United States Department of Health & Human Services

Enterprise Architecture Program Management Office

HHS Enterprise Architecture Training Plan

Version 6.1

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Disclaimer

The information in this document is believed by the Enterprise Architecture (EA) Program Management Office to be accurate and reliable. The origin of this information may be internal or external to US Department of Health and Human Services (HHS). Both the HHS representatives and EA Program Office have taken all reasonable effort to verify the information in this report.

1   Introduction

The Department of Health and Human Services (HHS) Office of Enterprise Architecture manages an Enterprise Architecture (EA) Program, under the leadership of the HHS Chief Enterprise Architect (CEA). The Office of Enterprise Architecture within the Office of the Chief Information Officer (OCIO) oversees many of the Department's core strategic planning and accountability functions, including information security, capital planning and investment control, information resources strategic planning, and of course, enterprise architecture. The HHS EA Program fulfills multiple Federal mandates related to planning and managing information technology (IT) investments and supporting organizational effectiveness at the Department, Staff Division (STAFFDIV), and Operating Division (OPDIV) levels, in accordance with relevant government wide initiatives.

The HHS EA Training Plan details the curriculum and course offerings of the HHS EA Training Program. The Plan provides the essential guidance for the development, delivery, and maintenance of the HHS EA Training Program. It describes the overall approach to training, course descriptions, and other aspects related to EA training and education.

This HHS EA Training Plan is based on the upgrade to the latest version of the HHS EA Repository including the addition of detailed segment architecture development. This training plan addresses and updates training material needed to support the needs of the HHS EA community.

1.1   Purpose

This document is both directional and informative; it provides the guidance for the maintenance and delivery of the HHS EA Training. The Training Program addresses the following areas of the HHS EA Program:

- General introduction to the EA
- Segment architecture development
- HHS EA framework
- Modeling within the HHS the HHS EA Repository
- Modeling best practices
- Viewing content within the HHS EA Repository
- Reporting and Decision-making within the HHS EA Repository
- Collaborating within the OCIO Collaboration Portal
- EA Stage Gate reviews for the Enterprise Performance Life Cycle (EPLC)
- Special projects such as the Systems Inventory

1.2   Training Approach

The overall objective of the HHS EA Training Program is to provide user training to the HHS community that will use and/or support enterprise architecture and segment architecture development within the HHS EA Repository and the OCIO Collaboration portal environment. The training plan described below is a role-based education program that focuses on the specific needs of the user community based on their tasks and responsibilities as they relate to the EA program.

The roles foreseen for the HHS community interested in enterprise architecture products are:

- Business Audience
    - Understand the role of EA
    - Editors (Basic/Advanced)
    - Viewers (Browse and report)
- Segment/Enterprise/Data Architects/SME
    - Editors (Basic/Advanced)

- Viewers (Browse and report)
- Administrators
- Technical Audience (Non Enterprise Architects) (SME)
  - Editors (Basic/Advanced)
  - Viewers (Browse and report)
- Senior Executives
  - Viewers (Browse and report)

For example, the enterprise architect will be required to edit, view, and report architectural information representing HHS OPDIV services' vision, organization, and/or business processes, thus performing as an Editor. The subject matter expert (SME) and/or domain specialist on the other hand will need to comprehend and view the EA information produced by the architect and will be asked to contribute to their evolution and data population. This second group will need training for information review and some data population purposes.

With the upgrade to the latest version of the HHS EA Repository and the strong push for segment architecture development; this training plan will address all updated components and training material needed to support the needs of the HHS EA community.

1.3 Delivery Approach

The HHS EA training plan includes a phased and context-sensitive approach to delivery. Each training session will be delivered in the most efficient method for both the trainers and the attendees. Training delivery methods include:

- **Classroom Learning**: Participants attend training where an instructor presents material and there is an opportunity for interaction and hands-on learning or practice.

- **On-Site Learning**: Participants attend training where an instructor presents material and there is an opportunity for interaction and hands-on learning or practice.

- **Virtual Classroom (e-Learning)**: Just like classroom learning, the instructor-led training is delivered via the Internet using online conferencing tool.

- **Self-Paced e-Learning (Tutorials)**: Training delivered electronically (e.g., computer-based via the OCIO Collaboration Portal and/or the HHS EA Repository Portal) in which students set their own learning pace or can view the tutorials anytime as needed.

Training sessions are built using specific components to enhance flexibility and user customization. Each training session is composed of one or multiple training components listed in section 2. All training and related materials is context-sensitive to focus on the particular needs of the attendees.

2 Component Descriptions

This section provides a list of training components and their related descriptions, difficulty level, duration, target audience, and prerequisites.

2.1 Classroom Learning/Virtual Classroom

The complete list of Classroom Learning/Virtual Classroom is included in the following table:

Course Title	Difficulty Level (**H**igh, **M**edium, **L**ow)	Duration (Hours)
Introduction to Enterprise Architecture at HHS	L	3
Segment Architecture development	M	6
Segment Architecture for business owners	L	2
Business Process Modeling Concepts (for viewers)	M	2
Business Process Modeling Concepts (for modelers)	M	4
EA Stage Gate (EPLC) reviews for architects	M	2
EA Stage Gate (EPLC) reviews for PMs	L	1
Special Project trainings	Variable	Variable
Guidelines and Best Practices	M	2
Data Architecture Modeling Concepts	M	4
HHS Information Exchange Packages Architecture	M	4
NIEM Development Training	H	6
OCIO Collaboration Portal User	L	3
The HHS EA Repository Fundamental Concepts	M	2
The HHS EA Repository Editor: Basic	M	2.5
The HHS EA Repository Editor: Advanced	H	4
The HHS EA Repository Browser	M	1

Table-1. List of Classroom Learning/Virtual Classroom courses

2.1.1 Introduction to Enterprise Architecture at HHS

This component is an introduction to the general concepts of Enterprise Architecture and its relevance within HHS. Attendees will learn about the basic concepts and frameworks that are driving EA and specific Government EA drivers. In addition, the component will include an overview of how EA is managed and deployed at HHS, the HHS EA policies, and what are the core functions of the HHS EA Program.

> **Difficulty Level:** Low
> **Duration:** 3 Hours
> **Target audience:** Business and technical audience

Prerequisites: None

2.1.2   The HHS EA Repository Fundamental Concepts (and refresher)

This component teaches the fundamental information regarding the HHS Enterprise Architecture Framework and the instantiation of the framework in the HHS EA Repository (HEAR). Attendees will learn about the information collected in each layers of the framework and how the information relates between layers to create a "line of sight". This component also includes an explanation of the HHS framework and the HHS Enterprise Architecture Repository (HEAR) governance including the components related to the HHS EA Repository and its relationships to other HHS enterprise tools. This component also includes an overview of the change request and configuration management process that apply to the HHS EA Repository. A quick overview of the drivers for EA will also be given as part of this training component with particular emphasis for the latest version of the Enterprise Architecture Assessment Framework (EAAFv3).

> **Difficulty Level:** Medium
> **Duration:** 2 Hours (1 Hours)
> **Target audience:** Business and technical audience, enterprise architects
> **Prerequisites:** None

2.1.3   The HHS EA Repository Editor: Basic

This component teaches attendees how to manage information in the HHS EA Repository. The hands-on exercises will help architects, segment analysts, and information owners learn how to add, modify, browse, and maintain architectural information stored in the HHS EA Repository using the repository business intelligence portal. Attendees will use original and custom web forms to perform the tasks taught in this component.

> **Difficulty Level:** Medium
> **Duration:** 2.5 Hours
> **Target audience:** Business and technical audience, enterprise architects
> **Prerequisites:** Basic Microsoft Windows computer skills required; knowledge of modeling concepts recommended.

2.1.4   The HHS EA Repository Editor: Advanced

This component is directed to more advanced enterprise architects and business process modelers. This advanced training focuses on the modeling of objects using the modeling tool Troux Architect. Attendees are walked through step-by-step instructions to learn how to pull objects from the HHS EA Repository into the modeling environment or create and edit objects directly in Troux Architect. This component includes all aspects of modeling in Troux Architect including navigating, editing, and reporting.

> **Difficulty Level:** High
> **Duration:** 4 Hours
> **Target audience:** Business and technical audience, enterprise architects
> **Prerequisites:** The HHS EA Repository Editor: Basic, basic Microsoft Windows computer skills required; knowledge of modeling concepts recommended.

2.1.5 The HHS EA Repository Browser

This component is designed to instruct all of the HHS EA Repository users how to browse the information on the repository. Users will learn how to use multiple queries to find, view, and navigate through the layers of the architecture following the HHS EA framework.

Difficulty Level: Medium
Duration: 1 Hour
Target audience: Business and technical audience, enterprise architects
Prerequisites: Basic Microsoft Windows computer skills required; HHS EA Repository Fundamental Concepts.

2.1.6 Business Process Modeling Concepts (for viewers)

The goal of this component is to help business/segment analysts understand Business Process Modeling concepts using the Business Process Modeling Notation standards. In this component, users will learn both the theory related to BPMN and how to find, view, and report business process models stored in the HHS EA Repository using the Troux Architect. Attendees will also be briefly introduced to other available business process modeling standards.

Difficulty Level: Medium
Duration: 2 Hours
Target audience: Business and technical audience, enterprise architects
Prerequisites: Basic Microsoft Windows computer skills required; knowledge of modeling concepts recommended.

2.1.7 Business Process Modeling Concepts (for modelers)

This hands-on course teaches the analysts and/or segment specialists the Troux Architect functionalities as they relate to the business modeling activities. Attendees will be instructed on how to create new business process models, create and retrieve objects from the HHS EA Repository, and create relationships using the Troux Architect modeling tool. At the end of these components, users will be able to produce business process models using Troux Architect.

Difficulty Level: Medium
Duration: 4 Hours
Target audience: Business/segment analysts, enterprise architects
Prerequisites: The HHS EA Repository Editor: Advanced, basic Microsoft Windows computer skills required; knowledge of modeling concepts recommended.

2.1.8 Segment Architecture development

The segment architecture development component is a detailed overview of how to develop a segment at HHS. Attendees will be introduced to the business areas and segment concepts and walked through the segment development steps published in the Federal Segment Architecture Development Methodology (FSAM) and Rapid Segment Architecture Development Methodology (RSAM). Users will be instructed on how to use The HHS EA Repository portal to support the population and retrieval of information related to segments. As part of this component, users will learn about the touch points between the segment to be developed and other important enterprise services such as Records Management, EPLC, Security, etc. Attendees will also be instructed on

how to report segments using the Enterprise Architecture Assessment Framework (EAAFv3) segment template and the OMB MAX knowledge management portal.

> **Difficulty Level:** Medium
> **Duration:** 6 Hours
> **Target audience:** Business and technical audience, enterprise architects
> **Prerequisites:** Basic Microsoft Windows computer skills required;

2.1.9 Segment Architecture for business owners

The goal of this component is to provide segment business owner and other executives an overview of the segment architecture development process. Attendees will introduced to the segment development approach from the HHS and OMB prospective and presented with benefits and best practices related to this topic.

> **Difficulty Level:** Low
> **Duration:** 2 Hours
> **Target audience:** All
> **Prerequisites:** None

2.1.10 EA Stage Gate (EPLC) reviews for architects

This component focuses on helping enterprise architects support the Enterprise Architecture review process for each of the Stage Gates in the HHS Enterprise Performance Life Cycle (EPLC). Architects will be instructed on how to analyze the information provided by project/program managers to provide a review score for each Stage Gate. Architect will learn how to use EPLC review stage gate forms in The HHS EA Repository portal.

> **Difficulty Level:** Medium
> **Duration:** 2 Hours
> **Target audience:** Enterprise Architect
> **Prerequisites:** HHS EA Repository Editor: Basic, basic Microsoft Windows computer skills required; knowledge of the EPLC recommended.

2.1.11 EA Stage Gate (EPLC) reviews for PMs

In this component PMs will be instructed to the EA requirements for each stage gate of the HHS Enterprise Performance Life Cycle (EPLC). PMs will also learn how to use the forms and queries in The HHS EA Repository portal to support each EA stage gate review of the EPLC.

> **Difficulty Level:** Low
> **Duration:** 1 Hours
> **Target audience:** Project/Program Managers, Enterprise architects
> **Prerequisites:** Basic Microsoft Windows computer skills required; knowledge of the EPLC recommended.

2.1.12 Special Project trainings

Special projects training will be delivered as-needed in support of specific projects such as the System inventory and the Critical Partner Review.

Difficulty Level: Variable
Duration: 2-4 Hours
Target audience: Business and technical audience, enterprise architects
Prerequisites: Basic Microsoft Windows computer skills required; knowledge of modeling concepts recommended.

2.1.13 Guidelines and Best Practices

This component teaches the fundamental information regarding how to best model information in The HHS EA Repository using a combination of the EA repository Portal and Troux Architect. Based on the HHS EA Modeling Guide, this component will help users learn how to perform specific modeling tasks such as modeling investments, reference model alignment, and best modeling practices for each layer of the architecture.

Difficulty Level: Medium
Duration: 2 Hours
Target audience: Business and technical audience, enterprise architects
Prerequisites: HHS EA Repository Editor: Basic/Advanced, basic Microsoft Windows computer skills required; knowledge of modeling concepts recommended.

2.1.14 Data Architecture Modeling Concepts (for viewers)

The goal of this component is to help business analysts and business process modelers understand data architecture development. In this component, users will learn both the theoretical foundations for data architecture related and how to develop data architecture models. Users will learn how to use the HHS EA repository to model information exchanges based on the latest HHS EA Framework. In addition, this component will also introduce attendees to different data architecture standards and notations used in the industry and/or how to add an information exchange to the National Information Exchange Model (NIEM)

Difficulty Level: Medium
Duration: 4 Hours
Target audience: Business and technical audience, enterprise architects
Prerequisites: Basic Microsoft Windows computer skills required; knowledge of modeling concepts recommended.

2.1.15 HHS Information Exchange Packages Architecture

The goal of this component is offers an overview of the development of an IEP, focusing on the IEP development tasks and their constituent steps that collectively provide a roadmap for developing IEPs in a consistent manner.

Difficulty Level: Medium
Duration: 2 Hours
Target audience: Data Architects, Enterprise Architects, Analyst, EA Model Stewards
Prerequisites: Basic Microsoft Windows computer skills required; knowledge of development support standards recommended.

2.1.16 NIEM Development Training

This component offers an overview of NIEM, discussing NIEM roles in information sharing, along with the development of NIEM conformant information exchanges.

Difficulty Level: High
Duration: 2 Hours
Target audience: Business, Technical, Data, and Enterprise Architects
Prerequisites: HHS Information Exchange Packages Architecture

2.1.17 OCIO Collaboration Portal User

This component offers an overview of the EA sites within the OCIO Collaboration Portal. Users will learn about the portal layout and the overall structure. This component also provides guided hands-on exercises on how to work with libraries including uploading, downloading, editing, and version control for documents.

Difficulty Level: Low
Duration: 3 Hours
Target audience: Business and technical audience, enterprise architects
Prerequisites: Basic Microsoft Windows computer skills required;

2.2   Self-Paced e-Learning (Tutorials)

This section presents the course descriptions for the developed and proposed self-paced (i.e. online tutorials) courses by the HHS EA Training Program. Each course description includes a brief description of the course, objectives, topics, prerequisites, and duration. The complete list of Self-Paced e-Learning (Tutorials) is included in the following table:

Course Title	Difficulty Level (**H**igh, **M**edium, **L**ow)	Duration (Minutes)
The HHS EA Repository Browsing on Portal	M	10
Editing objects using the HHS EA Repository Portal	M	15
The HHS EA Repository Reporting	M	5
EA Repository Report Authoring	H	32
Creating a Business Process Model in the EA Repository	H	30
Publishing a Business Process	M	5

Table-2. List of Self-Paced e-Learning (Tutorials) courses

2.2.1   The HHS EA Repository Browsing on Portal

This online tutorial will provide a quick step-by-step guidance on how to query and browse the information stored in The HHS EA Repository using the repository Portal (Troux Portal).

> **Difficulty Level:** Medium
> **Duration:** 10 Minutes
> **Difficulty level:** Low
> **Prerequisites:** Basic Microsoft Windows computer skills required; knowledge of modeling concepts recommended.

2.2.2   Editing objects using the HHS EA Repository Portal

This online tutorial will provide a quick step-by-step guidance on how to edit information (Objects) stored in The HHS EA Repository using the repository Portal (Troux Portal).

> **Difficulty Level:** Medium
> **Duration:** 15 Minutes
> **Difficulty level:** Medium
> **Prerequisites:** Basic Microsoft Windows computer skills required; knowledge of modeling concepts recommended.

2.2.3   The HHS EA Repository Reporting

This online tutorial will provide a quick step-by-step guidance on how to run a report using the HHS EA Repository Portal (Troux Portal).

> **Difficulty Level:** Medium

Duration: 5 Minutes
Difficulty level: Low
Prerequisites: Basic Microsoft Windows computer skills required.

2.2.4 EA Repository Report Authoring

This set of online tutorials (7 in total) will provide a quick step-by-step guidance on how to author reports using the Report Studio IDE (Troux Portal Explorer).

Difficulty Level: High
Duration: 32 Minutes
Difficulty level: Low
Perquisites: Basic Microsoft Windows computer skills required; knowledge of SQL is strongly recommended.

2.2.5 Creating a Business Process Model in the EA Repository

This online tutorial will provide a quick step-by-step guidance of how to create a Business Process Model in EA Repository using Troux Architect.

Difficulty Level: Medium
Duration: 30 Minutes
Difficulty level: Medium
Perquisites: Basic Microsoft Windows computer skills required; knowledge of modeling concepts recommended

2.2.6 Publishing a Business Process

This online tutorial will provide a quick step-by-step guidance on how open and print a Business Process modeled in the HHS EA Repository using Troux Architect.

Difficulty Level: Medium
Duration: 5 Minutes
Difficulty level: Medium
Prerequisites: Basic Microsoft Windows computer skills required; knowledge of modeling concepts recommended.