

Data Update (DATUP) 4.0

Deployment, Installation, Back-Out, and Rollback Guide



January 2024

Department of Veterans Affairs (VA)

Office of Information and Technology (OIT)

Revision History

Date	Version	Description	Author
01/10/2024	1.0	DATUP 4.0 / PRED*4*1	Liberty IT Solutions

Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into the VA Enterprise. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities involved in all those activities. Its purpose is to provide clients, stakeholders, and support personnel with a smooth transition to the new product or software, and should be structured appropriately, to reflect particulars of these procedures at a single or at multiple locations.

The Veteran-focused Integrated Process (VIP) 4.0 Guide indicates the VA Product (Line) Accountability and Reporting System (VA PARS) reporting tool requires a Gateway Review that will move the project from the Planning Stage and to the Build Stage and will require Release Approval before deploying into production. The Product Line Manager will ensure necessary documents are made available for the release approval process.

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1 Introduction

This document describes how to deploy and install the PRED*4*1 release of the DATUP version (v) 4.0, as well as how to back-out the product and rollback to a previous version or data set. This document is a companion to the project charter and management plan for this effort. In cases where a non-developed Commercial Off-The-Shelf (COTS) product is being installed, the vendor provided User and Installation Guide may be used, but the Back-Out Recovery strategy still needs to be included in this document.

1.1 Purpose

The purpose of this plan to provide a single, common document that describes how, when, where, and to whom the PRED*4*1 release will be deployed and installed, as well as how it is to be backed out and rolled back, if necessary. The plan also identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

1.2 Dependencies

The following must be available during the deployment.

- First Databank (FDB) Framework (Fwk) COTS set up for incremental updates.
- Configuration changes for Consolidated Mail Outpatient Pharmacy (CMOP) on Secure File Transfer Protocol (sFTP) Server.

1.3 Constraints

There are no constraints for the PRED*4*1 release.

2 Roles and Responsibilities

Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
1	Austin Information Technology Center (AITC)	Deployment	Plan and schedule deployment (including orchestration with vendors)	
2	AITC	Deployment	Determine and document the roles and responsibilities of those involved in the deployment	
3	AITC	Deployment	Test for operational readiness	
4	AITC	Deployment	Execute deployment	

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
5	DATUP Sustainment Team	Back-out	Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)	
6	Product Support	Post Deployment	Hardware, Software and System Support	

3 Deployment

This section provides the schedule and milestones for the deployment.

Contract Dates:

- Base Period: 5/4/2020 – 5/3/2021
- Extension Period 1: 5/6/2021 – 10/7/2022
- Extension Period 2: 9/16/2022 – 2/15/2023
- Extension Period 3: 2/15/2023 – 2/15/2024

3.1 Timeline

The DATUP v4.0 Java Enterprise Edition (J2EE) application will be nationally deployed at AITC after initial operating capacity (IOC) testing and national release approval.

3.2 Site Readiness Assessment

The DATUP v4.0 Java Application is a single, nationally deployed application deployed in AITC.

3.2.1 Deployment Topology (Targeted Architecture)

The DATUP Java Application and Database will be installed on the existing DATUP v3.2.01 production platform.

3.2.2 Site Information (Locations, Deployment Recipients)

Section 3.2 describes the DATUP Java Application.

User acceptance testing (UAT) successfully completed by the Business Office.

3.2.3 Site Preparation

The following table describes preparation required by the site prior to deployment.

Table 2: Site Preparation

Site/Other	Problem/Change Needed	Features to Adapt/Modify to New Product	Actions/Steps	Owner
N/A				

3.3 Resources

The pre-existing DATUP v3.2.01 environment resources will be used.

3.3.1 Facility Specifics

The following table lists facility-specific features required for deployment.

Table 3: Facility-Specific Features

Site	Space/Room	Features Needed	Other
N/A			

3.3.2 Hardware

The following table describes hardware specifications required at each site prior to deployment.

Table 4: Hardware Specifications

Required Hardware	Model	Version	Configuration	Manufacturer	Other
N/A					

Please see the Roles and Responsibilities table in Section 2 for details about who is responsible for preparing the site to meet these hardware specifications.

3.3.3 Software

The following table describes software specifications required at each site prior to deployment.

Table 5: Software Specifications

Required Software	Version	Configuration
Oracle WebLogic	12.2.1.4.1	Pre-existing
Oracle 19c Enterprise Edition Release	19.14.0.0.0	Pre-existing
Red Hat Enterprise Linux Server (RHEL5)	7.0 (Santiago)	Pre-existing
Java Software Development Kit (SDK)	1.8.0_391 or	Pre-existing

Please see the Roles and Responsibilities table in Section 2 above for details about who is responsible for preparing the site to meet these software specifications.

3.3.4 Communications

- Notify business owner of production deployment
- The Release Manager will schedule activities and identify the required personnel for each activity.
- Meetings will be scheduled for deployment personnel to work through the deployment steps. Deployment/Installation/Back-Out Checklist

Table 6: Deployment/Installation/Back-Out Checklist

Activity	Day	Time	Individual who completed task
Deploy	TBD	TBD	Infrastructure Operations (IO)
Install	TBD	TBD	IO
Back-Out	N/A	N/A	IO

4 Installation

4.1 Pre-installation and System Requirements

The DATUP J2EE will be installed on the existing DATUP v3.2.01 production platform.

4.2 Platform Installation and Preparation

The pre-existing DATUP v3.2.01 platform will be used. Specifics will be detailed in the Request For Change (RFC) order.

4.3 Download and Extract Files

See Section 4.5, specific filenames will be detailed in the RFC order.

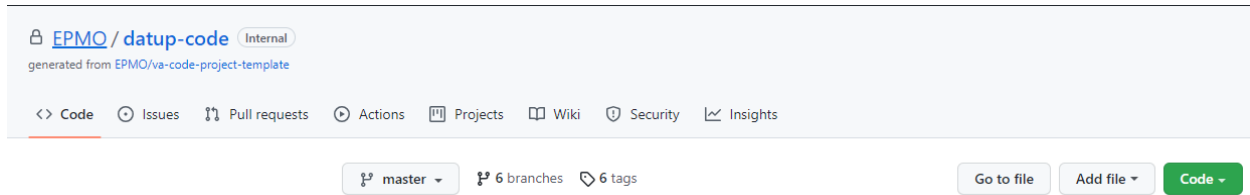
4.4 Database Creation

The new FDB Fwk v4.5 database will need to be set up.

4.5 Installation Scripts

Installation scripts needed for the software and database installation, as well as the procedure on how to set up FDB Fwk v4.5, are provided in VA GitHub EC, located in the [datup-code](#) repository docs folder. DBA should make sure to disable the archive mode before setting up 4.5 schema and then enable it after schema import.

Figure 1: DATUP Repository



4.6 Cron Scripts

No Cron job changes are required for this deployment.

4.7 Access Requirements and Skills Needed for the Installation

Provide reference instructions on how to perform these functions (e.g., vendor-supplied operating system manuals, VistA publications, or other reference materials).

Linux System Administrator will need:

- Access to the Linux console of the server where DATUP's WebLogic is running
- Access to the WebLogic web-based Console
- Access to the location indicated in section 4.5 Installation Scripts

Database Administrator will need:

- Access to the Linux console of the server where DATUP's Oracle Database is running
- Access to the location indicated in section 4.5 Installation Scripts

4.8 Installation Procedure

This section is a high-level overview of the installation procedure steps. Detailed steps are in the RFCs for the Database and Application deployment, and they will be published at the locations in Section 4.5.

1. Stop the Managed Server
2. Install EAR file for DATUP 4.0 .
3. Validate the `fdb_datup4_configuration.properties` for SFTP server path location, if updated.
4. Validate any changes to datasource name `FDB45_DIF` for database connection the one new EAR file for DATUP v4.0 Application
5. Start the DATUP Application
6. Perform Smoke Test on DATUP

4.9 Installation Verification Procedure

After deployment is updated, DATUP will be smoke tested.

The system administrator will check application logs for the absence of errors.

4.10 System Configuration

4.10.1 Properties Files

No property file changes are required for this deployment. The pre-existing DATUP v3.2.01 property file will be used.

4.10.2 Import VA Certificates

No certificate changes are required for this deployment. The pre-existing DATUP v3.2.01 VA certificates will be used.

4.11 Database Tuning

After installation, the AITC Data Base Administrator (DBA) should monitor Oracle Enterprise Manager/Cloud Control to note any performance problems.

5 Back-Out Procedure

5.1 Back-Out Strategy

The back-out strategy for the DATUP Java application is to restore the previous DATUP EAR file in PRED*3*5.

5.2 Back-Out Considerations

5.2.1 Load Testing

Not applicable for PRED*4*1.

5.2.2 User Acceptance Testing

User Acceptance Testing (UAT) is performed at test sites during IOC Testing.

5.3 Back-Out Criteria

A back-out of PRED*4*1 should only be considered if it is determined there is the cause for a patient safety issue or catastrophic system failure.

5.4 Back-Out Risks

Risks of backing out include not reconfiguring the application in the same manner it was before the start of the implementation. This can be remediated by taking backups of the appropriate file systems and database before the start of the deployment.

5.5 Authority for Back-Out

The DATUP Sustainment PM has the authority to determine if a back-out of PRED*4*1 is required.

5.6 Back-Out Procedure

Deploy the previous latest DATUP application EAR file in WebLogic, currently PRED*3*5 as of April 2023.

5.7 Back-out Verification Procedure

A smoke test will be performed to determine that the application is working properly.

6 Rollback Procedure

See Section 5, **Back-Out Procedure**, for rollback procedures.

6.1 Rollback Considerations

N/A

6.2 Rollback Criteria

N/A

6.3 Rollback Risks

N/A

6.4 Authority for Rollback

N/A

6.5 Rollback Procedure

N/A

6.6 Rollback Verification Procedure

N/A