



Cabinet for Health and Family Services (CHFS)
Information Technology (IT) Policy



CHFS

KENTUCKY
*Cabinet for Health and
Family Services*

020.201 Server Patch Management Policy

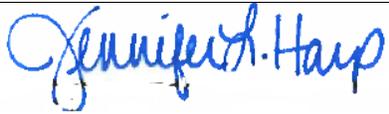
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020.201 Server Patch Management Policy	Current Version: 2.4
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Revision History

Date	Version	Description	Author
9/2/2002	1.0	Effective Date	CHFS IT Policies Team Charter
10/29/2019	2.4	Review Date	CHFS OATS Policy Charter Team
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Sign-Off

Sign-off Level	Date	Name	Signature
Executive Director (or designee)	10/29/2019	Jennifer Harp	
CHFS Chief Information Security Officer (or designee)	10/29/2019	DENNIS E. LEBER	

020.201 Server Patch Management Policy	Current Version: 2.4
020.200 Managerial Security	Review Date: 10/29/2019

Table of Contents

1	POLICY DEFINITIONS.....	4
2	POLICY OVERVIEW.....	6
2.1	PURPOSE	6
2.2	SCOPE	6
2.3	MANAGEMENT COMMITMENT	6
2.4	COORDINATION AMONG ORGANIZATIONAL ENTITIES	6
2.5	COMPLIANCE.....	6
3	ROLES AND RESPONSIBILITIES	7
3.1	CHIEF INFORMATION SECURITY OFFICER (CISO)	7
3.2	CHIEF PRIVACY OFFICER (CPO)	7
3.3	SECURITY/PRIVACY LEAD.....	7
3.4	CHFS CONTRACT, STATE, AND VENDOR STAFF/PERSONNEL	7
3.5	SYSTEM DATA OWNER AND SYSTEM DATA ADMINISTRATORS.....	7
4	POLICY REQUIREMENTS	8
4.1	GENERAL SERVER PATCH MANAGEMENT	8
4.2	CHFS PATCH CYCLE STAGES	8
4.3	EMERGENCY/OFF-SCHEDULE PATCHES	8
5	POLICY MAINTENANCE RESPONSIBILITY	8
6	POLICY EXCEPTIONS	8
7	POLICY REVIEW CYCLE.....	8
8	POLICY REFERENCES	8

020.201 Server Patch Management Policy	Current Version: 2.4
020.200 Managerial Security	Review Date: 10/29/2019

1 Policy Definitions

- Confidential Data:** Defined by the Commonwealth Office of Technology (COT) Standards Data of which the Commonwealth has a legal obligation not to disclose. This data requires the highest levels of restrictions, because of the risk or impact that will result from disclosure, modifications, breach, or destruction of that data. Examples include, but are not limited to, data not releasable under the Kentucky State Law (Kentucky Revised Statute 61.878); Protected Health Information; Federal Tax Information; Social Security and Credit Card numbers.
- Contract Staff/Personnel:** Defined by CHFS as an employee hired through a state approved (i.e. System Design/Development Services {SDS} Vendor Agreement/Company) vendor who has a master agreement with the state.
- Electronic Protected Health Information (ePHI):** Defined by the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule as individually identifiable health information, including demographic data, that relates to: the individual's past, present or future physical or mental health or condition, the provision of health care to the individual, or the past, present, or future payment for the provision of health care to the individual, and that identifies the individual or for which there is a reasonable basis to believe can be used to identify the individual. Identifiable protected health information items include many common identifiers (e.g., name, address, birth date, Social Security Number). The Privacy Rule excludes from protected health information employment records that a covered entity maintains in its capacity as an employer and education and certain other records subject to, or defined in, the Family Educational Rights and Privacy Act, 20 U.S.C. §1232g.
- Emergency/Out of Band Patches:** Defined by CHFS as the dates and times for any off-schedule Microsoft patch releases are approved and agreed upon between COT and the agency(s).
- Federal Tax Information (FTI):** Defined by Internal Revenue Service (IRS) Publication 1075 as federal tax returns and return information (and information derived from it) that is in the agency's possession or control which is covered by the confidentiality protections of the Internal Revenue Code (IRC) and subject to the IRC 6103(p) (4) safeguarding requirements including IRS oversight. FTI is categorized as Sensitive but Unclassified information and may contain personally identifiable information (PII). FTI includes return or return information received directly from the IRS or obtained through an authorized secondary source, such as Social Security Administration (SSA), Federal Office of Child Support Enforcement (OCSE), Bureau of the Fiscal Service (BFS), or Centers for Medicare and Medicaid Services (CMS), or another entity acting on behalf of the IRS pursuant to an IRC 6103(p) (2) (B) Agreement. FTI includes any information created by the recipient that is derived from federal return or return information received from the IRS or obtained through a secondary source..

020.201 Server Patch Management Policy	Current Version: 2.4
020.200 Managerial Security	Review Date: 10/29/2019

- **In-Scope Servers:** Defined by CHFS as any server connected to a CHFS network managed by COT must follow the guidelines outlined above.
- **Personally Identifiable Information (PII):** Defined by Kentucky Revised Statute (KRS) Chapter 61 House Bill 5 (HB5) and in accordance with National Institute of Standards and Technology (NIST) 800-53 Revision 4 as information which can be used to distinguish or trace the identity of an individual; person's first name or first initial and last name, personal mark, or unique biometric or genetic print or image, in combination with one or more of the following data elements: account number, credit card number or debit card number that in combination with any required security code, access code or password would permit access to an account; social security number, taxpayer ID number, driver's license number, state ID number, passport number or other ID number issued by the United States government, or individually identifiable health information, except for education records covered by The Family Educational Rights and Privacy Act of 1974 (FERPA).
- **Production (PROD):** Defined by CHFS as the system environment where the intended users will interact with the system and is updated only when testing on other environments is completed. Data within the system environment that may contain personal, identifiable, sensitive, and confidential information. All servers shall be labeled in the Information Technology Management Portal (ITMP) to reflect the system environment (i.e. Development, Test, Production, etc.).
- **Sensitive Data:** Defined by COT standards as data that is not legally protected, but should not be considered public information and only be disclosed under limited circumstances. Only authorized users should be granted access to sensitive data. Examples include: All information identifiable to an individual including staff, employees, and contractors but not limited to dates of birth, driver's license numbers, employee ID numbers, license plate numbers, and compensation information. The Commonwealth proprietary information including but not limited to intellectual property, financial data and more.
- **State Staff/Personnel:** Defined by CHFS as an employee hired directly through the state within the CHFS with final approval and appointment by the Kentucky Personnel Cabinet.
- **System Center Operations Manager (SCOM):** Defined by CHFS as a cross-platform data center monitoring system for operating systems and hypervisors. It uses a single interface that shows state, health and performance information of computer systems
- **Vendor Staff/Personnel:** Defined by CHFS as an employee contracted through an approved Master Business Associate Agreement, or other formal agreement, to provide temporary work for CHFS.

020.201 Server Patch Management Policy	Current Version: 2.4
020.200 Managerial Security	Review Date: 10/29/2019

2 Policy Overview

2.1 Purpose

The Cabinet for Health and Family Services (CHFS) Office of Application Technology Services (OATS) must establish a comprehensive level of security controls through a server patch management policy. This document establishes the agency's Server Patch Management Policy, which helps manage patching cycles and provides guidelines for security best practices regarding patch management.

2.2 Scope

The scope of this policy applies to all internal CHFS state, contract, and vendor staff/personnel, temporary personnel, third party providers under contract with a CHFS agency, and other entities that interact with CHFS information related resources. This policy covers the applicable computer hardware, software, application, configuration, business data, and data communication systems.

2.3 Management Commitment

OATS Division Directors, the CHFS Chief Technical Officer (CTO), Chief Information Security Officer (CISO), and IT Executive Management have reviewed and approved this policy. Senior Management supports the objective put into place by this policy. Violations of not abiding by this policy may result in disciplinary action, which may include suspension, restriction of access, or more severe penalties up to and including termination of employment. CHFS shall report illegal activities or theft of CHFS property (physical or intellectual) to the appropriate authorities.

2.4 Coordination among Organizational Entities

OATS coordinates with CHFS organizations and/or agencies that access applications, systems, and facilities. All organizational entities that interact with CHFS are subject to follow requirements outlined within this policy.

2.5 Compliance

As the official guidance domain for this policy, CHFS agencies abide by the security and privacy requirements established in applicable state laws and regulations as well as federal guidelines outlined in the NIST. Additionally, applicable agencies follow security and privacy frameworks outlined within the CMS, IRS, and SSA.

020.201 Server Patch Management Policy	Current Version: 2.4
020.200 Managerial Security	Review Date: 10/29/2019

3 Roles and Responsibilities

3.1 Chief Information Security Officer (CISO)

An individual responsible for providing guidance and direction in assessment, planning, and implementation of all security standards, practices, and commitments required. This individual is responsible for adherence to this policy.

3.2 Chief Privacy Officer (CPO)

An individual responsible for overseeing activities related to the development, implementation, maintenance of, and adherence to the Cabinet's and Commonwealth's information privacy and confidentiality policies and procedures in compliance with federal and state laws. This individual will conduct Health Insurance Portability and Accountability Act (HIPAA) self-assessments through coordination with the Information Security Agency Representative, the CISO, or CHFS OATS Information Security (IS) Team, and other CHFS agencies, and will ensure compliance with HIPAA notification and reporting requirements in the event of an identified breach. This position is responsible for adherence to this policy.

3.3 Security/Privacy Lead

Individual(s) designated by the division leadership to coordinate privacy and/or security issues and incidents with all appropriate staff/personnel. This individual(s) is responsible for providing privacy and security guidance and direction for protection of Payment Card Industry (PCI), PII, ePHI, FTI and other sensitive information to all CHFS staff/personnel. This role along with the CHFS OATS IS Team is responsible for adherence to this policy.

3.4 CHFS Contract, State, and Vendor Staff/Personnel

All CHFS contract, state, and vendor staff/personnel must adhere to this policy. All staff/personnel must comply with referenced documents, found in section [8 Policy References](#) below that pertain to the agency's applications, application servers, appliances, operating systems, web servers, network components, and database (server or components) that reside on CHFS/OATS information system(s).

3.5 System Data Owner and System Data Administrators

Management/lead who works with the application's development team, to document components that are not included in the base server build, and ensures that functionality and backups are conducted in accordance with business needs. This individual(s) is also responsible for working with personnel within the enterprise, agency, application, technical and business areas, for providing full recovery of all application functionality, as well as meeting federal and state regulations for disaster recovery situations.

020.201 Server Patch Management Policy	Current Version: 2.4
020.200 Managerial Security	Review Date: 10/29/2019

4 Policy Requirements

4.1 General Server Patch Management

Operating system patches will be applied monthly by COT to CHFS servers, per their patch cycle. Emergency/off-schedule patches will be applied to all CHFS servers as soon as possible.

4.2 CHFS Patch Cycle Stages

COT will apply patches in four (6) stages:

- Stage 1- Patches will be applied to all Development (DEV) servers.
- Stage 2- Patches will be applied to all Test (TEST) servers.
- Stage 3- Patches will be applied to all User Acceptance Testing (UAT) and Training (TRN) servers.
- Stage 4- Patches will be applied to all Enterprise Production (PROD) servers.
- Stage 5- Patches will be applied to all System Center Operations Manager (SCOM) servers.
- Stage 6- Patches will be applied to all Production (PROD) servers.

COT will work with the agency for any downtime that may be required.

4.3 Emergency/Off-Schedule Patches

COT applies emergency/off-schedule patches as needed with notification to the CHFS OATS Patch Notification distribution list.

5 Policy Maintenance Responsibility

The OATS IS Team is responsible for the maintenance of this policy.

6 Policy Exceptions

Any exceptions to this policy must follow the guidance established in [CHFS OATS Policy: 070.203- Security Exceptions and Exemptions to CHFS OATS Policies and Security Control Policy](#).

7 Policy Review Cycle

This policy is reviewed at least once annually, and revised on an as needed basis.

8 Policy References

- [Centers for Medicare and Medicaid Services \(CMS\) MARS-E 2.0](#)

020.201 Server Patch Management Policy	Current Version: 2.4
020.200 Managerial Security	Review Date: 10/29/2019

- [CHFS OATS Policy: 010.103- Change Control Policy](#)
- [CHFS OATS Policy: 070.203- Security Exceptions and Exemptions to CHFS OATS Policies and Security Control Policy](#)
- [Enterprise IT Policy: CIO-082- Critical Systems Vulnerability Assessment Policy](#)
- [Enterprise IT Procedure: COT-067- Enterprise Security Standard Process and Procedure Manual \(ESPPM\) Process](#)
- [Internal Revenue Services \(IRS\) Publication 1075](#)
- [Kentucky Revised Statute \(KRS\) Chapter 61.878 Certain public records exempted from inspection except on order of court – Restriction of state employees to inspect personnel files prohibited](#)
- [National Institute of Standards and Technology \(NIST\) Special Publication 800-53 Revision 4, Security and Privacy Controls for Federal Information Systems and Organizations](#)
- [Social Security Administration \(SSA\) Security Information](#)