basis for IT lifecycle management.
- (2) **Information Resources Management Council Members.** The purpose of IRMC lifecycle management planning is to ensure IT personal property for their organization does not exceed the identified lifecycle.
- (a) IRMC members must coordinate with the local servicing property office to obtain a detailed inventory report listing all accountable IT personal property data and with the CPOC/AOCPOC to obtain a detailed inventory report of all iPhones. IRMC members will use these reports to annually ensure adherence to the lifecycle management plan for IT personal property as described in Paragraph 5.G. If the IRMC member identifies IT personal property that exceeds its end-of-life or is unsupported by the developer, vendor, or manufacturer, the IRMC member must develop a plan to replace the IT personal property and excess the non-compliant IT personal property through the local servicing property office (IT equipment, excluding iPhones) or CPOC/AOCPOC (iPhones). Non-compliant IT must be excessed as soon as the replacement IT is received and operating.
 - (b) Based on the annual lifecycle review of IT personal property, IRMC members must include a statement that their organization is compliant with their lifecycle management plan or include applicable plans to replace the

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non-compliant IT, identified in Paragraph 6.B.(2)(a), in their annual assurance statement to the ACIO.

- (c) As determined by the Enterprise End User Management Tower, organizational assessments include metrics associated with the development and maintenance of IT lifecycle management plans in accordance with the requirements in this D&S.
- C. **Configure.** The servicing IT office must follow Reclamation procedures to configure the assets in compliance with NIST, Department, and Reclamation cybersecurity requirements. Contact your local or regional IT security office for assistance.
- D. **Maintain.** Supervisors and employees must ensure IT is maintained in accordance with NIST, Department, and Reclamation cybersecurity requirements (i.e., connecting to the network regularly for patching, firmware updates, license renewals, compliance with current approved configurations). Contact your local or regional IT security office for assistance.
- E. **Dispose.**
 - (1) IRMC members must identify accountable IT personal property and iPhones requiring disposal using the reports from Paragraphs 6.B.(1)(c) and 6.B.(2)(a), respectively.
 - (2) If replacement is needed, the IRMC member will coordinate with supervisors for the simultaneous procurement of new IT personal property and iPhones and disposal of outdated IT personal property and iPhones. Contact your local servicing property office for additional guidance for excessing IT personal property through a trade in (see next paragraph for iPhone buy-back process).
 - (3) The CPO of the IT personal property will coordinate with the servicing IT and local servicing property office or CPOC/AOCPOC for disposal of IT personal property in accordance with Risk Management Services Division – Cybersecurity Standard – [IMT Asset Disposal – Information Sanitization](#) . The local servicing property office shall complete the physical excess process in accordance with excessing requirements. The CPOC/AOCPOC shall complete the physical excess through the buy-back process or transfer the iPhone to the local servicing property office for excessing.

7. Definitions.

- A. **Area Office Cellular Point of Contact or AOCPOC.** See definition for this term in RM D&S, *Mobile Device Management and Cellular Billing* ([IRM 06-01](#)).

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- B. **Cellular Point of Contact or CPOC.** See definition for this term in RM D&S, *Mobile Device Management and Cellular Billing* ([IRM 06-01](#)).
- C. **Cognizant Employee or CE.** Any employee who utilizes Government personal property, and therefore is responsible for personal property, both accountable and non-accountable, entrusted to their care, to include the protection and proper use, and who is under the direct supervision of a CPO who has daily control or supervision of the assigned personal property (Reclamation Supplement 114S-60.100(5)).
- D. **Custodial Property Officer or CPO.** A designated employee obligated the responsibility for property custody, care and use of Government personal property entrusted to his/her possession or under his/her direct supervision (Reclamation Supplement 114S60.100(6)).
- E. **Excess.** Any personal property under the control of any Federal agency which is not required for its needs and the discharge of its responsibilities, as determined by the CPO and/or local servicing property office (Interior Property Management Directive 114-60.100).
- F. **Industrial Control Systems or ICS.** General term that encompasses several types of control systems, including supervisory control and data acquisition (SCADA) systems, distributed control systems (DCS), and other control system configurations such as Programmable Logic Controllers (PLC) often found in the industrial sectors and critical infrastructures. An ICS consists of combinations of control components (e.g., electrical, mechanical, hydraulic, pneumatic) that act together to achieve an industrial objective (e.g., manufacturing, transportation of matter or energy).
- G. **Information Technology or IT.** See definition for this term in RM Policy, *Information Management and Technology Program* ([IRM P05](#)). IT, as used in this release, includes components of all Mission and OT systems (see Paragraph 7.F. for specific definition of OT).
- H. **Information Technology Personal Property.** Non-expendable personal property, with a useful life of 2 years or more for which accountability (FBMS) or property control records (Mobile Device Enterprise Management Platform) are maintained in the FBMS or the Mobile Device Enterprise Management Platform to include mobile devices (i.e., iPhones, iPads) (Interior Property Management Directive 114-60.100).
- I. **Operational Technology (OT):** Programmable systems or devices that interact with the physical environment (or manage devices that interact with the physical environment). These systems or devices detect or cause a direct change through the monitoring or control of devices, processes, and events. Examples include industrial control systems, building management systems, fire control systems, and physical access control mechanisms.

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- J. **Personal Computer or PC.** Desktop or laptop. In relation to this D&S, PC **does not** include mobile devices such as iPhones and iPads.
8. **Appendices.**
- A. Appendix A – IMT Circular 18-01 version 4, Information Management and Technology (IMT) Procurement Procedures and Approvals
 - B. Appendix B – Lifecycle Management Plan Template
 - C. Appendix C – Personal Computer Lifecycle Diagram
 - D. Appendix D – iPhone and iPad Lifecycle Diagram
9. **Review Period.** The originating office will review this release every 4 years.