



Image Services

Release Content Description

Release 4.0 SP1

9844106-002

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About This Manual

Scope

This document describes the new features in FileNet Image Services (IS) Release 4.0 SP1, as well as features added since the release of Image Services 4.0.0 and not documented previously. Image Services 4.0 SP1 software is comprised of the following products:

- Image Services for AIX/6000
- Image Services for HP-UX
- Image Services for the Solaris Operating Environment
- Image Services for Windows Server

Refer to the following document for contents of the Image Services 4.0.0 release:

Image Services Release 4.0.0 Content Description 9844093-001

Refer to the *Image Services Toolkit Release 4.0.0 Content Description* (9844101-001) for the Image Services Toolkit content. This document is released on the Image Services Toolkit CD.

References

The following procedures, guides, and handbooks contain additional material regarding Release 4.0 SP1 features. With the exception of the *CSAR Procedures and Guidelines*, the updated documents listed below are released on the Image Services 4.0 SP1 media. The *CSAR Procedures and Guidelines* is released on a Professional Services CD.

Refer to the documentation CD released with Image Services 4.0.0 for all other applicable Image Services manuals.

Procedures

CSAR Procedures and Guidelines (on Professional Services CD)

Guides and Handbooks

IS System Tools Reference Manual

IS System Messages Manual

Education

FileNet provides various forms of instruction. Please visit the Global Learning Services in FileNet's Service & Support area at www.filenet.com.

Comments and Suggestions

FileNet invites all customers to communicate with the Documentation group on any question or comment related to FileNet manuals and online help. Send email to:

docs@filenet.com

We will make every effort to respond within one week. Your suggestions help us improve the products we deliver.

Feature Summary

Image Services (IS) Release 4.0 SP1 includes the following features, either added in this release or post-qualified in the IS 4.0.0 release:

- Support for EMC Centera (CSAR)
- Media surface removal tools
- Graceful shutdown of COLD daemon
- Hot fix pack creation
- Support for clustered Root/Index server with clustered BES
- Support for SAN technologies
- Support for Plasmon M-series

In addition, this document references features associated with the Image Services Remote Admin Console (ISRAC), a new product released after Image Services 4.0.0.

The **[“Image Services 4.0 SP1 RCI Summary” on page 10](#)** includes a list of Release Content Items (RCIs) included in Image Services 4.0 SP1 and not documented previously. These enhancements are described in more detail in the main section of this document.

Some features listed in this document will be post-qualified. Check the CSS Web site for notification of successful qualification.

To review the changes that affect a particular software subsystem, see **[“List of Enhancements by Subsystem” on page 33.](#)**

Image Services 4.0 SP1 RCI Summary

The following list summarizes the enhancements made to the FileNet Image Services software in this release. A second list includes the RCIs to support the Image Services Remote Admin Console, released after Image Services 4.0.0, but not documented in another Release Content Description. The RCIs are listed in numerical order.

Certain Image Services 4.0 SP1 RCIs are NOT included in this list and/or documented in this Release Content Description. These RCIs fall in one of the following categories:

- RCIs for internal features, such as test scripts, that are not released to the field.
- RCIs for internal interfaces to other FileNet products.
- RCIs for preliminary work on features that will not be implemented until a future release.

RCIs Implemented in Image Services 4.0 SP1

RCI Number	Description	See Page
2825	Provide media surface removal tools.	<u>18</u>
2895	Test AIX 5.1-04 Maintenance Level.	<u>22</u>
2917	Support Image Services with SAN technologies.	<u>21</u>
2922	Test Solaris 8 12/02 Release.	<u>24</u>
2944	Provide integrated support for EMC Centera storage and retrieval (CSAR).	<u>15</u>
2928	Create mechanism for releasing Image Services Hot Fix Packs.	<u>31</u>
2955	Support Veritas Volume Manager 3.5 on Solaris 8.	<u>25</u>
2966	Support Windows 2000 SP4.	<u>26</u>
2968	Support a clustered Root/Index server with a clustered remote Batch Entry Server (BES)	<u>13</u>
2979	Limit the Image Services startup/status tools to the local server.	<u>29</u>
2983	Allow graceful shutdown of the COLD daemon.	<u>14</u>
2984	Provide a means to identify the Hot Fix Pack installed on an Image Services system.	<u>31</u>
2991	Test Solaris 9 08/03 Release.	<u>24</u>
2992	Test Solaris 8 05/03 Release.	<u>24</u>
2993	Test HP-UX 11i Diagnostics & Test Patch Bundle, Sept. 2003.	<u>23</u>
2995	Support AIX 5.1-05 Maintenance Level.	<u>22</u>

RCIs Implemented in Image Services 4.0 SP1, Continued

RCI Number	Description	See Page
2996	Test AIX 5.2-02 Maintenance Level.	<u>22</u>
3003	Support Plasmon M-Series 5.25 optical libraries on UNIX platforms.	<u>21</u>

RCIs Implemented for Image Services Remote Admin Console

RCI Number	Description	See Page
2809	Provide remote access for administrative applications.	<u>27</u>
2837	Provide a remote administration installation tool.	<u>27</u>

Enhancement Descriptions

Clustering

Clustered Root/Index and BES Servers

RCIs: 2968

Implementation: All platforms

In a continuing effort to qualify various clustering combinations, a clustered Root/Index server has now been qualified with a clustered Batch Entry Server (BES).

COLD

COLD Daemon Shutdown

RCIs: 2983

SCRs: 178104 (COLD 2.X)

Implementation: All platforms

The COLD daemon is a background process that automatically processes COLD import jobs when the import files are copied into a specific Image Services directory. The COLD daemon can be started by an `ims_start` initialization script, through a cron job, or manually.

Previously, the COLD daemon was shut down abruptly when Image Services was shut down, even if the COLD daemon was in the middle of processing an import file. This could lead to integrity problems with the remaining import files.

You can now have the COLD daemon shut down gracefully between import jobs.

A new `cold_mgr` command line tool accepts the following arguments:

- stop - shut down any active COLD daemons after the next document.
- status - UP if one or more `cold_3770` processes are active; DOWN if no COLD daemons are active.
- clear - Delete the `stop_cold` flag file.

Use of the `cold_mgr` tool and the corresponding `/fnsw/local/sd/stop_cold.txt` flag file are optional. All existing `/fnsw/local/sd/ims_start` scripts and cron jobs continue to work as they did previously.

Document and OSAR Services

Centera Storage and Retrieval (CSAR)

RCIs: 2944

SCRs: 179561, 179591, 180532, 180669, 181448, 181436, 181471, 183163, 183918 (Document Services)
178814, 181403 (Help-Error)
185840, 185842, 185843 (Localized Files)
179578, 180415, 180535, 180542, 180537, 180541, 180548, 180645, 180651, 180657, 180658, 180670, 180683, 180687, 180688, 180690, 180691, 180692, 180693, 180713, 180735, 180737, 180738, 181407, 181414, 180688, 180670, 180658, 180690, 181403, 181398, 181415, 181450, 181449, 181437, 182131, 182132, 183150, 183159, 183162, 183500, 183503, 183504, 183505, 183531, 183545, 183549, 183546, 184298, 184334, 184335 (OSAR Services)
180533 (SystemV Miscellaneous)

Implementation: All platforms.

Image Services now allows you to easily access Image Services documents stored on EMC Centera devices. The new feature is called Centera Storage and Retrieval (CSAR).

FileNet Professional Services has long provided the Near Line Storage (NLS) tool that allows you to archive Image Services documents to a file system repository and retrieve them from the repository. NLS communicates with Image Services using standard client APIs from the Image Services Toolkit.

More recently Professional Services has enhanced NLS to archive and retrieve Image Services documents with an EMC Centera object repository. Image Services documents are stored temporarily in the NLS file system and then moved to an EMC Centera object repository using Centera API calls. This new feature is called the Image Services Centera Connector (ISCC).

Previously, Image Services did not recognize the NLS or ISCC products. The native Image Services tools provided to clients such as Desktop and Web Services did not provide those clients the capability of accessing NLS/ISCC documents. Instead, Professional Services provided a custom library to allow clients to retrieve such documents. The clients required modification to recognize the NLS retrieval entry points.

Image Services has now been enhanced to retrieve documents directly from an NLS file system or an EMC Centera object repository. Professional Services is no longer required to release a custom client library to access documents in the repository, and client retrieval and display programs no longer need to be modified to use a custom library. In response to a retrieval request, an Image Services document may be retrieved - without customization - from page cache, optical storage, MSAR, NLS file system storage, or an EMC Centera object repository.

For additional information refer the new *CSAR Procedures and Guidelines*.

DOC_tool has been updated to support CSAR. For changes to the DOC_tool ENable and DISable commands, as well as the new SDSinfo command, refer to the ***IS System Tools Reference Manual***.

The ***IS System Messages Manual*** documents several new CSAR-related error tuples.

Media Surface Removal Tools

RCIs: 2825

SCRs: 175391 (Help-Error)

177866, 177868, 177869, 177870 (Localized Files)

171047, 175393, 175394, 175753, 176262 (OSAR Services)

Implementation: All platforms.

Two new command line tools, `remove_docs_ref` and `remove_surf`, allow you to remove references to surfaces. These tools may be of particular interest if you are converting an OSAR system to MSAR without tranlogs and wish to remove existing tranlog references.

The `remove_docs_ref` tool removes any surface references in the MKF perm docs table. If both the primary and tranlog references are gone, the doc table and the index table (doctaba) are removed.

The usage is as follows:

```
remove_docs_ref {-s <surface ID> | -f <surface list file>}
```

where `-s` removes a single surface and `-f` allows you to specify a list of surfaces to be removed.

To run `remove_docs_ref`, you must be member of the `fnadmin` group. You must run the tool on the storage library server that houses the doc locator table.

The `remove_docs_ref` tool automatically read/write disables the surface(s) on the doc locator server. You must manually read/write disable any surface(s) not on the doc locator server.

Since `remove_docs_ref` does a sequential scan of the doc locator table, the tool's performance depends on the size of the doc locator table. If you are removing several surfaces, improve performance by using the `-f` option rather than running the tool several times using the `-s` option.

If you interrupt the tool, the statistics in the `surf_info` table may be incorrect, and you must rerun the tool to correct any inconsistencies in the database. Note that `remove_docs_ref` does not create a checkpoint file. If the tool is interrupted, you must restart it from the beginning.

After `remove_docs_ref` completes, run the `remove_surf` tool to remove all other references to a single surface. Such references include those in the `surf_info` tables, `surf_locator` table, `family_disk` write surfaces, SRF and OSA shared memory references, and the OSA checkpoint file. The `remove_surf` tool removes both sides of the surface.

The usage is as follows:

```
remove_surf <surface ID>
```

To run `remove_surf`, you must be member of the `fnadmin` group and you must run the tool on the server that houses the `surf_info` table.

You can remove a written surface only if it is out of the library. You can remove a blank surface whether it is in or out of the library.

You cannot run `remove_surf` on a surface with `read/write/background` job requests pending or active documents recorded in `surf_info` table.

Run `remove_docs_ref` or `deldocs` prior to running `remove_surf` to ensure there are no references to non-blank surfaces in the `docs` table.

Both the `remove_docs_ref` and `remove_surf` tools syslog messages at completion.

For additional information about `remove_docs_ref` and `remove_surf`, refer to the [***IS System Tools Reference Manual***](#).

Hardware

Plasmon M-Series Optical Storage Libraries

RCIs: 3003

STRs: 184345, 184346 (System Configuration Tools)
184860, 184979, 185036, 185094 (Localized Files)

Implementation: All UNIX platforms

Support for Plasmon M-Series optical storage libraries was initially post-qualified in Image Services 3.5.0 (RCI 2324). Support was restricted to Image Services for Windows Server. Now the Plasmon M-Series has been qualified on all Image Services UNIX platforms as well as Image Services for Windows Server. The M-Series includes the M20, M32, M52, M104, M156, M258, and M500 storage libraries. Only the M20, M32, and M52 were qualified.

Storage Area Network (SAN)

RCIs: 2917

Implementation: All platforms

Image Services has now been qualified using Storage Area Network (SAN) technologies. Tests included putting IS cache, MKF databases, and MSAR libraries on SAN.

Operating Systems

AIX

RCIs: 2895, 2995, 2996

Implementation: Image Services for AIX/6000

The following AIX releases are supported for the 4.0 SP1 release of Image Services for AIX/6000:

AIX 5L Version 5.1

AIX 5L Version 5.2

Image Services can run with both the 32-bit and 64-bit versions of AIX. Oracle 9i requires a 64-bit version of AIX. Any server running Oracle requires the 64-bit version of the operating system. However, other servers, such as storage library servers, can run on either the 32-bit or 64-bit versions of the operating system.

The following maintenance levels have been tested with this release:

AIX 5.1 Maintenance Level 4 (AIX 5100-04)

AIX 5.1 Maintenance Level 5 (AIX 5100-05)

AIX 5.2 Maintenance Level 2 (AIX 5200-02)

For the most up-to-date information on maintenance level testing, refer to the specification for your Images Services release and operating system on the FileNet Customer Service & Support Web site: Product Tech Info > Image Manager > Image Services > Compatibility & Dependency.

HP-UX

RCIs: 2993

Implementation: Image Services for HP-UX

The following HP-UX release is supported for the 4.0 SP1 release of Image Services for HP-UX:

HP-UX 11i

Image Services can run with both the 32-bit and 64-bit versions of HP-UX 11i. Oracle 9i requires a 64-bit version of HP-UX. Any server running Oracle requires the 64-bit version of the operating system. However, other servers, such as storage library servers, can run on either the 32-bit or 64-bit versions of the operating system.

HP-UX 11.0 is no longer supported.

The following patch bundle has been tested with this release:

HP-UX 11i Patch Bundle September 2003

For the most up-to-date information on patch bundle testing, refer to the specification for your Images Services release and operating system on the FileNet Customer Service & Support Web site: Product Tech Info > Image Manager > Image Services > Compatibility & Dependency.

Solaris

RCIs: 2922, 2991, 2992

Implementation: Image Services for the Solaris Operating Environment

The following Solaris releases are supported for the 4.0 SP1 release of Image Services for the Solaris Operating Environment:

Solaris 8

Solaris 9

The following patch releases have been tested with this release:

Solaris 8 12/02

Solaris 8 05/03

Solaris 9 08/03

For the most up-to-date information on patch testing, refer to the specification for your Images Services release and operating system on the FileNet Customer Service & Support Web site: Product Tech Info > Image Manager > Image Services > Compatibility & Dependency.

Volume Managers for Solaris

RCIs: 2955

Implementation: Image Services for the Solaris Operating Environment

Image Services for the Solaris Operating Environment supports any version of the Veritas Volume Manager (VxVM) supported by Solaris 8 or Solaris 9.

Veritas Volume Manager 3.5 has now been qualified with an Image Services system running Solaris 8. Veritas Volume Manager 3.5 was previously qualified with Solaris 9.

Windows Server

RCIs: 2966

Implementation: Image Services for Windows Server

The following Windows releases are supported for the 4.0 SP1 release of Image Services for Windows Server:

- Windows 2000 Server
- Windows 2000 Advanced Server
- Windows 2000 Datacenter Server
- Windows Server 2003
- Windows Advanced Server 2003

Windows 2000 Service Pack 4 has been qualified.

Remote Administration Console

Remote Access for Administrative Applications

RCIs: 2809, 2837

SCRs: 173028 (DAM)
173725, 174714, 175073, 176078, 177981, 177982, 177983,
178093, 178094, 178100 (Database Maintenance)
173020, 173021, 174043, 174689 (Index Services)
178083, 179586, 180536, 180705, 180709, 180710
(InstallShield Multiplatform)
177291, 177293, 177294, 177295, 179567, 179568, 179569,
179570, 180686, 180706, 183922, 183923, 183924 (Localized
Files)
177195 (OS WAL)
174704, 175051, 176263, 177194 (OSAR Services)
178646, 178725 (Performance Analysis)
173705, 173706, 174729, 176079, 178097, 178098, 178101
(Security Administration Application)
171412, 171420, 171421, 173032, 173038, 178084 (Security
Services)
173688, 173707, 174728, 174730, 176077, 178215, 178216,
179581, 182771 (SystemV Application Executive)
172070, 175075, 177071, 177078, 177172, 178217 (SystemV
Miscellaneous)
174724, 175068, 175060 (XVT Portable Toolkit)

Implementation: Server changes apply to all platforms; Remote
Admin Console client software runs only on
Windows.

Previously, you performed administrative tasks only from the Image Services console for a particular domain.

The new Image Services Remote Admin Console (ISRAC) now allows you to perform certain Database Maintenance and Security functions from any remote Windows-based PC with access to your Image Services network.

For example, you could give help desk personnel the ISRAC capability to update user accounts and passwords but grant them no other Security or Database Maintenance permissions.

ISRAC is a client-only product, released separately from Image Services.

An ISRAC installation consists of the Applications Executive, Database Maintenance, and Security Administration software, packaged separately from the Image Services software and running on top of Image Services Toolkit on a remote desktop. The ISRAC software is customer-installable.

For additional information on the new ISRAC capabilities, refer to the *Remote Admin Console User's Guide* in the Product Documentation area of the FileNet CSS Web site. Installation instructions for the ISRAC client software are provided in a RAC_readme file on the ISRAC media.

Security

Allow Startup and Status Tools to Be Restricted to Local Server

RCIs: 2979

SCRs: 184347 (SystemV Applications Executive)

Implementation: All platforms

Previously, the Xtaskman, initfnsw, whatsup, and vl command line tools could be run on both the local server and on other remote Image Services domain servers. For the initfnsw, whatsup, and vl command tools, the -h option specifies the remote hostname. The [Connect] option allows Xtaskman access to a remote server.

You can continue using these tools as you have in the past or you can now restrict the tools to the local server by denying tool access to remote servers and/or refusing requests from remote servers.

To restrict the tools, Task Manager now provides an optional new Task Manager Configuration File, tm_config.txt, that supports one or both of the following entries:

restrict_outgoing - Disables the -h option for vl, initfnsw, and whatsup. Disables the [Connect] option for Xtaskman.

restrict_incoming - TM_daemon refuses to accept remote requests from other servers.

If the tm_config.txt file is not present, the unrestricted behavior is the default, making the system backward compatible with any existing backup scripts, operational procedures, etc.

The following programs have been modified to read the tm_config.txt file:

- vl
- whatsup
- initfnsw
- Xtaskman
- TM_daemon

The tm_config.txt file is located at:

/fnsw/local/sd/1/tm_config.txt (UNIX)

<drive:>\fnsw_loc\sd\1\tm_config.txt (Windows)

Miscellaneous Enhancements

Hot Fix Packs and Release Number Display

RCIs: 2928, 2984

SCRs: 178807, 178808, 178812, 178822, 178824, 178828, 179553,
179575, 179594, 179595, 179706, 179707, 180545, 180546,
180549, 180671, 180716, 180786 (InstallShield Multiplatform)
179592 (Server WAL Sample Apps)
178809 (System Configuration Tools)

Implementation: All platforms

In conjunction with the introduction of Hot Fix Packs (HFPs), the `fn_util whichfn` command now presents Image Services release numbers in a clearer, more consistent format.

HFPs are now provided for Image Services on a regular basis. These HFPs consist of cumulate fixes since the last full release or service pack. Each HFP passes standard tests and is easy to install. Refer to the readme file that is included on the HFP CD for additional information.

The `fn_util whichfn` command now displays the number of the HPF, if any, that is installed, along with the Image Services release and service pack. In addition, the `fn_util whichfn` output is now consistent between releases and platforms. The order of output is:

- Operating System release number
- Database release number
- Image Services release number

The Image Services release information now follows a standard format:

FileNet Image Services Release:

<major/minor release #> <Service Pack #> <Hot Fix Pack #>

Examples include:

4.0 GA

4.0 GA, Hot Fix Pack 3

4.0 GA, Service Pack 1

4.0 GA, Service Pack 1, Hot Fix Pack 2

Note that whichfn no longer lists the four-part release number. To see the four-part number, use the stamp program or native registry tools.

List of Enhancements by Subsystem

Enhancements by Subsystem

Refer to the following list for the RCIs that apply to each software subsystem of FileNet Image Services. Documentation and testing subsystems are not included.

Subsystem	RCI Number	Description
COLD 2.X (C2)	2983	Allow graceful shutdown of the COLD daemon.
DAM (DM)	2809	Provide remote access for administrative applications.
Database Maintenance (DB)	2809	Provide remote access for administrative applications.
Document Services (DS)	2944	Provide integrated support for retrievals from third-party repositories.
Help-Error (HE)	2944	Provide integrated support for retrievals from third-party repositories.
	2825	Provide media surface removal tools.
Index Services (IS)	2809	Provide remote access for administrative applications.
Installation Wizard (W8)	2837	Provide a remote administration installation tool.
InstallShield Multiplatform (MP)	2928	Create mechanism for releasing Image Services Hot Fix Packs.
	2809	Provide remote access for administrative applications.
	2837	Provide a remote administration installation tool.

List of Enhancements by Subsystem

Enhancements by Subsystem

Subsystem	RCI Number	Description
Localized Files (LF)	2809	Provide remote access for administrative applications.
	2825	Provide media surface removal tools.
	2944	Provide integrated support for retrievals from third-party repositories.
	3003	Support Plasmon M-Series 5.25 optical libraries on UNIX platforms.
OSAR Services (OS)	2809	Provide remote access for administrative applications.
	2825	Provide media surface removal tools.
	2944	Provide integrated support for retrievals from third-party repositories.
Performance Analysis (PA)	2809	Provide remote access for administrative applications.
Security Administration Application (XS)	2809	Provide remote access for administrative applications.
Security Services (SE)	2809	Provide remote access for administrative applications.
System Configuration Tools (SF)	2984	Provide a means to identify the Hot Fix Pack installed on an Image Services system.
	3003	Support Plasmon M-Series 5.25 optical libraries on UNIX platforms.
SystemV Applications Executive (EV)	2809	Provide remote access for administrative applications.
	2979	Limit the Image Services startup/status tools to the local server.

List of Enhancements by Subsystem

Enhancements by Subsystem

Subsystem	RCI Number	Description
SystemV Miscellaneous (MV)	2809	Provide remote access for administrative applications.
	2944	Provide integrated support for retrievals from third-party repositories.
XVT Portable Toolkit (XV)	2809	Provide remote access for administrative applications.

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