



#### RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **Distribution Management**

(ADS)

# **Technical Manual**

Version 1.0 May 2020

Office of Information Technology Division of Information Technology

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# **Revision History**

| Version | Date       | Author        | Section | Page<br>Number | Summary of Change |
|---------|------------|---------------|---------|----------------|-------------------|
| 1.0     | April 2020 | Ken Halfpenny | All     | All            | New release       |
|         |            |               |         |                |                   |
|         |            |               |         |                |                   |
|         |            |               |         |                |                   |

# **Preface**

This technical manual describes the InterSystems License Report and related options in the Distribution Management (ADS) package.

## 1.0 Introduction

This manual provides IHS site managers with a technical description of the Distribution Management (ADS) routines, files, menus, cross references, globals, and other necessary information required to effectively manage the system.

All routines, files, options, and keys are namespaced starting with the letters "ADS."

The file number range for this package is 9002290 – 9002299.

# 2.0 Implementation and Maintenance

#### 2.1 General Information

Refer to the *Distribution Management (ADS) Installation Guide and Release Notes* for maintenance and implementation information, specifically, information on the set up of the TaskMan task and where to locate the option in the menus.

### 2.2 System Requirements

- VA FileMan version 22 or higher
- VA Kernel version 8.0 or higher

## 2.3 Package-wide Variables

There are no package-wide variables in the ADS package.

## 2.4 Security Keys

There are no security keys in the ADS package.

# 3.0 Routine Descriptions

# 3.1 Routines with Description

Table 3-1 details routines and their associated descriptions. There are a total of two routines.

Table 3-1: ADS routines and descriptions

| Routine | Description  |
|---------|--|
| ADSRPT  | InterSystems License Report – Main Compile Routine |
| ADSPST  | InterSystems License Report – Post Install Routine |

### 4.0 Files and Tables

The following tables include information regarding file lists and file access.

#### 4.1 File List

Table 4-1 details file numbers and names.

Table 4-1: ADS file numbers and names

| File #  | Filename                   |
|---------|----------------------------|
| 9002290 | ADS LICENSE CONFIGURATION  |
| 9002291 | ADS LICENSE REPORT HISTORY |

### 4.2 File Access

Table 4-2 lists file access information.

Table 4-2: File access information

| File #  | Filename                      | GL               | RD | WR | LYG | DD | DEL |
|---------|-------------------------------|------------------|----|----|-----|----|-----|
| 9002290 | ADS LICENSE<br>CONFIGURATION  | ^ADS(9002290,    | @  | @  | @   | @  | @   |
| 9002291 | ADS LICENSE REPORT<br>HISTORY | ^ADSRPT(9002291, | @  | @  | @   | @  | @   |

#### 4.3 Cross References

Figure 4-1 displays ADS files that all use the standard  ${\bf B}$  cross reference as defined by FileMan.

| FILE: ADS LICENSE CONFIGURATION FILE GLOBAL: ^ADS(9002290, FILE #: 9002290 |                      |  |            |  |  |
|--|----------------------|--|------------|--|--|
| FIELD #  | FIELD NAME           | SUBSCRIPT  | PIECE TYPE |  |  |
| .01  | ID<br>X: B           | D0,0   | 1 F        |  |  |
|  | 1) S ^ADS(900229     | 00,"B",\$E(X,1,30),DA)=""                                    |            |  |  |
| .02  | INSTALL DATE         | "  | 2 P        |  |  |
| .03  | LAST RESET DATE/TIME | m .  | 3 F        |  |  |
| .04  | TASK NUMBER          | m .  | 4 F        |  |  |
| .05  | SYSTEM TYPE          | "  | 5 F        |  |  |
|  | GLOBAL:              | S LICENSE REPORT HISTORY FI<br>^ADSRPT(9002291,<br>: 9002291 | LE         |  |  |

| FIELD # | FIELD NAME            | SUBSCRIPT                           | PIECE S | ГҮРЕ<br>==== |
|---------|-----------------------|-------------------------------------|---------|--------------|
| .01     | REPORT DATE/TIME X: B | D0,0                                | 1       | F            |
|         |                       | 002291, "B", \$E(X, 1, 30), DA) ="" |         |              |
| .02     | FACILITY              | "                                   | 2       | F            |
| .03     | KEY CUSTOMER NAME     | II .                                | 3       | D            |
| .04     | LUMX CONSUMED         | II .                                | 4       | D            |
| .05     | LUMAX DATE/TIME       | II .                                | 5       | D            |
| .06     | LUMAX RESET DATE/TIME | TI .                                | 6       | D            |
| .07     | STAR DATE/TIME        | n .                                 | 7       | D            |
| .08     | FULL VERSION          | п                                   | 8       | D            |
| .09     | OS VERSION            | п                                   | 9       | D            |
| 1.01    | SERVER FQDN           | D0,1                                | 1       | D            |
| 1.02    | SERVER IP             | n                                   | 2       | D            |
| 1.03    | NAMESPACE             | "                                   | 3       | D            |
| 1.04    | AUTO OR MANUAL        | "                                   | 4       | D            |
| 2       | KEY LICENSE CAPACITY  | D0,2                                | E1,250  | D            |

Figure 4-1: Example ADS files FileMan B cross-reference

## 5.0 External Relations

### 5.1 Callable Routines

Table 5-1 displays the available list of callable routines.

Table 5-1: Callable routines

| Routine Called    | Description   |
|-------------------|---|
| \$\$FIND^ADSPST   | FIND AN ENTRY IN THE OPTION FILE  |
| \$\$FMTMDY^ADSRPT | CONVERT \$H DATE/TIME FORMAT TO MM/DD/YY HH:MM:SS FORMAT (NOTE: TIME PORTION IS OPTIONAL) |

## 5.2 Published Entry Points

There are no published entry points in the (ADS package.

## 5.3 Exported Options

Table 5-2 displays the available option names and descriptions.

Table 5-2: Options names and descriptions

| Option Name                        | Description  |
|------------------------------------|--|
| ADS INTERSYSTEMS<br>LICENSE REPORT | This option runs the InterSystems License Report and sends the current maximum number of License Units used (and other associated information) to a central server for aggregation with other licensing info. This option is normally scheduled to be checked on a daily basis and sends the report every 30 days. |
|                                    | This option may be run manually to reset the license counts if an unusual circumstance such as a runaway process has occurred, which artificially inflated the counts.   |
|                                    | This option may also be run at any time without resetting the counts to keep tabs on the current license counts for the system.  |

# 6.0 Internal Relations

There are no internal relations in the ADS package.

# 7.0 Archiving and Purging

No archiving or purging is necessary with the ADS package.

#### 8.0 Documentation Resources

This section describes a few of the methods used to generate online technical documentation.

#### 8.1 System Documentation

Online ADS package system documentation can be generated through the use of several Kernel options, including, but not limited to:

- %INDEX
- Menu Management
- Inquire Option
- Print Option File
- VA FileMan
- Data Dictionary Utilities
- List File Attributes

For more option listings and further information about other utilities that supply online technical information, refer to the *Decentralized Hospital Computer Program* (DHCP) Kernel Reference Manual.

#### 8.1.1 %INDEX

The %INDEX option analyzes the structure of a routine to determine in part, if the routine adheres to RPMS programming standards. The output can include the following components:

- Compiled list of errors and warnings
- Routine listing
- Local variables
- Global variables
- Naked globals
- Label references
- External references
- Running %INDEX for a specified set of routines allows users to discover any deviations from RPMS programming standards that exist, and to see how routines interact with one another (i.e., which routines call or are called by other routines)
- To run %INDEX for the ADS package
- At the "Routine(s)?" prompt, type the **ADS** namespace.

#### 8.1.2 Inquire Options

The Inquire menu management option provides the following information about a specified option:

- Option name
- Menu text
- Option description
- Type of option
- Lock (if any)

In addition, all items on the menu are listed for each menu option. To secure information about ADS package options, specify the ADS namespace.

#### 8.1.3 Print Option File

The Print Option File utility generates a listing of options from the Option file (#19). Users can print all of the entries or a single option or range of options.

#### 8.1.4 List File Attributes

This VA FileMan option allows users to generate documentation pertaining to files and file structure. The standard format of this option provides the following data dictionary information for a specified file:

- File name and description
- Identifiers
- Cross-references
- Files pointed to by the file specified
- Files that point to the file specified
- Input, print, and sort templates

In addition, the following applicable data is supplied for each field in the file:

- Field name, number, title, and description
- Global location
- Help prompt
- Cross-references
- Input transform
- Date last edited
- Notes

Using the Global Map format of this option generates an output that lists the following information:

- All cross-references for the file selected
- Global location of each field in the file
- Input, print, and sort templates

For a comprehensive listing of ADS files, refer to Internal Relations.

## 8.2 Online Help

In addition to system documentation, RPMS includes special help displays for most menu options and data entry prompts. Typing one questions mark (?) at the "Select . . . Option" prompt displays information related to the current option, as shown in Table 8-1.

Table 8-1: Online help prompts and displays

| Typing  | Displays  |
|---|---|
| one question mark (?)   | a list of all options accessible from the current option. |
| two question marks (??)   | a list of all accessible options and their formal names.  |
| three question marks (???)  | a brief description for each option in a menu.            |
| one question mark (?) followed by an option name ( <b>?OPTION</b> ) | extended help, if available, for that option.             |

## 9.0 SAC Requirements and Exemptions

Applicable standards are listed in Table 9-1.

Table 9-1: Table of standards and descriptions

| Standard Number | Description                                  |
|-----------------|--|
| 2.2.3.3.2       | Intrinsic Variables direct use is prohibited |

#### **Reasons for Exemption**

The code for ADS version 1.0 is collecting system data, including InterSystems license and version information and the IP address and FQDN (fully qualified domain name) for the RPMS server. This information can only be obtained from methods found in the \$SYSTEM objects and methods provided by InterSystems. These are listed by the SAC Checker as Intrinsic Variables under \$SYSTEM.

#### **SAC Exemption Approval list**

Table 9-2 lists specific code updates that have been approved for a SAC exemption in addition to any generic approvals listed above.

Table 9-2: Table of SAC Exemption Approvals

| Patch   | Program | Line | Exception                                       | Date<br>Approved |
|---------|---------|------|---|------------------|
| ADSv1.0 | ADSRPT  | +131 | Use of \$SYSTEM.INetInfo.LocalHostName()        | 4/17/2020        |
| ADSv1.0 | ADSRPT  | +132 | Use of \$SYSTEM.INetInfo.HostNameToAddr()       | 4/17/2020        |
| ADSv1.0 | ADSRPT  | +133 | Use of \$SYSTEM.INetInfo.AddrToHostName(()      | 4/17/2020        |
| ADSv1.0 | ADSRPT  | +136 | Use of \$SYSTEM.License.KeyCustomerName()       | 4/17/2020        |
| ADSv1.0 | ADSRPT  | +137 | Use of \$SYSTEM.License.KeyLicenseCapacity()    | 4/17/2020        |
| ADSv1.0 | ADSRPT  | +149 | Use of \$SYSTEM.Version.GetISCProduct()         | 4/17/2020        |
| ADSv1.0 | ADSRPT  | +158 | Use of \$SYSTEM.License.LUMaxConsumed()         | 4/17/2020        |
| ADSv1.0 | ADSRPT  | +172 | Use of \$SYSTEM.License.LUMaxConsumedReset("*") | 4/17/2020        |

# **Acronym List**

| Acronym | Meaning                                |
|---------|--|
| FQDN    | Fully Qualified Domain Name            |
| IHS     | Indian Health Service                  |
| IP      | Internet Protocol                      |
| RPMS    | Resource and Patient Management System |
| SAC     | Standards and Conventions              |

# **Contact Information**

If you have any questions or comments regarding this distribution, please contact the IHS IT Service Desk.

**Phone:** (888) 830-7280 (toll free)

Web: <a href="https://www.ihs.gov/itsupport/">https://www.ihs.gov/itsupport/</a>

Email: <a href="mailto:itsupport@ihs.gov">itsupport@ihs.gov</a>