Decision Support System (DSS)

Version Description Document (VDD)

Software Version 3.0

Patch ECX\*3.0\*178



October 2020

Document Version 1.0

Department of Veterans Affairs (VA)

Office of Information and Technology (OI&T)

Document Revision History

| Date | Document Version | Description | Author |
| --- | --- | --- | --- |
| 06/02/2020 | 1.0 | Updates for DSS FY21 (ECX\*3.0\*178 v11) patch release | Liberty IT Solutions |

Deliverable (Product) Version History

| Date | Release / Revision | Description | Project Name | VA Department |
| --- | --- | --- | --- | --- |
| 06/02/2020 | ECX\*3.0\*178 v11 | DSS Extracts FY21 Annual Sustainment Patch | Decision Support System Annual Sustainment Project | Product Support |

Table of Contents

[1 General Configuration Management (CM) Information 1](#_Toc45713647)

[2 Configuration Management (CM) Tools 1](#_Toc45713648)

[3 Configuration Management of Documents 2](#_Toc45713649)

[3.1 Rational Team Concert (RTC) Documents 2](#_Toc45713650)

[4 Configuration Management Development Files 2](#_Toc45713651)

[4.1 Rational Team Concert (RTC) Repository 2](#_Toc45713652)

[4.1.1 Baseline and Component 3](#_Toc45713653)

[4.1.2 Build Information 3](#_Toc45713654)

[4.1.3 RTC Build Definition 3](#_Toc45713655)

[4.1.4 Build Label or Number 4](#_Toc45713656)

[5 Build and Packaging 4](#_Toc45713657)

[5.1 Build Log 4](#_Toc45713658)

[5.2 Build System/Process Information 4](#_Toc45713659)

[6 Change Tracking 4](#_Toc45713660)

[6.1 Rational Team Concert (RTC) Repository 5](#_Toc45713661)

[7 Release (Deployment) Information 6](#_Toc45713662)

[Appendix A Acronyms A-1](#_Toc45713663)

[Appendix B Data Dictionary Changes B-1](#_Toc45713664)

List of Tables

[Table 1: General CM Information 1](#_Toc41999292)

[Table 2: Configuration Management Tools 1](#_Toc41999293)

[Table 3: Rational Team Concert Information 2](#_Toc41999294)

[Table 4: RTC Information 2](#_Toc41999295)

[Table 5: Development Files Baseline Details 3](#_Toc41999296)

[Table 6: Build Information 3](#_Toc41999297)

[Table 7: RTC Build Definition 3](#_Toc41999298)

[Table 8: Build Label or Number 4](#_Toc41999299)

[Table 9: Change Tracking Information 4](#_Toc41999300)

[Table 10: RTC Change Tracking Repository Information 5](#_Toc41999301)

[Table 11: Business User Stories 5](#_Toc41999302)

[Table 12: Release (Deployment) POC Information 6](#_Toc41999303)

[Table 13: Release Package Information 6](#_Toc41999304)

[Table 14: Acronym Table A-1](#_Toc41999305)

[Table 15: Data Dictionary Changes B-1](#_Toc41999306)

#  General Configuration Management (CM) Information

Table 1 lists the general CM information for the proposed changes to the sustainment effort for Fiscal Year (FY) 2021 to the Decision Support System (DSS) application Patch Release ECX\*3.0\*178 v11. The Patch Release number is assigned by creating a new patch number in the FORUM patch module and includes the following components for the DSS FY21 Annual Sustainment application:

* Project Namespace: ECX
* DSS Extracts Software Application Version: 3.0
* Patch Number: 178 v11
1. General CM Information

| Deliverable (Product) Name | Configuration Manager | VDD Package Name | Project Manager |
| --- | --- | --- | --- |
| ECX\*3.0\*178 v11 | REDACTED | Not Applicable (N/A) | REDACTED |

#  Configuration Management (CM) Tools

Rational CM is a collaborative software development/delivery environment based on the Jazz technology platform from IBM. Rational CM provides software version control and workspace management and supports parallel development. This product is part of the Office of Information and Technology (OI&T) Chief Information Officer’s (CIO) mandated, standardized toolset for OI&T projects.

Table 2 describes where the project artifacts for DSS FY21 are located within Rational.

1. Configuration Management Tools

| CM Tools | CM Tool Location | ToolOnsite/Offsite | CM Tool AccessPoint of Contact | Access Information (Forms or other access requirements) |
| --- | --- | --- | --- | --- |
| Rational DOORS Next Generation (RDNG) Requirements Management (RM) | Hines Data Center | Onsite | VA Rational Tools Team | REDACTED |
| Rational Team Concert (RTC) | Hines Data Center | Onsite | VA Rational Tools Team | REDACTED |
| Rational Quality Management (RQM) | Hines Data Center | Onsite | VA Rational Tools Team | REDACTED |

# Configuration Management of Documents

Project-related documents are managed and controlled within the Rational Tool Suite. Final documentation deliverables are posted in the VA Software Document Library (VDL).

## Rational Team Concert (RTC) Documents

Table 3 details the RTC location for the DSS FY21 documents.

1. Rational Team Concert Information

| RTC Information | Explanation |
| --- | --- |
| **RTC URL** | REDACTED |
| **RTC Project Area** | Rational DSS (CM) Project Area |
| **RTC Team Area** | Sustainment Team |
| **RTC Stream** | DSS\_Docs |
| **Baseline ID** | Patch ECX\*3.0\*178 v11 |
| **Components** | DSS\_Docs |
| **Directory Path** | REDACTED |
| **Documents Included in the Baseline** | **DSS FY21 (ECX\*3\*178) Version Description Document**ECX\_3\_178\_VDD**DSS FY21 (ECX\*3\*178) Patch Description** ECX\_3\_178\_PD**DSS FY21 (ECX\*3\*178) User's Guide**ECX\_3\_178\_UG**DSS FY21 (ECX\*3\*178) Technical Manual**ECX\_3\_178\_TM**DSS FY21 (ECX\*3\*178) Deployment Installation, Back out, and Rollout Guide** ECX\_3\_178\_DIBRG**DSS FY21 (ECX\*3\*178) Data Definitions Document**ECX\_3\_178\_DDD |

#  Configuration Management Development Files

DSS development is completed in accounts created for, and managed by, the Albany Office of Information Field Office (OIFO). The Albany OIFO has multiple accounts used by various development groups. The following subsections describe the CM development files.

## Rational Team Concert (RTC) Repository

The DSS application source code is developed using the Massachusetts General Hospital Utility Multi-Programming System (MUMPS) language and development environment. Development source artifacts are not maintained in the Rational Team Concert Repository during development. Instead, development source artifacts/builds are produced and maintained on VistA servers. Table 4 lists the RTC information for the development files (source).

1. RTC Information

| RTC Information | Explanation |
| --- | --- |
| **RTC URL** | REDACTED |
| **RTC Project Area** | RTC DSS FY21 Project Area |
| **RTC Team Area** | Sustainment Team |
| **RTC Stream** | Patch ECX\*3.0\*178 |

###  Baseline and Component

Prior to the start of development, a baseline snapshot of MUMPS source code was created and posted to Rational CM. Additional snapshots are created and posted throughout the development cycle. Table 5 lists the baseline details for DSS FY21.

1. Development Files Baseline Details

| Name | Description |
| --- | --- |
| ECX\*3.0\*178 v11 | This was the initial baseline for FY21 development. |
| **Required Patches:** ECX\*3.0\*177  | ECX\*3.0\*177 was previously released and contains shared routines which make it a prerequisite for installing ECX\*3.0\*178. |

###  Build Information

Builds are performed in the Veterans Health Information Systems and Technology Architecture (VistA) development account(s) for the MUMPS code. Builds will be performed using selected versions of the formally submitted source code contained within the Development Repositories. General build information that results from the build process is maintained in the DSS (CM) repository as detailed in Table 6.

1. Build Information

| Name | Description |
| --- | --- |
| **Build Output** | The DSS build process does not generate output. |
| **Build Output Directory** | N/A |
| **Target Deployment Location** | Enterprise-wide National Release (October 2020). VistA Patches are released in FORUM using Packman messages. |

### RTC Build Definition

The Product Component build uses the approved product design and all applicable standards, tool sets, and environments. Table 7 describes the DSS FY21 build.

1. RTC Build Definition

| Name | Description |
| --- | --- |
| ECX\*3.0\*178 v11 | Release Build 1 Test 4 |

###  Build Label or Number

The Package Build consists of the individual application components, and the System Build (Release Packages) includes all packages that comprise the entire release for the specific environment.

Table 8 lists the identifier for the derived object or package produced for deployment and/or installation for DSS FY21.

1. Build Label or Number

| Name | Description |
| --- | --- |
| ECX\*3.0\*178 v11 | DSS Version 3.0, Patch 178DSS FY21 Annual Sustainment Patch |

#  Build and Packaging

The methods of packaging and rules concerning management of a release are determined by OI&T Release Management, working with Product Management to meet the needs of the development team, along with consideration for the operational needs for accepting the product. For VA products being developed, the primary form of a release candidate will be in the form of an electronically packaged release.

## Build Log

The build log is found in the DSS (CM) project under the DSS\_Src stream.

## Build System/Process Information

The Kernel Installation and Distribution System (KIDS) is used to manually bundle all the code for distribution. The builds are then sent to FORUM where they become the basis of the patch that is sent to the sites for installation.

#  Change Tracking

Change tracking identifies a set of work product versions created to resolve a specific Change Request. For MUMPS-based VistA patches, there are currently no CM tools available that are approved for use by the VA.

For DSS, a baseline snapshot of M routines is created and posted to Rational and may be used to observe changes between fiscal year patches. Table 9 lists the Change Tracking information.

1. Change Tracking Information

| Change Tracking Tool | Change Tracking Tool Location | ToolOnsite/Offsite | Change Tracking Tool Access /Point of Contact (POC) | Access Information(Forms or other access requirements) |
| --- | --- | --- | --- | --- |
| Rational (CM) | Hines Data Center | Onsite | VA Rational Tools Team | REDACTED |

## Rational Team Concert (RTC) Repository

Table 10 provides details for the RTC Repository used for Change Tracking.

1. RTC Change Tracking Repository Information

| RTC Information | Explanation |
| --- | --- |
| **RTC URL** | REDACTED |
| **RTC Project Area** | DSS(CM) Project Area |
| **RTC Team Area** | Sustainment Team |

Table 11 provides details for the DSS FY21 Business User Stories.

1. Business User Stories

| Rational ID | Summary |
| --- | --- |
| 1221223 | As a user, I need accurate information in the data dictionary. |
| 1221224 | As a user, I need MCAO to have accurate logic documentation. |
| 1221055 | As a user, I need field logic to be kept in the correct fiscal year. |
| 1221230 | As a user, I want information on how the various DSS reports work.  |
| 1221046 | As a user, I do not need to see a selection of fiscal years in the option to the current fiscal year. |
| 1221234 | As a user, I no longer need the obsolete Means Test field. |
| 1221239 | As a user I am no longer allowed to use VistA ECQ. |
| 1221240 | As a user I no longer need access to the obsolete LAR Extract. |
| 1221076 | As a user I want improved data quality and costing of pharmacy data.  |
| 1221130 | As a user I need SAS programming to match what SAS will do in later processing. |
| 1221131 | As a user I want to cut costs of observation stop codes. |
| 1221170 | As a user, I want to be able to distinguish between new prescriptions and renewals. |
| 1244014 | As a user, I want to know the administering clinic of IV chemotherapy drugs. |
| 1272084 | As a User, I need to modify on-screen text displayed when the Pharmacy Pre-Extract Incomplete Feeder Key Report is selected. |

# Release (Deployment) Information

The VIP Release management process is required for any release into production environments, for all national releases (limited or widespread), and for all releases that might have national impact.

The HSP Application Coordinator is responsible for coordinating the activities for the national release of the product or patch and representing Health Services Portfolio (HSP) for the product or patch release. This includes working with the appropriate Sustainment Manager (SM) to ensure a smooth and successful transition of the product from development to sustainment. This project is using the Initial Operating Capability (IOC) model.

Table 12 lists the release (deployment) POC information.

1. Release (Deployment) POC Information

| Release Identification | Release Package POC Name | Release Package POC Email |
| --- | --- | --- |
| ECX\*3.0\*178 v11 | HSP Application Coordinator | REDACTED |

Table 13 lists the release package information for DSS FY21.

1. Release Package Information

| Release Package (Component) Identified | Release Package Description | Release Package Delivery Method | Release Package Location Identified |
| --- | --- | --- | --- |
| ECX\*3.0\*178 v11 | KIDS Build DSS FY21 annual sustainment update | FORUM KIDS Build | REDACTED |

###### Acronyms

Table 14 lists the acronyms used in this document.

1. Acronym Table

| Acronym | Description |
| --- | --- |
| CIO | Chief Information Officer |
| CM | Configuration Management |
| DDD | Data Definitions Document |
| DSS | Decision Support System |
| ECQ | Quasar Extract |
| FY | Fiscal Year |
| HSP | Health Services Portfolio |
| IBM | International Business Machines |
| ID | Identification |
| IOC | Initial Operating Capability |
| KIDS | Kernel Installation and Distribution System |
| LAR | Lab Results Extract |
| MCAO | Managerial Cost Accounting Office |
| MUMPS | Massachusetts General Hospital Utility Multi-Programming System |
| N/A | Not Applicable |
| OI&T | Office of Information and Technology |
| OIFO | Office of Information Field Office |
| POC | Point of Contact |
| RDNG | Rational DOORS Next Generation |
| RM | Requirements Management |
| RQM | Rational Quality Management |
| RTC | Rational Team Concert |
| SAS | Statistical Analysis System |
| SM | Sustainment Manager |
| URL | Uniform Resource Locator |
| VA | Department of Veterans Affairs |
| VDD | Version Description Document |
| VDL | VA Software Document Library |
| VistA | Veterans Health Information Systems and Technology Architecture |

###### Data Dictionary Changes

Table 15 is a list of the Data Dictionary files and fields modified for DSS FY21 patch ECX\*3.0\*178.

1. Data Dictionary Changes

| **File Name**  | **File Number**  | **Field Name**  | **Field Number** |
| --- | --- | --- | --- |
| ADMISSION EXTRACT | 727.802 | PLACEHOLD MEANS TEST | 25 |
| ADMISSION EXTRACT | 727.802 | ERI | 76 |
| BCMA EXTRACT | 727.833 | PLACEHOLD MEANS TEST | 50 |
| BCMA EXTRACT | 727.833 | ERI | 76 |
| BLOOD BANK EXTRACT | 727.829 | ERI | 22 |
| CLINIC EXTRACT | 727.827 | PLACEHOLD MEANS TEST | 71 |
| CLINIC EXTRACT | 727.827 | ERI | 86 |
| EVENT CAPTURE LOCAL EXTRACT | 727.815 | ERI | 83 |
| IV DETAIL EXTRACT | 727.819 | PLACEHOLD MEANS TEST | 42 |
| IV DETAIL EXTRACT | 727.819 | ERI | 80 |
| LABORATORY EXTRACT | 727.813 | ERI | 38 |
| PRESCRIPTION EXTRACT | 727.81 | PLACEHOLD MEANS TEST | 69 |
| PRESCRIPTION EXTRACT | 727.81 | ERI | 84 |
| PRESCRIPTION EXTRACT | 727.81 | REMARKS | 105 |
| PROSTHETICS EXTRACT | 727.826 | ERI | 75 |
| RADIOLOGY EXTRACT | 727.814 | ERI | 43 |
| SURGERY EXTRACT | 727.811 | ERI | 77 |
| UNIT DOSE LOCAL EXTRACT | 727.809 | PLACEHOLD MEANS TEST | 29 |
| UNIT DOSE LOCAL EXTRACT | 727.809 | ERI | 75 |