

IBM FileNet P8
Version 4.5.1

Release Notes



IBM FileNet P8
Version 4.5.1

Release Notes



Note

Before using this information and the product it supports, read the information in "Notices" on page 93.

Contents

Revision Log	7
Introduction	13
Access IBM FileNet documentation, compatibility matrices, and fix packs.....	13
Customer support	13
Feedback	13
What's New in 4.5.1	15
FileNet P8 Platform	15
FileNet Deployment Manager	15
Security	16
Content Engine Administration	16
Changed performance tuning parameter for Verity server configuration	16
Property template symbolic name global uniqueness change	16
New symbolic name naming convention	16
Content Engine	17
Language Support	18
Product support updates	18
Storage	18
Configuration Manager	19
FileNet Content Federation Services	19
FileNet Integration for Microsoft Office	20
BPM-based document review and approval	20
New Content Management features	20
FileNet P8 Documentation	21
FileNet P8 4.5.1.001 Documentation Refresh	21
FileNet P8 4.5.1 Documentation	23
IBM Enterprise Content Management Widgets	23
Business Space support	23
Documentation	23
New and changed widgets	24
Product support updates	25
IBM InfoSphere Enterprise Records	25
Language Support	26
IBM General Parallel File System (GPFS)	26
Support for GPFS is available with this release. GPFS provides the following features:.....	26
Process Analyzer	27
Process Designer	27
Process Engine	28
Language Support	28
Process Monitor	28
Rendition Engine	29
Development Tools	29
Content Engine Java and .NET APIs	29
Content Engine Web Service	34
Process Engine Web Services	34
Component Integrator	34
Process Engine REST Service	35
Additional Notices	36
Known limitations	37
Application Engine	37
Known Issues	37
Supplemental notices	37
Independent software vendor issues	40
IBM Enterprise Content Management Widgets	40
Firefox	40
JBoss	40

WebSphere	41
FileNet P8 Platform Installation, Uninstallation, and Upgrades.....	42
General Installation	42
Application Engine	42
Content Engine	42
Content Search Engine.....	45
Process Analyzer, Process Engine, Process Simulator	46
Process Engine.....	46
Workplace XT	46
Application Engine.....	47
Configuration Manager.....	48
Content Engine.....	49
Content Federation Services.....	51
Content Search Engine	51
FileNet Integration for Microsoft Office (FIMO)	52
FileNet Services for Lotus Quickr.....	52
IBM Enterprise Content Management Widgets.....	54
IBM InfoSphere Enterprise Records.....	55
Process Engine	60
Rendition Engine	60
Workplace.....	64
Workplace XT	64
Application Integration BCS.....	66
WebDAV	67
Internationalization	67
IBM FileNet Connector for SharePoint Web Parts 2.2.1 and 2.2.1.1	68
Development Tools.....	68
Content Engine Web Service.....	68
Content Engine Java and .NET API	69
Documentation	69
General Help	69
Plan and Prepare Guide	69
Application Engine	70
Content Engine	70
Content Federation Services	75
Content Search Engine.....	76
FileNet Integration for Microsoft Office (FIMO).....	77
IBM InfoSphere Enterprise Records.....	77
Image Viewer.....	79
Installation documentation	80
Process Analyzer.....	87
Process Engine.....	87
Rendition Engine.....	88
WebDAV	88
Workplace XT	89
Content Engine Java and .NET API Developer's Guide.....	89
Content Engine Web Service.....	90
Resolved Known Issues.....	91
Resolved in Application Engine fix pack 4.0.2.6-P8AE-FP001	91
Resolved in Workplace XT fix pack 1.1.4.3-WPXT-FP003	91
Resolved in Workplace XT fix pack 1.1.4.6-WPXT-FP006	91
Notices	93
Trademarks	94
U.S. Patents Disclosure.....	95

Revision Log

Date	Revision
15 July 2011	<ul style="list-style-type: none"> Adds or updates Known Issue defects for the following products: <ul style="list-style-type: none"> FileNet P8 Platform Installation, Uninstallation, and Upgrades: <ul style="list-style-type: none"> Content Engine: 839874 Content Search Engine: 957020 Process Engine: 958089 FileNet P8 Documentation: <ul style="list-style-type: none"> Content Engine: 962994 IBM Enterprise Records: 961854
26 May 2011	<ul style="list-style-type: none"> Adds or updates Known Issue defects for the following products: <ul style="list-style-type: none"> FileNet P8 Platform Installation, Uninstallation, and Upgrades: <ul style="list-style-type: none"> Content Engine: 920028, 940636 Workplace XT ApplInt BCS: 910498 Application Engine: 894998 Content Federation Services: 948064 Content Search Engine: 945086 IBM InfoSphere Enterprise Records: 938640, 945689 Rendition Engine: 839957 <i>Introductory statement edited</i> FileNet P8 Documentation: <ul style="list-style-type: none"> Plan and Prepare Guide: 941668, 945545 Content Engine: 934292, 942086, 943628, 947115, 956808 IBM InfoSphere Enterprise Records: 952163, 952177 Installation: 909464, 939790, 940597, 941633 Rendition Engine: 938044, 945334 Content Engine Java and .NET API Developers Guide: 939587, 951310 Content Engine Web Service: 939587, 949778
11/10/10	<ul style="list-style-type: none"> Adds a Known Limitation for Application Engine (906388) Adds or updates Known Issue defects for the following products: <ul style="list-style-type: none"> Independent Software Vendor Issues: <ul style="list-style-type: none"> WebSphere : 922764 FileNet P8 Platform Installation, Uninstallation, and Upgrades: <ul style="list-style-type: none"> Content Engine: 915126, 928336

	<ul style="list-style-type: none"> ▪ Content Search Engine: 935043 ▪ Workplace XT ApplInt BCS: 915540 ○ Content Engine: 848698, 906214, 906224, 929930, 931203 ○ IBM InfoSphere Enterprise Records: 914755, 937094 ○ Rendition Engine: 923069 ○ Workplace XT: <ul style="list-style-type: none"> ▪ ApplInt BCS: 915540 ○ FileNet P8 Documentation: <ul style="list-style-type: none"> ▪ General Help: 937571 ▪ Application Engine: 934281 ▪ Content Engine: 913640, 932705, 936519, 936684 ▪ Installation: 904515, 930555 ▪ Process Analyzer: 915450 ▪ Process Engine: 913635 ▪ Workplace XT: 896691 ▪ Content Engine Java and .NET API Developers Guide: 929436
09/15/10	<ul style="list-style-type: none"> • Adds or updates Known Issue defects for the following products: <ul style="list-style-type: none"> ○ Supplemental Notices: 925663 ○ Independent Software Vendor Issues: <ul style="list-style-type: none"> ▪ JBoss : 919070 ○ FileNet P8 Platform Installation, Uninstallation, and Upgrades: <ul style="list-style-type: none"> ▪ Content Engine: 895619 (<i>update</i>), 906485 ○ IBM InfoSphere Enterprise Records: 910094 ○ Workplace XT: 849654 (<i>update</i>) ○ FileNet P8 Documentation: <ul style="list-style-type: none"> ▪ Content Engine: 889862, 906453 ▪ IBM InfoSphere Enterprise Records: 857023, 907722 ▪ FIMO: 914360 ▪ Image Viewer: 896378 (<i>update</i>) ▪ Installation: 894647 • Updates Known Issues and Release Notes links associated with FileNet Services for Lotus Quickr release 1.1 fix pack 1.0.
07/27/10	<ul style="list-style-type: none"> • Adds or updates Known Issue defects for the following products: <ul style="list-style-type: none"> ○ FileNet P8 Platform Installation, Uninstallation, and Upgrades: <ul style="list-style-type: none"> ▪ Application Engine: 898988

	<ul style="list-style-type: none"> ▪ Content Search Engine: 907249 ○ Content Engine: 906221 ○ FIMO: 896527 ○ IBM InfoSphere Enterprise Records: 898398 ○ Rendition Engine: 910348 ○ Workplace XT: 908502 ○ FileNet P8 Documentation: <ul style="list-style-type: none"> ▪ Help system and Search functionality: 906895 ▪ Content Federation Services: 916117 ▪ Content Engine: 915771 ▪ Installation: 899839, 916117
06/15/10	<ul style="list-style-type: none"> • Adds edits to 'What's New in 4.5.1' > Support for IBM General Parallel File System (GPFS) • Adds update to 'What's New in 4.5.1' > Documentation > Customer-installable information center • Adds or updates Known Issue defects for the following products: <ul style="list-style-type: none"> ○ FileNet P8 Platform Installation, Uninstallation, and Upgrades: <ul style="list-style-type: none"> ▪ Content Engine: 895619 ○ Configuration Manager: 839939 ○ IBM InfoSphere Enterprise Records: 860876 ○ Workplace XT: 846888, 849654 <ul style="list-style-type: none"> ▪ ApplInt BCS: 860822 ○ FileNet P8 Documentation: <ul style="list-style-type: none"> ▪ Image Viewer: 896378 ▪ Content Engine: 901676, 902378 ▪ Content Search Engine: 901072, 901099 ▪ IBM InfoSphere Enterprise Records: 898247, 904256 ▪ Installation: NA, 895567, 896273, 906382 (all regarding Plan and Prepare Guide) ▪ WebDAV: 802978
04/30/10	<ul style="list-style-type: none"> • Adds 'What's New' in 4.5.1 documentation updates • Adds edits to 'What's New in 4.5.1' > Development Tools > Component Integrator entries • Adds or updates Known Issue defects for the following products: <ul style="list-style-type: none"> ○ FileNet P8 Platform Installation, Uninstallation, and Upgrades: <ul style="list-style-type: none"> ▪ Content Engine: 892491, 895033, 867297

	<ul style="list-style-type: none"> ○ FileNet Services for Lotus Quickr: 828000 ○ IBM FileNet Connector for SharePoint Document Libraries 2.2.1 and 2.2.1.1: 890246 ○ FileNet P8 Documentation: <ul style="list-style-type: none"> ▪ Content Engine: 891990, 893107, 893239, 893360, 894146, 894354, 894401 ▪ IBM InfoSphere Enterprise Records: 894875 ▪ Installation – Plan and Prepare Guide: 893738, 894649 ▪ Content Engine Java and .NET API Developer's Guide: 893523
03/26/10	<ul style="list-style-type: none"> • Adds 'What's New' in 4.5.1 documentation updates • Adds or updates Known Issue defects for the following products: <ul style="list-style-type: none"> ○ Independent Software Vendor Issues: JBoss : 892807, 892396 ○ FileNet P8 Platform Installation, Uninstallation, and Upgrades: <ul style="list-style-type: none"> ▪ <i>Content Engine:</i> 893033 ▪ <i>Workplace XT:</i> 893270, 893305 ○ IBM InfoSphere Enterprise Records: 844677, 860223, 860467, 860468, 867184, 889070 ○ Workplace: 852386 ○ Workplace XT: <ul style="list-style-type: none"> ▪ Applnt BCS: 853933 (<i>update</i>), 893300 ○ FileNet P8 Documentation: <ul style="list-style-type: none"> ▪ Workplace XT: 849682 ▪ WebDAV: 862062, 862064
02/19/10	<ul style="list-style-type: none"> • Adds FileNet Integration for Microsoft Office (FIMO) 'What's New' section • Adds 'Adds a Process Engine entry (regarding configuration of an NCH server in the /etc/hosts file) to the 'What's New' section • Adds or updates Known Issue defects for the following products: <ul style="list-style-type: none"> ○ Independent Software Vendor Issues: WebSphere: 857756 ○ FileNet P8 Platform Installation, Uninstallation, and Upgrades: <ul style="list-style-type: none"> ▪ <i>Content Engine:</i> 865695 ▪ <i>Workplace XT:</i> 833280, 856004, 848664 ○ Application Engine: 856019, 851714 ○ Content Engine: 853456, 853401 ○ FIMO: 846220, 861949, 862597 ○ Workplace: 799462, 802838, 828344

	<ul style="list-style-type: none"> ○ Workplace XT: 799462, 828344, 851714, 860835 <ul style="list-style-type: none"> ▪ ApplInt BCS: 853933 ○ WebDAV: 840608 ○ Internationalization: 835374 ○ Development Tools: <ul style="list-style-type: none"> ▪ Content Engine Web Services: 860728 ▪ Content Engine Java and .NET API: 860728 ○ FileNet P8 Documentation: <ul style="list-style-type: none"> ▪ Application Engine: 849682 ▪ Installation: 852145 ▪ Content Engine Java and .NET API Developer's Guide: 866148
10/09/09	<ul style="list-style-type: none"> • Adds IBM InfoSphere Enterprise Records 'What's New' section • Adds or updates Known Issue defects for the following products: <ul style="list-style-type: none"> ○ Independent Software Vendor Issues: JBoss: 832513, 833571 ○ Installation: 837257 ○ Application Engine: 846924 ○ IBM InfoSphere Enterprise Records: 836350, 837288, 844857, 844677, 844747, 844860, 846730 ○ Rendition Engine: 839957 (<i>includes 15 Known Issues</i>) ○ Workplace XT: 780538, 759915, 825425, 844804 <ul style="list-style-type: none"> ▪ Application Integration BCS: 845953 ○ Internationalization: 837257 ○ FileNet P8 Documentation: <ul style="list-style-type: none"> ▪ Content Federation Services: 843855, 845908 ▪ Installation: 843106, 843113, 843857, 844631
08/28/09	<ul style="list-style-type: none"> • Initial release, which provides 'What's New' section for all 4.5.1 products • Adds or updates Known Issue defects for the following products: <ul style="list-style-type: none"> ○ Independent Software Vendors: <ul style="list-style-type: none"> ▪ IBM Enterprise Content Management Widgets, Firefox: 816901, 823727 ○ FileNet P8 Platform Installation, Uninstallation, and Upgrades: <ul style="list-style-type: none"> ▪ Process Analyzer, Process Engine, Process Simulator: 825106 ○ Application Engine: 838620 ○ Content Engine: 830462, 837762 ○ FileNet Services for Lotus Quickr: 767882, 775463, 779920, 780139, 783889, 784386, 785114, 785318, 786243, 787126, 791334

	<ul style="list-style-type: none">○ IBM Enterprise Content Management Widgets: <i>812830, 817232</i>○ Process Engine: <i>820379</i>○ FileNet P8 Documentation:<ul style="list-style-type: none">▪ General Help: <i>837274</i>▪ Content Engine: <i>831449</i>
--	--

Introduction

This document provides release information about IBM® FileNet® P8 4.5.1 and has the following major topics:

- **What's new** – Describes new features.
- **Known issues** – Lists and describes known product and documentation issues.

This document includes information about the following IBM FileNet P8 components:

- Content Engine 4.5.1
- Content Search Engine 4.5.1
- FileNet Content Federation Services 4.5.1
- FileNet Integration for Microsoft® Office (FIMO)
- FileNet P8 Documentation 4.5.1
- IBM Enterprise Content Management Widgets 4.5.1
- IBM FileNet Process Monitor 4.5.1 (previously known as Business Activity Monitor)
- IBM InfoSphere Enterprise Records 4.5.1 (previously known as IBM FileNet Records Manager)
- Process Analyzer 4.5.1
- Process Designer 4.5.1
- Process Engine 4.5.1
- Process Simulator 4.5.1
- Rendition Engine 4.5.1

Access IBM FileNet documentation, compatibility matrices, and fix packs

To access documentation, compatibility matrices, and fix packs for IBM FileNet products:

1. Navigate to the Product Documentation for FileNet P8 Platform support page.

(<http://www-1.ibm.com/support/docview.wss?rs=3247&uid=swg27010422>).

2. Select a PDF or a Doc Link, whichever is appropriate.

Customer support

For information about contacting customer support:

3. Navigate to the FileNet Product Family support page:

(<http://www-01.ibm.com/software/data/content-management/filenet-product-family/support.html>).

4. Click **IBM FileNet Support Communications**, or search for a particular support topic under “Enter search terms”.

Feedback

Your feedback helps us to provide quality information. Send your comments about this publication or any other IBM FileNet documentation by e-mail to comments@us.ibm.com. Be sure to include the name of the product, the version number of the product, and the name and part number of the book (if applicable).

If you are commenting on specific text, include the location of the text (for example, a chapter and section title, a table number, a page number, or a help topic title).

What's New in 4.5.1

This section lists the new and improved features contained in this release.

FileNet P8 Platform

FileNet Deployment Manager

IBM FileNet Deployment Manager has been refined and expanded. New facilities include:

- **Export** The export operation allows you to export assets from a Content Engine repository using the Deployment Manager.
- **Import** The import operation allows you to import assets to a Content Engine repository using the Deployment Manager.
 - **Update** The Deployment Manager import operation provides support to update existing objects in a destination object store. Object types available for update include documents, folders, custom objects, choice lists, class definitions, and property templates.
 - **Scripting** You can incorporate Java®Script scripts into the import process to perform custom operations before the import begins, before and after an object is saved to the server's object store, and after the import has completed.
- **Pre-Import Analysis**

The analysis facility enables you to validate and analyze data exported from Content Engine and Process Engine prior to importing this data into the destination environment. This function does not perform an import operation, nor does it modify any data.

 - **Error Checking** The data is validated for potential import errors, flagging the most common issues typical to an export/import transaction.
 - **Change Impact** The data is analyzed for potential change impacts on the destination environment.
 - **Reporting** The Analysis facility generates a report describing the results of the validation and analysis. You can display the data in summary or detailed reports.
- **Service mapping** Service mapping has been added to the Deployment Manager data mapping facility. Exported Content Engine and Process Engine services can now be mapped from the source to the destination environment, and imported into the destination environment.
- **FIPS 140-ready mode** Support for the Federal Information Processing Standards (FIPS) 140-2 standard has been added, placing restrictions on how passwords are handled by FileNet Deployment Manager. With this feature enabled, the application obfuscates passwords and caches them in memory until you end the Deployment Manager session; it does not record passwords to files.
- **Deploy dataset** To make it easier to distinguish between exported data and converted data, a "deploy dataset" paradigm is introduced. A deploy dataset can consist of data exported from a source environment, or of exported data that has been converted for import to a destination environment. Each type of deploy dataset is stored in its own separate folder structure for easy identification. In the previous release, exported data and converted data were not as distinguishable, requiring more effort by users to keep track of exported data and converted data locations.
- **Enhanced Process Engine Facilities** The following Deployment Manager facilities have been enhanced:
 - **Principal mapping** Exported Process Engine principals can now be included in principal maps for import into the destination environment.

- **Conversion** Exported Process Engine configuration data can now be converted for import into the destination environment.
- **Support of workflow subscriptions** With the new export and import operations in Deployment Manager, you can now deploy workflow subscriptions to a destination environment, although you must manually update the identifier of the workflow launched by the subscription.

Security

- **Support for e-mail or UPN for logins** You can now assign the directory server's e-mail attribute or, for Active Directory, the userPrincipalName (UPN) to be the user short name used for login. The security help contains a how-to procedure that explains all the steps. This support is only for new installations and not for existing installations.
- **Oracle® Internet Directory** You can configure FileNet P8 to use Oracle Internet Directory as its directory server.
- **Master Key encrypter** Content Engine now automatically generates the Master Key that is used to encrypt all persisted passwords. In previous releases, users would provide a phrase during Content Engine installation that would be used to generate the Master Key.
- **Kerberos** Kerberos documentation has been enhanced with more problem solving information. For more information, see [IBM FileNet P8 Documentation > System Administration > Security > Web-Services-based client authentication via Ws-Security](#).

Content Engine Administration

Changed performance tuning parameter for Verity server configuration

The ThreadCount property specifies the number of threads used for background processing of content-based retrieval indexing requests. In previous releases, the ThreadCount property value you specified was on a per object store basis. Setting the value to N caused the allocation of a number of running threads equal to N times the number of object stores. The parameter now specifies the thread count on a per index area per object store basis. Setting the ThreadCount value to N causes the allocation of a number of running threads equal to N times the number of index areas times the number of object stores being processed for content-based retrieval by that particular Content Engine server. Set this parameter from the FileNet P8 domain properties Verity Server tab in Enterprise Manager.

Property template symbolic name global uniqueness change

The symbolic name of a property template must be unique within a class family only. Previously, the symbolic name of a property template was unique to an object store. For more information, see [IBM FileNet P8 Documentation > System Administration > Content Engine Administration > Properties > How to... > Create a Property Template](#).

New symbolic name naming convention

A metadata prefix-naming convention for property and class symbolic names has been defined for the Content Engine. All new properties and classes introduced in this release or later, by any IBM Enterprise Content Manager product that produces its own Content Engine feature AddOn, or by new system properties in the Content Engine server, are required to adhere to this naming convention. Note that this naming convention applies to property and class symbolic name values only; there are no constraints on the values chosen for display names.

Details of the prefix-naming convention are given in the following examples:

- A prefix of "Cm" is used for the symbolic name of any new Content Engine class or system property of a user-extensible class introduced in this release. For example, "CmNewProperty".
- All new system classes follow the naming convention, whether they are user extensible or not.

- The "Cm" prefix is also used for any new properties or classes introduced in Content Engine feature AddOns. However, the DITA feature AddOn will continue to use the "Dita" prefix instead of "Cm"

Any IBM Enterprise Content Manager product that produces its own feature AddOn will also conform to a prefix-naming convention. These feature AddOns will use a prefix of "Cm???", in which "???" represents a short product-name abbreviation. However, any IBM ECM products that have already established their own prefix-naming convention prior to this release will continue to use their established naming convention.

The AddOn metadata prefixes in the following list are reserved:

- "Cm": reserved by Content Engine
- "Dita": reserved by Content Engine for the FileNet P8 DITA AddOn
- "RM": reserved by FileNet Records Manager (now IBM InfoSphere Enterprise Records)
- "EDM": reserved by IBM eDiscovery Manager
- "EDISC_": reserved by IBM eDiscovery Manager
- "ICC": reserved by IBM Content Collector

When you create a new custom property or class, avoid assigning its symbolic name with a value beginning with one of these reserved prefixes, to avoid encountering name collisions in this release or any future upgrades. For more information, see [IBM FileNet P8 Documentation > System Administration > Content Engine Administration > Properties > How to... > Create a Property Template](#).

Content Engine

- **Support for Oracle Internet Directory** For more information about configuring the Oracle Internet Directory properties, see [IBM FileNet P8 Documentation > System Administration > Content Engine Administration > FileNet P8 Domain > How to... > View and modify FileNet domain properties > Directory configuration properties \(User tab\)](#).
- **Support for native EMC Centera logging** This release adds the following new attributes for enabling and configuring the native logging performed by the EMC Centera® fixed content device:
 - Centera Logging Enabled
 - Centera Logging Configuration File

For more information about these properties, see [IBM FileNet P8 Documentation > Content Engine Administration > FileNet P8 Domain > How To... > View and modify FileNet domain properties > Fixed Content Devices properties \(General tab\)](#).

- **Support for directory server failover (Microsoft Active Directory only)** A failover list includes one or more directory servers specified in preference order (with each server other than the first considered an alternate for the preceding one.) Content Engine attempts to connect to an alternate directory server when the connection attempt with a preferred directory server fails. The directory server provider for the listed servers must be Microsoft Active Directory. The following properties permit a failover list to be specified:
 - **Host** (existing property)
 - **Global Catalog Host** (new property)

For more information, see [IBM FileNet P8 Documentation > Content Engine Administration > FileNet P8 Domain > How To... > Configure directory server failover \(Microsoft Active Directory\)](#)

- **Support for Verity collection partitions** The capability to partition Verity (also known as Autonomy) collections by date has been added, allowing high-volume indexing of date-sensitive documents, such

as e-mail messages archived in a Content Engine repository. For documents in which a date-based property is a primary identifier, collection partitioning reduces the number of collections that need to be searched, thus reducing query retrieval time.

For more information about configuring partitioning in Enterprise Manager, see [IBM FileNet P8 Documentation > System Administration > Content Engine Administration > Content-based retrieval > Verify collection partitions](#).

Language Support

- Turkish and Hungarian translations are available for this release.

Product support updates

With this release, the following products are supported:

- SUSE 11
- DB2 LUW 9.7
- JBoss 5.0.1
- Oracle Internet Directory 10.1
- Tivoli® Access Manager 6.1
- Tivoli Directory Server 6.2
- Tivoli Storage Manager 6.1
- JRE 1.6
- HP/UX Itanium (new to Content Search Engine)

Storage

- **Storage area cleanup task errors** The storage area cleanup task could encounter out-of-memory errors when it checks the inbound directory for abandoned files in file storage areas and fixed storage areas that were created prior to this release. These errors result from too many files in the inbound directory. Storage areas created in this release do not encounter this error because the inbound directory now has multiple subdirectories, thus decreasing the number of files per directory.
- **Support for single-instance storage** The capability has been added to filter out incoming content that already exists in a Content Engine repository. The single-instance storage feature is especially useful for high-volume content ingestion, such as when archiving e-mails to a Content Engine repository.

For more information about configuring single-instance storage in Enterprise Manager, see [IBM FileNet P8 Documentation > System Administration > Content Engine Administration > Content storage > Storage areas > How to > Suppress duplicate content elements](#).

- **Support for Tivoli Storage Manager tape drive** The Content Engine now supports writing and retrieving content that can be stored on a tape drive in a Tivoli Storage Manager server. As a result, a new property, `TSMConcurrentTapeReaders`, has been added to the `TivoliFixedContentDevice` interface to allow you to control the number of concurrent users that are allowed to wait for a tape to be mounted. For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Reference > Properties by Class > TivoliFixedContentDevice Properties](#).

Configuration Manager

- **Integrated Help Documentation** Configuration Manager provides access to two kinds of Help. When you first open Configuration Manager, you see the Welcome Help that introduces the basic features. You can open the Welcome Help and the online Help from the Help menu.
- **Enhanced Profiles** Configuration Manager now supports enhanced profiles for simplifying the configuration process. For example, a single profile contains all of the information needed to set up multiple data sources for the Global Configuration Database and multiple object stores. Profiles can now be re-used during upgrades, so that most of the information is supplied with the user profile.
- **Flexible Task Lists** Configuration Manager now allows appropriate tasks to be added and removed as well as allowing renaming and re-ordering of tasks to suit your needs. For tasks like configuring JDBC data sources, where much of the basic data is the same, tasks can be copied to minimize redundant data entry.
- **Improved Hover Help** Configuration Manager provides hover help when you hover the mouse over a field name. For this release, the tool tips have been revised to provide more information and to make it more context-specific. Rather than providing general help for the property, the text provided by Configuration Manager's tool tips can change depending on your choice of application server, database provider, LDAP provider and the host operating system.
- **Improved Task Validation** Configuration Manager provides new ways to make sure that Task data is valid and ready for execution. In addition to the new field validation (making sure that only legal values can be entered for properties), Configuration Manager adds a "test" button to many tasks that interacts with your application server to verify that the task data is correct. For example, after entering various connection information for the application (user name, password, server name, port number, etc.), you can use the "Test Connection" button to ensure that connection to the application server works.
- **Improved Upgrade Wizard** Configuration Manager uses information available from your current installation to determine the best (and shortest) path through its Upgrade wizard. The wizard adjusts itself based on the type of installation and your current Content Engine release level.
- **User Preferences** You can quickly customize your Configuration Manager experience by changing your user preferences. The user preferences control how passwords are saved and which warning messages to skip.
- **Configuration Manager password preference** You can set a Configuration Manager Preference to save all passwords to a file when saving a task or profile.

FileNet Content Federation Services

- **FileNet P8 to FileNet P8 federation lockdown of source content** Content Federation Services 4.5.1 introduces new functionality that locks content in source FileNet P8 repositories so that federated documents from other FileNet P8 systems can be declared as records by IBM FileNet Records Manager (now known as IBM InfoSphere Enterprise Records with the 4.5.1 release).
- **Auto-upgrade from Content Federation Services 4.0.0 and 4.5.0 to 4.5.1** The Content Federation Services installer detects a pre-existing 4.0.0 or 4.5.0 installation and automatically upgrades, instead of performing a new installation. You can upgrade from 4.0.0 or 4.5.0 (any fix pack level). In order to perform the upgrade, you must run the full installer on top of your existing CFS 4.0.0 or CFS 4.5.0 environment.
- **IBM Support Assistant (ISA) (Phase 2)**
The IBM Support Assistant is a free local software serviceability workbench that helps clients resolve questions and problems with IBM software products.
 - Includes a "must gather" script to improve trace log retrieval capabilities
 - Supports both Workbench and the ISA Lite tool

- Tech notes are available on the IBM support site:
 - MustGather: FileNet Content Federation Services (CFS)
<http://www-01.ibm.com/support/docview.wss?rs=0&uid=swg21321304>
 - Download the IBM Support Assistant Lite for Content Federation Services
<http://www-01.ibm.com/support/docview.wss?rs=0&uid=swg24023880>
 - IBM Support Assistant Lite for Content Federation Services Quick Start Guide
<http://www-01.ibm.com/support/docview.wss?rs=0&uid=swg27016383>
- Federal Information Processing Standard (FIPS 140-2) support for Content Federation Services
- Support for IBM Content Integrator 8.5.1

FileNet Integration for Microsoft Office

BPM-based document review and approval

- **Ribbon Bar review process** Start a document review process and process tasks using the new Process command group on the Ribbon Bar. In addition, you can start a process using the Start process menu option.
- **Document approval** Start and process document approvals from within an integrated Microsoft Office 2007 application, such as Word, Excel, PowerPoint and Outlook.
- **Review and collaborate on documents** With BPM-based document approval processes, you can use process tasks to reject or approve a document, provide comments on a document, and respond to comments about a document.
- **Document review process patterns** Documents are reviewed using one of two process patterns:
 - Sequential - review documents in a sequential order based on a defined reviewer list.
 - Parallel – review documents at the same time based on a defined reviewer list.
- **Define process behavior** You can define process behavior by selecting process pattern and defining the reviewer list, instructions, deadlines, and rejecting processes.
- **Review a running history of a process** History includes the state the task is in, the date the task was processed, reviewers who processed the task and reviewers' responses and comments.
- **Process document Task command** Process document approval tasks using the new Task command by viewing a list of approval tasks. You can select to open and process tasks from a task list view.
- **Task processing** Automatically process consecutive tasks after completing a previous task.

New Content Management features

Security

- Modify security assigned to FileNet P8 folders and documents from within an integrated Office 2007 application.
- Assign or modify security when adding or checking in documents.
- Use security policies when adding or checking in documents.

Properties

- Modify FileNet P8 folder and document properties from the Details view without having to open the document.

- Modify marking sets.
- Change the folder class.
- View and change document lifecycle states.

General user interface

- **Prompt for open documents** Provides a new prompt to inform users to check in any checked out documents that are still open when they close an Office 2007 application window or shut down an Office 2007 application.
- **Hyperlink insertion references** Insert references to FileNet P8 documents as hyperlinks in an opened document. Access the Insert link to document option from a menu.
- **Polish language support** Support for a Polish language version as part of the Multilingual Language Pack offering.

FileNet P8 Documentation

FileNet P8 4.5.1.001 Documentation Refresh

The IBM FileNet P8 4.5.1.001 documentation refresh includes edits for consistency and accuracy, as well as technical changes that have resulted from documentation defects.

FileNet P8 Version 4.5.1 English-only local information center

With this documentation update, you can install a local FileNet P8 information center instead of the local documentation server that uses the ecm_help format. The local information center is functionally identical to the FileNet P8 information center on ibm.com, but does not contain any non-English translations.

The local information center has the following advantages over the local documentation server:

- You can print sections of the documentation tree.
- You can filter the FileNet P8 platform installation documentation by component, database, and application server.
- You can view translated content in different national languages based on your browser language setting.
- You can orient yourself in the information center through the use of breadcrumb trails and table of contents synchronization.
- You can customize the search scope options to improve search results.

To install the documentation as a local information center, follow the download and installation instructions in the download document at <http://www.ibm.com/support/docview.wss?uid=swg24025610> or in "[Installing the local information center](#)" in the IBM FileNet P8 Version 4.5.1 information center.

P8 Platform Installation Documentation

This section includes changes available with the March, 2010 documentation refresh.

All significant technical changes are marked in the planning and installation documentation as follows:

- In the PDF versions of the documentation, changed sections are marked in the left margin with a dashed line.
- In the HTML information center version of the documentation, changes are marked at the beginning and end of each changed section with blue carets.

In addition to technical updates, the FileNet P8 Platform installation documentation contains the following significant changes:

- The *FileNet P8 Platform Installation and Upgrade* documentation now includes topics and tasks for the newly introduced Content Engine Web Upgrade Tool to simplify upgrades from versions 3.5.2 to version 4.5.1.
- The *Plan and Prepare Your Environment for IBM FileNet P8* documentation now includes a topic on what issues to consider if you are upgrading a version 3.5.2 FileNet P8 domain into a nonempty version 4.5.1 FileNet P8 domain.
- The topic “Setting the statement cache size value for the GCD database” has been removed from the *FileNet P8 Platform Installation and Upgrade* documentation.
- The *FileNet P8 Platform Installation and Upgrade* documentation now includes a Troubleshooting section.
- The information center provides new, separate installation documentation for the FileNet Integration for Microsoft Office product.

Changes to the *Installation and Upgrade Worksheet* are not marked in the worksheet itself. These changes include a number of edits for accuracy, completeness of coverage, and the order of the component entries. Also, the following major components have been added:

- IBM ECM Widgets
- FileNet Integration for Microsoft Office
- Infosphere Enterprise Records (formerly FileNet Records Manager)
- IBM FileNet Business Process Framework
- Content Engine Web Upgrade tool

P8 Platform Help

- **Updated procedures for setting up Content Engine Java and .NET API client development environments** Procedures for setting up thin and thick client development environments have been updated to provide additional information. In particular, the procedure for configuring a thin client using the EJB transport, which previously directed you to the *IBM FileNet Workplace XT Installation and Upgrade Guide* for instructions, is now a standalone procedure. Also note that these procedures have been moved from the **Getting Started > Concepts** section of the *IBM FileNet Content Engine Java and .NET API Developer's Guide* to the **Getting Started > Procedures** section of the guide. For more information, see **IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Getting Started > Procedures**. Select the “Setting Up ...” topic that reflects your client environment and transport protocol choice.
- **New procedures for setting up Content Engine Java and .NET API IDE projects** Procedures for how to set up IDE projects for client application development have been added to the **Getting Started > Procedures** section of the *IBM FileNet Content Engine Java and .NET API Developer's Guide*. Samples are provided for the Eclipse IDE and the Microsoft® Visual Studio IDE and address development environments on all of the supported application servers. For more information, see **IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Getting Started > Procedures > Sample IDE Setups**.
- **Business Process Manager and Content Manager documentation updates** Documentation for the IBM FileNet Business Process Manager and Content Manager products is now available in accessible formats. Documentation is available in an accessible Eclipse information center in HTML format. The HTML format allows users to view documentation according to the display preferences set in their browsers. It also allows the use of screen readers and other assistive technologies. For information on accessibility practices at IBM, see the IBM Human Ability and Accessibility Center (<http://www.ibm.com/able/index.html>).

FileNet P8 4.5.1 Documentation

- **Documents available in an IBM hosted information center** The full set of IBM FileNet P8 documentation is available for the first time in an ibm.com-hosted information center. This information center is accessible from anywhere on the internet without the need to provide IBM credentials, and is Google searchable and offers improved accessibility. To access the information center, follow this link: <http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/index.jsp>.
- **Customized installation documentation** Installation documentation is now being released as 18 customized PDFs based on customer configurations. These customized PDFs are significantly shorter and more streamlined than the full documents. However, the customized PDF documentation might not describe every possible installation scenario. Find these customized PDFs along with the standard set of installation documentation from the IBM FileNet P8 documentation page on the FileNet Content Manager Support page or by following this link: <http://www.ibm.com/support/docview.wss?rs=3278&uid=swg27016206>.
- **The Installation and Upgrade Worksheet has been improved in several ways.**
 - The customization macro now lets you add more than one object store to the customized worksheet.
 - The customized worksheet has a button that hides most of the columns, permitting easier use during the installation phase.
 - Most worksheet rows contain an ordering number so that, after running the customization macro, they display in the same order of appearance as the FileNet P8 installation programs that they describe. Due to this and to improved descriptions in the worksheet's Description column, the Installation or Upgrade Information Center no longer contains "screen tables" that describe every panel of the installation programs it describes.
 - For some of its properties, the worksheet provides a hyperlink that you can click to run a query against the Information Center which will display a list of results.

Language Support

- Turkish translation is available for this release.

IBM Enterprise Content Management Widgets

Business Space support

With Release 4.5.1, IBM ECM Widgets is deployed on Business Space powered by WebSphere. IBM ECM Widgets includes Business Space, or you can deploy IBM ECM Widgets into an existing deployment of Business Space installed by the IBM WebSphere Business Process Management suite of products.

Business Space provides the following new features:

- Logical grouping of multiple mashup pages into business applications (business spaces)
- Intuitive tabbed interface allowing quick access to related pages
- Business Space themes

IBM ECM Widgets 4.5.1 is no longer deployed on IBM Mashup Center Lotus Mashups. Because of this change, you cannot upgrade from ECM Widgets 4.5.0 to ECM Widgets 4.5.1. Instead, ECM Widgets 4.5.1 is a new installation.

Documentation

The ECM Widgets 4.5.1 documentation replaces the previous ECM Widgets 4.5.0 documentation. The online help, developer's guide, and installation guide are written to support ECM Widgets deployed into Business Space.

While not recommended, if you want to install the ECM Widgets 4.5.0 and 4.5.1 documentation, you must do so on separate documentation servers.

New and changed widgets

ECM Widgets 4.5.1 includes the following new widgets

- **ECM Content List** The Content List widget shows a list of documents retrieved from a search executed against the Content Engine. You view the documents and their properties, and download them. You can also dynamically specify search values using iWidget events.
- **ECM Work Data eForm** The Work Data eForm widget displays a P8 HTML eForm for entering data in a new work item that you launch, or for modifying data on an existing work item that is assigned to you. The Work Data eForm widget is a Step Processor widget used on a step processor page.
- **Open Web Page** Open Web Page is an action selected from the Toolbar Action menu. This action opens a configured Web page in a separate browser window. The window is modal; that is, you cannot work in the main window until you close the second browser window.

In ECM Widgets 4.5.1, the following widget was removed

- **ECM Settings** The ECM Settings widget is no longer required. Instead, you use the In-basket widget to configure the Process Engine Application Space.

New ECM Widgets features and changed behaviors

- **Installation and Configuration** In this release, you install into an existing WebSphere Application Server. A new Configuration Manager tool simplifies configuration and deployment into WebSphere Application Server.
- **Keep Alive** The keep-alive interval setting determines the interval between HTTP keep-alive signals sent from ECM Widgets to the application server. While you are working on ECM Widgets, a signal is sent at regular intervals to the server to maintain your session connection so that you do not need to log in to the application again.
- **Single Page Support** One approach for displaying the step user interface is as a “single page.” With this approach, the In-basket widget and Step processor widgets are located on the same page. This is useful if all work items in the in-basket can be represented with the same user interface/widget layout, and there is sufficient screen space on the screen to show both the In-basket and Step processor widgets.
- **Toolbar widget** The role selector was removed. Instead of selecting a role, a new business space or new business space tab is created to represent the role. In addition, a new user interface for configuring the toolbar actions is provided.
- **In-basket widget** The In-basket widget can be configured to show the in-baskets associated with a role.
- **Attachment widget** You can configure the attachment widget to automatically display an attachment in the Viewer widget.
- **Create Work Item widget** The widget has been re-named Launch Process.
- **Create Action widget** The widget has been re-named Launch Process (eForm).

Previously, the Create Work Item and Create Action widgets were placed on the page and manually wired to the Toolbar widget. In this release, you configure menu actions using the Toolbar configuration panel and do not need to drag the widgets onto the page.

Product support updates

With ECM Widgets 4.5.1, the following changes were made:

- Internet Explorer 6 is no longer supported.
- Firefox 3 support was added.
- P8 Platform 4.5.1 is required; P8 Platform 4.5 is not supported.

IBM InfoSphere Enterprise Records

IBM InfoSphere Enterprise Records is the new name for IBM FileNet Records Manager; you might see both names in this document as we transition to the new name.

- **Performance Enhancements** Improvements have been made in performance and scalability to support up to 20 million daily record transactions - 10 million record declarations and 10 million disposals. This high level of transactions calls for careful and judicious planning. IBM System Capacity Planning Tool (SCOUT) is used to determine the optimal system configuration for supporting large volumes of records and users. Additionally, consultation with IBM technical and engineering resources may also be necessary to ensure the proper infrastructure and configuration settings are addressed. The *IBM InfoSphere Enterprise Records 4.5.1 Performance Best Practices* document and the *IBM FileNet Performance Tuning Guide* (versions 4.0 and 4.5) should also be reviewed.
- **User Experience Improvements**
 - Improves the consistency and integrity of searching with options to support presenting and sorting of larger result sets.
 - Bulk operations have been extended by adding the capability to execute record actions on large groups of records.
 - Provides flexibility and options to manage volumes.
 - Enhances Hold Management by providing options to more precisely refine searching and filtering of records that are on hold.
 - Provides additional documentation and schema details for creating custom reports.
 - Provides additional descriptive text to installation screens.
- **File Plan Management**
 - Extends File Plan options to allow you to further customize Volumes with renaming and exception processing of closed volumes.
 - The action of copying an electronic record has been enhanced so a second copy of the source document is added to the same folder as the original, with the name appended.
- **Customization and Integration Support**
 - Provides physical to electronic records conversion infrastructure, enabling customers and partners to build custom solutions to facilitate conversion processes. This infrastructure supports the simultaneous management of both physical and electronic representations of the same objects that may have the same or different records retention policies.
 - Extends the number of documents associated with a single record.
- **Updated Platform Support**

This release supports the latest operating systems, application servers and databases. This release adds support for:

 - Enterprise Content Management (ECM) platform currency

- Oracle Internet Directory 10.1
- Microsoft Windows Server 2008 and SQL Server 2008
- IBM Advanced Interactive Executive (AIX) V6.1 and Novell Software and Systems Development (SUSE) 11
- IBM WebSphere Application Server V7
- Java Runtime Environment (JRE) 1.5 support with JRE 1.4.2 compatibility
- SAP Business Objects Crystal Reports 2008
- Oracle WebLogic Server 10.3
- JBoss 4.2.3, 5.0.1
- Request for Comment (RFC) Standard Kerberos V5 Authentication Protocol used in Microsoft Windows Server 2003
- **Installation and Upgrade Worksheet**
IBM InfoSphere Enterprise Records data has been added to the Installation and Upgrade Worksheet, which is a Microsoft® Excel spreadsheet (p8_worksheet.xls) that describes the properties and parameters required to complete an installation or upgrade. For more information, see *Using the installation and upgrade worksheet* in the IBM FileNet P8 Information Center:
<http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.planprepare.doc/p8ppi038.htm>

Language Support

- Swedish translation is available for this release.

IBM General Parallel File System (GPFS)

Support for GPFS is available with this release. GPFS provides the following features:

- **High performance shared-disk file management** GPFS is a high performance shared-disk file management solution that provides access to a common set of file data, online storage management, scalable access, and tightly integrated information lifecycle tools capable of managing petabytes of data and billions of files.
- **Unity of server and storage components into a cloud environment** Part of the foundation of a dynamic infrastructure, GPFS brings together mixed server and storage components into a cloud environment to provide an integrated view of distributed data.
This infrastructure enables you to use a single global namespace across platforms, provides high performance common storage, simplified file management, lowers redundant information, and improves storage use.
- **Common management interface** GPFS provides a common management interface that simplifies administration in large environments. The administration model is easy to use and consistent with standard AIX and Linux® file system administration. Cluster-wide operations can be managed from any node in the GPFS cluster. These commands support cluster management and other standard file system administration functions such as user quotas, snapshots, and storage management.
- **Seamless capacity expansion and high performance**
GPFS leverages its cluster architecture to provide high performance access to your file data. File data is automatically spread across multiple storage devices, providing optimal utilization of available storage performance. In addition, for high band width environments like digital media, GPFS reads or writes large blocks of data in a single operation, minimizing the overhead of I/O operations.

- **Multiple applications or users the ability to share access to a single file simultaneously while ensuring file data integrity.** For example, multiple animators or editors can work on different parts of a single video file simultaneously from multiple work stations. This reduces the amount of storage and management overhead normally required to maintain multiple copies of the source file. GPFS uses fine grained locking based on a scalable token (lock) management system to ensure data consistency during concurrent access. This prevents multiple applications or users from updating the same portion of a file at the same time. Using a TCP/IP or InfiniBand™ connection, a single GPFS file system can be accessed by nodes.
- **Multiple servers the ability to access the same space (partition or Logical Unit Number [LUN]), of a shared Storage Area Network (SAN) device.** Normally SAN devices are required to have partitioned space per server.
- **Known Issue** A rare, but potentially serious problem has been discovered in GPFS. Under certain conditions, a read from a cached block in the GPFS pagepool can return incorrect data. This read is not detected by GPFS. The issue is corrected in GPFS 3.3.0.5 (APAR IZ70396) and GPFS 3.2.1.19 (APAR IZ72671). All prior versions of GPFS are affected by this issue.
- **For GPFS documentation,** visit the IBM Support info center at:
<http://publib.boulder.ibm.com/infocenter/clresctr/vxrx/index.jsp?topic=/com.ibm.cluster.gpfs.doc/gpfsbooks.html>

Process Analyzer

- **Reporting Source** The Reporting Source dialog box was added to the Data Field wizard. This new dialog box enables you to choose whether to expose the data field to the OLAP cubes and fact tables, or to restrict it to the fact tables only for detailed reporting.
- **Support for Microsoft SQL 2008**
- **Microsoft SQL Server Standard Edition** Process Analyzer now supports Microsoft SQL Server Standard Edition. Previous releases only supported the “Enterprise” edition.
- **Oracle Real Application Clusters (RAC)** Process Analyzer now supports Process Engine Servers running on Oracle RAC

Process Designer

The ease of use improvements in Process Designer 4.5.1 enable you to complete your workflow business tasks more efficiently. You will see familiar paradigms, with solid improvements to the map and process definition. The areas of improvement include:

- **More space when working with workflow maps** The map takes over more of the stage and the properties are in the lower third, giving both areas more space. Workflow Properties is permanently accessible, and you can have multiple step and route properties open at the same time.
- **New location and consolidation of mapping tools** The mapping tools have been consolidated and are now located in one tool bar, simplifying the layout and allowing for more screen area to be used for other functionality.
- **Improved mapping and easier process definition**
 - The step palette functionality has been reorganized. You can now access it from either the mapping toolbar or as a floating window with palettes and steps. You can also select multiple palettes.
 - The step properties focus on the most important functionality for the specific step type. Visual relationships between steps and properties have been clarified, making it easier to rapidly map a process.
- **Visual design improvements**

- Icons have been simplified and updated, along with the indicators that a step is selected.
- The highlights for drawing a route have been improved to make route drawing easier.
- The overall visual design has been updated to improve the clarity of actions.

For more information, see **FileNet P8 Documentation > User Help > Integrating workflow > Workflow applications > Process Designer**

Process Engine

- With new installations, Process Engine no longer requires configuration of an NCH server in the /etc/hosts file. The Process Engine installation program now prompts only for the Process Engine network name (hostname).
- With new installations, Process Engine no longer requires raw partitions on UNIX®.
- **Product support updates** With this release, the following products are supported:
 - DB2 LUW 9.7
 - JBoss 5.0.1
 - Oracle Internet Directory 10.1
 - Tivoli Access Manager 6.1
 - Tivoli Directory Server 6.2
 - JRE 1.6
 - MSSQL 2008
 - Pure IPv6
 - IPv6 support for Farms

Language Support

- Turkish and Hungarian translations are available for this release.

Process Monitor

IBM FileNet Process Monitor (previously known as Business Activity Monitor) is a feature of Business Process Manager (BPM) that comprises a set of preconfigured projects that can be used with your IBM Cognos Now! application installation.

Business Activity Monitor projects and metadata that were created in prior releases will continue to work when you upgrade your IBM Cognos Now! installation.

Documentation for IBM FileNet Process Monitor is available in the IBM FileNet P8 Version 4.5.1 information center. To access the information center, follow this link:
<http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/index.jsp>.

Product changes

The following product changes have occurred:

- IBM FileNet Business Activity Monitor 4.5.0 is the terminal release of this product (Cognos Now! is now available separately as part of the Process Engine bundle).
- IBM FileNet Process Monitor is now a feature of BPM.

Rendition Engine

This release of Rendition Engine includes support for:

- Windows Server 2008, 32 and 64 bit
- Microsoft SQL Server 2008
- Rendition Engine is now built on Lquent Enterprise Services 3.1.1

Development Tools

Content Engine Java and .NET APIs

Support for Verity collection partitions

The capability to partition Verity (also known as Autonomy) collections by date has been added, allowing high-volume indexing of date-sensitive documents, such as e-mail messages archived in a Content Engine repository. For documents in which a date-based property is a primary identifier, collection partitioning reduces the number of collections that need to be searched, thus reducing query retrieval time.

For searching Verity partitions, see “Querying Collection Partitions” in [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Queries > Working with Queries](#).

To support this functionality, the following Content Engine API changes are introduced:

- Two new properties have been added to the ObjectStore class: VerityPartitionProperty and VerityPartitionInterval. For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Reference > Properties by Class > ObjectStore Properties](#).
- Two new properties have been added to the VerityCollection class: StartDate and EndDate. For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Reference > Properties by Class > VerityCollection Properties](#).

Support for single-instance storage

The capability has been added to filter out incoming content that already exists in a Content Engine repository. The single-instance storage feature is especially useful for high-volume content ingestion, such as when archiving e-mails to a Content Engine repository.

To support this functionality, the following Content Engine API changes are introduced:

- A new property, DuplicateSuppressionEnabled, has been added to the StorageArea class. For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Reference > Properties by Class > StorageArea Properties](#).
- The database table schemas have been updated for “Content Table” and “StorageClass Table”. For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Reference > Database Table Schemas](#).

Support for Oracle Internet Directory

This release adds support for the Oracle Internet Directory directory service provider. This support includes the following new classes and interfaces:

Java	.NET
CmDirectoryConfigurationOID	ICmDirectoryConfigurationOID

CMDirectoryConfigurationOIDList	ICMDirectoryConfigurationOIDList
Factory.CmDirectoryConfigurationOID	Factory.CmDirectoryConfigurationOID

The following properties now include default values for Oracle Internet Directory:

- DirectoryServerProviderClass
- DirectoryServerType
- GroupDisplayNameAttribute
- GroupMembershipSearchFilter
- GroupSearchFilter
- GroupShortNameAttribute
- UserDisplayNameAttribute
- UserSearchFilter
- UserShortNameAttribute

For information about the new classes and interfaces, refer to the Content Engine Java API reference help ([IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java API Reference](#)) or to the Content Engine .NET API reference help ([IBM FileNet P8 Documentation > Developer Help > Content Engine Development > .NET API Reference](#)).

For information about the properties, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Reference > Properties](#).

Systinet™ is no longer supported

Systinet has been replaced by a custom Web services serialization framework. As a result, the following constants have been deprecated:

- ConfigurationParameter.WSI_SYSTINET_HOME
- ConfigurationParameter.WSI_SYSTINET_HOME_AS_INT
- ConfigurationParameter.WSI_SYSTINET_HOME_AS_STRING
- ConfigurationParameter.WSI_SYSTINET_LOGGING_LEVEL
- ConfigurationParameter.WSI_SYSTINET_LOGGING_LEVEL_AS_INT
- ConfigurationParameter.WSI_SYSTINET_LOGGING_LEVEL_AS_STRING

For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java API Reference > ConfigurationParameter Class](#).

In addition, changes have been made to the list of .jar files that are required for a client that uses the CEWS transport:

Required: stax-api.jar, xlsxScanner.jar, xlsxScannerUtils.jar, Jace.jar, log4j.jar
 No longer required: wasp.jar, activation.jar

For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET API Developer's Guide > Getting Started > Concepts](#).

Support for User Principal Name as short name

A new property, AllowEmailOrUPNShortNames, has been added to the DirectoryConfigurationAD class. This property specifies whether an Active Directory configuration can use an e-mail address or User Principal Name (UPN) as the user short name. For more information, see [FileNet P8 Documentation > Developer Help > Content Engine Development > Reference > Properties > AllowEmailOrUPNShortNames](#).

Support for native EMC Centera logging

This release adds the following new properties for enabling and configuring the native logging performed by the EMC Centera® fixed content device:

- FPLogEnabled
- FPLogConfigFile

For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Reference > Properties](#).

Support for directory server failover (Microsoft Active Directory only)

This release provides support for a failover list that defines the preference order for one or more directory servers. Content Engine attempts to establish a connection to the most preferred directory server available. The directory server provider for the listed servers must be Microsoft Active Directory. The following properties permit a failover list to be specified:

- DirectoryServerHost (existing property)
- GCHost (new property)

You can also specify a single machine name in the above properties (instead of a failover list). In this case, you specify the port number for the directory server that runs on that machine in these corresponding properties:

- DirectoryServerPort (existing property – corresponds to DirectoryServerfHost)
- GCPort (new property – corresponds to GCHost)

For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Reference > Properties](#).

Update to DITA Classifier

The DITA Classifier has been updated so that it does not reassign the document class if the document exists and the correct class is already assigned. For more information, see [FileNet P8 Documentation > Developer Help > Content Engine Development > DITA Publishing > DITA Publishing Concepts > DITA Classifier](#).

New property identifies the CBR search type

A new read-only property, CBRSearchType, on the ObjectStore class is available to identify the currently configured full-text search engine for the object store. The value can be “None” if full-text search (content-based retrieval, CBR) is not enabled on the object store, or “Verity” if the Autonomy K2 search engine is enabled.

This property is for informational purposes only.

New property identifies server instance host names

A new read-only property, HostNames, on the ServerInstance class is available to identify the host names associated with the Content Engine server instance. The property value is a list of fully qualified DNS host names. To ensure that the names in the list are current, the server automatically validates the host names each time the server instance starts or when a new server instance is configured, and updates the property value only as necessary.

You can use the value of this property to identify all of the Content Engine server instances that are configured on the same host. Displaying such information might be useful in helping an administrator identify the server with which a server instance is associated.

For information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Reference > Properties by Class > ServerInstance Properties](#).

New SchemaVersion property

A new read-only property, SchemaVersion, on the ObjectStore class is available to identify the current schema revision level of the object store's repository (non-GCD) properties. The IBM® FileNet® Enterprise Manager compares the value of this property with its expected value to determine whether an upgrade is needed or in progress.

See [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Reference > Properties by Class > ObjectStore Properties](#).

Changed Performance Tuning Parameter for Verity Server Configuration

The ThreadCount property specifies the number of threads used for background processing of CBR indexing requests. In previous releases, the ThreadCount property value you specified was on a per object store basis. Setting the value to N caused the allocation of a number of running threads equal to N times the number of object stores. Now the property specifies the thread count on a per index area per object store basis. Setting the ThreadCount value to N causes the allocation of a number of running threads equal to N times the number of index areas times the number of object stores being processed for content-based retrieval (CBR) by that particular Content Engine server.

See "Configuring Server Information" in [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Queries > Working with Content-Based Retrieval](#).

Use of FIPS 140-2

The U.S. Federal Information Processing Standard 140-2 (FIPS 140-2) is a cryptographic function validation program defining security standards for cryptographic modules used in software. This release of Content Engine uses the FIPS 140-2 approved cryptographic providers; IBMJCEFIPS (certificate 376) or IBMJSSEFIPS (certificate 409) or IBM Crypto for C (ICC) (certificate 384) for cryptography. The certificates are listed on the NIST Web site at <http://csrc.nist.gov/cryptval/140-1/1401val2004.htm>.

To place the Content Engine in FIPS-enabled mode, use the IBM® WebSphere® 7.0 platform in conjunction with the IBMJCEFIPS JCE provider. For more information see the IBMJCEFIPS Provider topic in the IBM WebSphere documentation (located at <http://publib.boulder.ibm.com/infocenter/realtime/v1r0/topic/com.ibm.rt.doc.10/security/jcefips/ibmjceips.html>).

To allow for this release of Content Engine to be enabled for FIPS 140-2, changes have been made to the Content Engine Java and .NET APIs. The public key (formerly stored as a domain property) and private key (formerly stored in the GCD) mechanism for encrypting and de-encrypting data has been removed. Therefore, because sensitive data can no longer be encrypted and de-encrypted using the API, such data must now be non-encrypted and should be transmitted using a secure TLS (https) connection.

The following changes have been made to the Content Engine Java and .NET APIs. Although using these methods and properties in a client application will not cause an error, they will no longer perform any useful function. Therefore, their use is discouraged:

- The `Encryption` class and its three `encrypt` methods have been deprecated. These methods will no longer encrypt data but will instead return an exact duplicate of any data this is passed in.
- The `EncryptionAlgorithm` and `PublicKey` properties of the `Domain` class have been deprecated.

In addition, the following password-related properties have been modified. Previously, each of these properties allowed a password to be set using a byte array containing an encrypted password. Starting with this release, a password must now be set in a byte array containing a non-encrypted password. Note that the signature of each of these properties has not changed; the caller must still convert the password from a string to a UTF-8 encoded byte array. As in the previous release, callers cannot retrieve a password using one of these properties. To allow an application to determine whether a password has been set, a property returns an empty byte array if the password has been set (but is not returned) and returns a null value if the property has not been set:

- `PublishStyleTemplate.PDFUserPassword`
- `PublishStyleTemplate.PDFMasterPassword`
- `VerityDomainConfiguration.UserPassword`
- `IICEFixedContentDevice.CFSPassword`
- `IMFixedContentDevice.ISPassword`
- `SnaplockFixedContentDevice.SnaplockPassword`
- `RenditionEngineConnection.RenditionEnginePassword`
- `DirectoryConfiguration.DirectoryServerPassword`

For more information about the changed classes and interfaces, see the Content Engine Java API reference help (IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java API Reference) or to the Content Engine .NET API reference help (IBM FileNet P8 Documentation > Developer Help > Content Engine Development > .NET API Reference).

Property template symbolic name global uniqueness change

The symbolic name of a property template is required to be unique within a class family only. Previously, the symbolic name of a property template was required to be unique within an object store. For more information, see IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Properties > Concepts.

New symbolic name naming convention

A metadata prefix-naming convention for property and class symbolic names has been defined for the Content Engine. All new properties and classes introduced in this release or later, by any IBM ECM product that produces its own Content Engine feature AddOn, or by new system properties in the Content Engine server, are required to adhere to this naming convention. Note that this naming convention applies to property and class symbolic name values only; there are no constraints on the values chosen for display names.

Details of the prefix-naming convention are given below:

- A prefix of "Cm" is used for the symbolic name of any new Content Engine class or system property of a user-extensible class introduced in this release. For example, "CmNewProperty".
- All new system classes follow the naming convention, whether they are user extensible or not.
- The "Cm" prefix is also used for any new properties or classes introduced in Content Engine feature AddOns. However, the DITA feature AddOn will continue to use the "Dita" prefix instead of "Cm".

Any IBM ECM product that produces its own feature AddOn will also conform to a prefix-naming convention. These feature AddOns will use a prefix of "Cm???", in which "???" represents a short product-name abbreviation. However, any IBM ECM products that have already established their own prefix-naming convention prior to this release will continue to use it instead.

The AddOn metadata prefixes in the following list are reserved:

- "Cm": reserved by the Content Engine
- "Dita": reserved by the Content Engine for the FileNet P8 DITA AddOn
- "RM": reserved by FileNet Records Manager
- "EDM": reserved by IBM eDiscovery Manager
- "EDISC_": reserved by IBM eDiscovery Manager

- “ICC”: reserved by IBM Content Collector

When you create a new custom property or class, avoid assigning its symbolic name with a value beginning with one of these reserved prefixes; as long as you use this approach, you will not be subject to name collisions in this release or in any future upgrades. For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Properties > Concepts](#).

Support for Tivoli Storage Manager tape drive

The Content Engine now supports writing and retrieving content that can be stored on a tape drive in a Tivoli Storage Manager server. As a result, a new property, `TSMConcurrentTapeReaders`, has been added to the `TivoliFixedContentDevice` interface to allow you to control the number of concurrent users that are allowed to wait for a tape to be mounted. For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Java and .NET Developer's Guide > Reference > Properties by Class > TivoliFixedContentDevice Properties](#).

Content Engine Web Service

Support for Rational Application Developer

The Content Engine Web Service (CEWS) has been qualified with the IBM® Rational Application Developer® version 7.5 toolkit. IBM Rational Application Developer supports Web services client applications that are written in Java™. For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Web Service Developer's Guide > Concepts > Client-Specific Information](#).

DIME support deprecated

Support of Direct Internet Message Encapsulation (DIME) attachments continues to be supported for this release. As in previous releases, the use of DIME attachments had been deprecated. The preferred attachment encoding format for all scenarios is Message Transmission Optimization Mechanism (MTOM). Support for DIME will be completely dropped in a future release. For more information, see [IBM FileNet P8 Documentation > Developer Help > Content Engine Development > Web Service Developer's Guide > Concepts > Introduction](#).

Process Engine Web Services

Prior to this release, Process Engine Web Services used the Systinet™ web services framework. Beginning with this release, Process Engine Web Services uses the IBM Axis2 web services framework. Existing Process Engine Web Services applications will not be affected by this change.

For more information, see [IBM FileNet P8 Documentation > Developer Help > Process Engine Development > Process Engine Web Services Reference](#).

Component Integrator

The IBM FileNet Content Extended Operations (CE_Operations) component has been enhanced to support a rich IBM Content Manager data model. The following new attachment-related methods have been added to the `ContentOperations` class (the products supported are in parenthesis):

- `cancelCheckout` (CE only)
- `getLatestAttachmentVersion` (CE and CM8)
- `getContentCount` (CE and CM8)
- `getContentWithIndex` (CE and CM8)
- `getURLFromAttachmentWithIndex` (CM8 only)

- Get/Set methods for child components of an attachment: (All are CM8 only)
 getMultiChildDateProperty, getMultiChildIntegerProperty, getMultiChildDoubleProperty,
 getMultiChildStringProperty, setMultiChildDateProperty, setMultiChildIntegerProperty,
 setMultiChildDoubleProperty, setMultiChildStringProperty

For more information, see [IBM FileNet P8 Documentation > Developer Help > Process Engine Development > Component Integrator Reference](#).

Process Engine REST Service

A new Milestones resource has been added to the Process Engine REST Service. This resource retrieves a list of milestones for a step element.

For more information, see [IBM FileNet P8 Documentation > Developer Help > Process Engine Development > Process Engine REST Service Reference](#).

Additional Notices

Mozilla Rhino V1.5.R5 is included in IBM FileNet Content Manager. IBM did not modify this software, and IBM obtained the object code for this software under the terms and conditions of the Mozilla Public License 1.1 and any Amendments thereto. The source code for this software is available from the Mozilla Project (www.mozilla.org) under the terms and conditions of the Mozilla Public License 1.1 and any Amendments thereto.

Jython V2.1 is included in IBM FileNet Content Manager and is distributed under the following license agreement:

Copyright (c) 2000, Jython Developers

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the Jython Developers nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.

IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Known limitations

Application Engine

Attaching a file to a workflow from a local or mapped drive or a UNC path is not supported with the FireFox browser.

Workaround:

Use a different browser type if you plan to attach files from to a workflow.

Known Issues

This section describes:

- Independent software vendor issues related to FileNet P8
- FileNet P8-specific known issues

For some entries, known issues might be cited in multiple sections. For instance, an installation problem involving Content Engine might appear in both the Installation and the Content Engine sections.

As these known issues are fixed, they will be moved to a corresponding section under 'Resolved Known Issues'.

For an overview of the 4.5.1 known issues that have been fixed by a service pack, fix pack, or interim fix, see the associated readme file.

Supplemental notices

Defect ID	Description
925663	<p>Some open source packages are missing the following notices text</p> <p>In addition to the notices specified in the license file of IBM FileNet Business Process Manager, IBM FileNet Content Manager, and IBM InfoSphere Enterprise Records (the "Program"), the following terms and conditions apply:</p> <p>MIT License</p> <p>The Program includes some or all of the following that IBM obtained under the MIT license:</p> <p>Args4j v2.0.8</p> <p>Copyright (c) 2003, Kohsuke Kawaguchi All rights reserved.</p> <p>Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:</p> <ul style="list-style-type: none"> • Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. • Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

BSD License

The Program includes some or all of the following that IBM obtained under the BSD license:

XML Pull Parser (XPP) 3.0

Indiana University Extreme! Lab Software License

Version 1.1.1

Copyright (c) 2002 Extreme! Lab, Indiana University. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

5. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
6. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
7. The end-user documentation included with the redistribution, if any, must include the following acknowledgment:

"This product includes software developed by the Indiana University Extreme! Lab (<http://www.extreme.indiana.edu/>)."

Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.

8. The names "Indiana University" and "Indiana University Extreme! Lab" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact <http://www.extreme.indiana.edu/>.
9. Products derived from this software may not use "Indiana University" name nor may "Indiana University" appear in their name, without prior written permission of the Indiana University.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.

IN NO EVENT SHALL THE AUTHORS, COPYRIGHT HOLDERS OR ITS CONTRIBUTORS
BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR
CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR
BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF
LIABILITY,
WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR
OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN
IF
ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

APACHE 2.0 License

In addition to the existing terms and conditions that cover the use of Log4j v1.2.8, v1.2.9, v1.2.13, v1.2.14, the following terms apply:

Certain constants in Log4J were extracted from a syslog.h file copyrighted by the Regents of the University of California and subject to the BSD license.

Copyright (c) 1982, 1986, 1988, 1993

The Regents of the University of California. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

10. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
11. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
12. All advertising materials mentioning features or use of this software must display the following acknowledgement:

This product includes software developed by the University of California, Berkeley and its contributors.

13. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT

	(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
--	--

Independent software vendor issues

IBM Enterprise Content Management Widgets

Firefox

Defect ID	Description
816901	<p>When using the Firefox browser to log into Business Space, the Viewer widget might not correctly display PDFs after the browser window is minimized.</p> <p>This is caused by a Firefox limitation and a bug has been opened. It can be found using this link:</p> <p>https://bugzilla.mozilla.org/show_bug.cgi?id=493194</p> <p>A workaround to this problem is to maximize the viewer and then restore it, or reopen the PDF document.</p>
823727	<p>There is a script error when selecting a page, opening an in-basket, and then opening a Work Item in Firefox 2.</p> <p>The workaround is to:</p> <ol style="list-style-type: none"> 1. Go to http://support.mozilla.com/zh-CN/kb/warning+Unresponsive+script. 2. Follow instructions under: Letting the script run longer: <p>To configure Firefox so the script runs longer:</p> <ol style="list-style-type: none"> 3. In the Location bar, type <code>about:config</code> and press EnterReturn. The about:config "This might void your warranty!" warning page could appear. Click "I'll be careful, I promise!" to continue to the about:config page. 4. In the about:config page, search for the preference <code>dom.max_script_run_time</code> and double-click it. 5. In the Enter integer value prompt, type 20. 6. Click OK. <p>With scripts now allowed to run for longer times, the prompt should not be returned. If you still receive the prompt, or if you want to see it again, set the preference back to the default value.</p>

JBoss

Defect ID	Description
832513	LDAP encryption is not supported with JBoss 5.0.1.
833571	JBoss 5.0.1 is not supported with Oracle.

892807	An OutOfMemory exception occurs when running Content Engine 4.5.1 with JBoss AS (open source) 5.x. JBoss has accepted this defect. Refer to the IBM P8 FileNet Hardware Software Guide for more information.
892396	<p>If you want to upgrade your WorkplaceXT Jboss application server from JBoss version 4.x to JBoss version 5, you must configure your Workplace XT installation to accommodate the upgrade.</p> <p>To configure a JBoss 4.x to JBoss 5 upgrade for Workplace XT:</p> <ol style="list-style-type: none"> 1. Copy the jboss-classloading.xml file from the install_path/WebClient/jboss5 directory to the WebClient/WorkplaceXT/WEB-INF directory. 2. In the web.xml file in WebClient/WorkplaceXT/WEB-INF, add the following lines to the <listener> section: <pre><listener> <listener-class>com.sun.faces.config.ConfigureListener</listener-class> </listener></pre>
919070	<p>If you intend to deploy Content Engine on a Windows-based JBoss 4.3.0 EAP application server, edit the hotspot line in the JBoss startup script file, as follows:</p> <ol style="list-style-type: none"> 1. Open the startup script file jboss_install_dir\bin\run.bat. 2. Find the hotspot line in the file: <pre>"%JAVA%" -version 2>&1 findstr /l hotspot > nul</pre> 3. Replace the hotspot line with the following line: <pre>"%JAVA%" -server -version 2>&1 findstr /l hotspot > nul</pre> 4. Save your edit

WebSphere

Defect ID	Description
857756	<p>If you have a profile created in WebSphere 7 and you update from WebSphere fix pack 7.0.0.3 to a later fix pack, the existing profile from the previous level will not allow WebSphere to start.</p> <p>Workaround; After applying the update, you must create a new profile and configure all the settings from the existing profile in the new one. After configuring the new profile to match the existing profile, you must move the deployment to the new profile.</p> <p>This issue and the workaround apply to any P8 system that is deployed on WebSphere 7.0.0.x and is updated to a fix pack later than 7.0.0.3.</p>
922764	WebSphere's just-in-time (JIT) compilation can cause unexpected errors as a result of incorrectly compressing code. One symptom is unidentifiable NullPointerExceptions.

FileNet P8 Platform Installation, Uninstallation, and Upgrades

General Installation

Defect	Description
837257	<p>Installing IBM FileNet P8 Platform for a Turkish locale on Sun and HP platforms fails.</p> <p>Workaround: Change locale to US English to install, configure and deploy IBM FileNet P8 Platform. You can then change the locale back to Turkish after installation and deployment are complete. This does not affect any Turkish support in P8 applications.</p>

Application Engine

Defect	Description
898988	<p>On WebLogic 10.0.2 or 9.2.3 systems, the Application Engine 4.0.2.x installation program does not automatically update the weblogic.xml file of new installations.</p> <p>Workaround: After you run the Application Engine installation program, manually copy the weblogic-11g.xml from the weblogicFiles directory to the WEB-INF directory. This directory is included in Application Engine versions 4.0.2.6 and later.</p>

Content Engine

Defect	Description
839874	<p>When you upgrade Content Engine data from version 3.5.2 to 4.5.1 using the graphical user interface of the Content Engine Upgrade tool, it might happen that the database password field is not editable if you restart the tool. The result of this is that the tool will report a database validation error and the upgrade will not proceed.</p> <p>Workaround: Edit the upgrade XML file that you specified during the upgrade process, as follows:</p> <p>Change this text:</p> <pre><Password Encrypted="yes" /></pre> <p>To this text:</p> <pre><Password Encrypted="yes">db_password</Password></pre> <p><i>db_password</i> is the password for the database user account.</p>
865695	<p>If you deployed version 4.5.1 of Content Engine on a JBoss application server, either after an upgrade from version 3.5.2 or a new installation of version 4.5.1, then for each object store whose associated database name contains accented characters, you need convert to UTF-8 the encoding of the two data source XML files that Configuration Manager created for that object store. To do the conversion, open the file and save it in UTF-8 format.</p> <p>The path to the object store data source files is as follows:</p> <pre>JBOSS_HOME/server/server_name/deploy/data_source_name.xml</pre> <pre>JBOSS_HOME/server/server_name/deploy/xa_data_source_name.xml</pre>

Defect	Description
	Complete the file conversion immediately after you have created the data sources for the object stores. If you upgraded Content Engine from version 3.5.2, do not run a tool to upgrade Content Engine data until after you have completed the file conversion.
893033	Before you run Content Engine Web Upgrade Tool on Oracle-based object stores, the database administrator must revoke the DBA privilege from the Oracle user associated with the database for each object store. Revoking this privilege prevents the Oracle user from seeing sequences (lists of table-column numbers) that the user does not own.
892491	An error will occur when you test a data source connection using the SQL Server 2.0 driver if Content Engine is on WebSphere 7. The error occurs because the driver does not support version 1.6 of the IBM JVM, which Content Engine uses when it is deployed on WebSphere 7. To avoid the error, put the sqljdbc4.jar class library file in the ENVIRONMENT variable path on the WebSphere 7 machine and rename the file to sqljdbc.jar
895033	If you are upgrading version 3.5.2 of Content Engine to version 4.5.1 on a UNIX platform, you must use Content Engine Web Upgrade Tool to upgrade the Content Engine data.
895619	<p>Commands to install Content Engine include the parameter <code>-i silent</code>. For example, on an AIX platform the following command installs Content Engine:</p> <pre>P8CE-4.5.1-AIX.BIN -f CE_silent_install.txt -i silent</pre> <p>However, by specifying the parameter <code>-f CE_silent_install.txt</code>, the <code>-i silent</code> parameter is unnecessary. That is, you can silently install Content Engine as follows:</p> <pre>P8CE-4.5.1-AIX.BIN -f CE_silent_install.txt</pre> <p>For Content Engine client silent installations, it is still necessary to use the <code>-i silent</code> parameter.</p>
867297	<p>A comment in the Content Engine Upgrader tool batch file CE451Upgrader.bat says to use ojdbc6.jar for Oracle 10g and 11g databases that communicate with version 7 of WebSphere Application Server, as shown in the following excerpt from the file:</p> <pre>rem For Oracle 10g/11g connecting with Websphere 7: set JDBCSPATH=E:/MEDIA/jdbc/ojdbc6.jar set CLASSPATH=%JDBCSPATH%;%CLASSPATH%</pre> <p>Change the second line above to the following before running the Content Engine Upgrader tool:</p> <pre>set JDBCSPATH=E:/MEDIA/jdbc/ojdbc5.jar</pre> <p>This change to the CE451Upgrader.bat file applies to version 4.5.1 and version 4.5.1 FP1 of Content Engine.</p>
906485	The Upgrade Information window of the Content Engine Web Upgrade Tool displays an incorrect operating system type. In particular, when you are running the tool to upgrade Content Engine on a Windows Server 2008 system, the Upgrade Information window erroneously displays Windows Vista as the operating system

Defect	Description
	type.
915126	<p>The P8 Content Engine 4.5.1 fix pack 4 client installer does not create the correct fixtag fix pack level information after it has been installed. The expected file is:</p> <p>IBM_FileNet_Content_Engine_Client_Installer.4.5.1FP04.4.5.1.4.fixtag</p> <p>Since the correct file is not created; when you review your environment after the installation, you might find one of the following fixtag values:</p> <p>IBM_FileNet_Content_Engine_Client_Installer.4.5.1.swtag IBM_FileNet_Content_Engine_Client_Installer.4.5.1FP01.4.5.1.1.fixtag IBM_FileNet_Content_Engine_Client_Installer.4.5.1FP02.4.5.1.2.fixtag IBM_FileNet_Content_Engine_Client_Installer.4.5.1FP03.4.5.1.3.fixtag</p>
920028	<p>If you are using WebSphere as the applications server and IBM DB2 pureScale as the database for Content Engine, create and enable this JDBC parameter for the XA and non-XA data sources:</p> <p>enableSysplexWLB = true</p> <p>This parameter causes the JDBC driver to work with the DB2 pureScale Server to load balance JDBC driver requests across nodes in the DB2 pureScale cluster.</p> <p>Create and enable this parameter after you run Configuration Manager to create data sources for the GCD or for object stores.</p>
928336	<p>You might see the following error message when you try to start Configuration Manager on a SUSE Linux system where versions 1.8 and 1.9 of XULRunner are both installed:</p> <p>"symbol lookup error: /usr/lib/xulrunner-1.9.1.9/libxul.so: undefined symbol: gdk_screen_get_resolution"</p> <p>To work around this error, open one of the following files for editing, depending on whether you use the graphical user interface (GUI) or the command-line interface (CLI) of Configuration Manager:</p> <p>GUI: /opt/IBM/FileNet/ContentEngine/tools/configure/configmgr.ini CLI: /opt/IBM/FileNet/ContentEngine/tools/configure/configmgr_cl.ini</p> <p>Add the following line at the end of the file:</p> <pre>-Dorg.eclipse.swt.browser.XULRunnerPath=/xulrunner_path/xulrunner-1.8.0.14e01</pre> <p>For example, if your <i>xulrunner_path</i> is /usr/lib, add this line:</p> <pre>-Dorg.eclipse.swt.browser.XULRunnerPath=/usr/lib/xulrunner-1.8.0.14e01</pre> <p>Restart Configuration Manager.</p>
940636	<p>If you run Content Engine Web Upgrade Tool to upgrade from version 3.5.2 to 4.5.1, you might see an error when you complete any of the following actions within the tool:</p> <ul style="list-style-type: none"> Save the object store information page. Validate an object store.

Defect	Description
	<ul style="list-style-type: none"> Upgrade an object store. <p>The error occurs when Content Engine Web Upgrade Tool, running on the application server where Content Engine is deployed, attempts to connect to Content Engine and the length of the operating system descriptor string (for example, "Windows Server 2008 6.0 build 6002 Service Pack 2") in the Content Engine Startup Context (Ping Page) exceeds 45 characters.</p> <p>The error message has the following form:</p> <p>isCEUnixServer cannot connect to http://localhost:port/FileNet/Engine"</p> <p>localhost is the name of the system where Content Engine is deployed.</p> <p>port is the port number that Content Engine uses to communicate with client applications such as the Content Engine Web Upgrade Tool.</p> <p>The error is benign and can be ignored.</p>

Content Search Engine

Defect	Description
907249	<p>If you attempt to install version 4.5.1 of Content Search Engine on a Microsoft Windows Server 2008 system in which User Account Control is enabled, the installation will fail because the K2 Admin Web Server service does not start. To prevent this failure, complete the following steps before installing Content Search Engine:</p> <p>Grant the K2 user the "log on as a service" security setting on Windows Server 2008 by completing the following steps:</p> <ol style="list-style-type: none"> Navigate to Administrative Tools > Local Security Policy > Security Settings > Security Settings \ Local Policies \ User Rights Assignment Double-click the "Log on as a service" policy. Add the Windows user that will be set as the K2 administrator.
935043	<p>If you specify a K2 administrator (k2_os_user) password that contains embedded spaces, the K2 administration server service is not created on Microsoft Windows 2008 R2. To resolve this problem, reset the password so that it does not contain embedded spaces</p>
957020	<p>If Content Search Engine is installed on a UNIX system and you try to access the Autonomy K2 documentation from the hyperlink in the Verity K2 Dashboard or by directly going to http://cse_server:9990/verity_docs, you will see an HTTP 404 (Not Found) error message.</p> <p>cse_server is the name of the system where Content Search Engine is installed.</p> <p>To resolve this error, open this file for editing:</p> <pre>/opt/IBM/FileNet/ContentEngine/verity/appserver/conf/Catalina/localhost/k2_docs.xml</pre> <p>And change the docBase value from:</p> <pre>" /opt/verity/data/docs "</pre>

Defect	Description
	to: "/opt/IBM/FileNet/ContentEngine/verity/data/docs"

Process Analyzer, Process Engine, Process Simulator

Defect	Description
825106	Clicking the Browse button to choose the installation location for Process Analyzer, Process Simulator, or Process Engine causes the installer to fail. The problem appears to occur only on Windows 2008 when other Java tasks are running. Workaround: Manually modify the path field instead of browsing for the path, or perform a silent installation.

Process Engine

Defect	Description
845751	In version 4.5.1, the Process Engine installation fails on Windows 2003 SP2 cluster configurations only. The Process Engine installation works properly on Windows 2008 cluster configurations. Workaround: Add "ProcessEngine" to the entry in the hosts file.

Workplace XT

Defect	Description
833280	The <i>IBM FileNet Workplace XT Installation and Upgrade Guide v. 1.1.3</i> task "Install IBM FileNet Workplace XT" includes a step "(Optional) (UNIX only) Set the P8TASKMAN_HOME system environment variable." In the case of collocated instances of Workplace XT and Application Engine (Workplace), the value of the variable that is set as part of the first installation, that is, whichever application you install first, will apply for both installations.
848664	In the <i>IBM FileNet Workplace XT Installation and Upgrade Guide v. 1.1.4</i> , in the task for configuring Workplace XT on WebSphere, there is an omission in the procedure called, "(optional) To configure WebSphere to support user tokens and WebDAV connections for Workplace XT (for Application Integration, eForms, Records Manager, and others)". In the step "Enable JAAS", the second substep should include the field name for adding the entry. The field name is "Generic JVM Arguments."
856004	If you are installing Workplace XT on multiple nodes in a highly available environment, the shared configuration directory you specify might cause errors when the installation program runs. You can ignore these errors.
893270	If you are using Workplace XT with WebDAV, and you plan to upgrade to Workplace XT 1.1.4 from 1.1.3.x or an earlier version, you must configure WebDAV support in the web.xml file. Make these edits to the web.xml file after you complete the upgrade. To configure WebDAV support after an upgrade: 1. In the install_path/WebClient/WorkplaceXT/WEB-INF directory, create a backup of the web.xml file.

Defect	Description
	<p>2. Open web.xml and modify the WebDAV url-pattern in the security-constraint section. Change this: <url-pattern>/webdav*</url-pattern> to this: <url-pattern>/webdav/*</url-pattern></p> <p>3. In the install_path/FileNet/WebClient/deploy directory, delete the existing web_client.war and web_client.ear files.</p> <p>4. Run the shell script to create a new war file: "./create_web_client_war.sh."</p> <p>5. Run the shell script to create a new ear file "./create_web_client_ear.sh."</p> <p>6. Deploy the new web_client.ear or web_client.war file.</p>
915540	<p>For Application Integration BCS in an SSL environment, the steps to install the security certificate are different depending on the browser version. For IE6, you can accept all defaults in the wizard that installs the certificate. For IE7 and IE8, use the following steps:</p> <ol style="list-style-type: none"> 1. In your browser, access the SSL link for Content Engine. 2. On the Certificate Error dialog, click View Certificate. 3. Click Install Certificate. 4. Click Next. 5. Choose Place all certificates in the following store. 6. Click Browse and choose Trusted Root Certification Authorities. 7. Click Next. 8. Click Finish. 9. Close all IE browser windows. 10. Open a new IE browser window and access the Content Engine SSL link again. If there are no warnings or messages, the certificate was properly installed.

Application Engine

Defect	Description
838620	<p>For customers who have upgraded to the 4.0.2.4-P8AE-FP004 fix pack, and are also upgrading to JBoss 5.0.1, an extra configuration file (jboss-classloading.xml) is required. Contact IBM Support for assistance with installing this file. In the next fix pack release, 4.0.2.5-P8AE-FP005, with an Application Engine upgrade of JBoss 4.x, the jboss-classloading.xml file will be installed under: <i>install_directory</i>\FileNet\AE.</p>
846924	<p>When running Application Engine with JBoss 4.3.0 (4.2.3 Enterprise Edition (EE)) on Sun JVM, JBoss can run out of memory.</p> <p>Workaround:</p> <p>Set the value of MaxPermSize in JAVA_OPTS to 128m, as follows:</p> <p>UNIX</p> <p>JAVA_OPTS=%JAVA_OPTS% -Xms128m -Xmx512m -XX:MaxPermSize=128m</p>

Defect	Description
	<p>Windows</p> <p>set JAVA_OPTS=%JAVA_OPTS% -Xms128m -Xmx512m -XX:MaxPermSize=128m</p> <p>This increased value prevents out of memory errors that can stop JBoss.</p>
856019	<p>If you are installing Application Engine on multiple nodes in a highly available environment, the shared configuration directory you specify might cause errors when the installation program runs. You can ignore these errors.</p>
894998	<p>If an Application Engine Workplace deployment has user and site preferences stored in an object store that is not accessible to all users, the Site Preferences object store can reinitialize to a default state.</p> <p>To avoid this issue, configure preferences in an object store that grants at least read access to all users who might sign into Workplace. This prevents the Site Preferences from being inadvertently initialized.</p>

Configuration Manager

Defect	Description
839939	<p>In the LDAP tasks for Websphere, the tool tip for Login Properties (Federated Repository) is not accurate. It should read:</p> <p>Enter the attribute that determines the information that a user enters to log on to the Active Directory. Valid attributes are: cn, uid, or sn (lower case). The default attribute is cn. See the WebSphere Application Server documentation for more information about mapping these properties to any property on the LDAP user account by modifying the wimconfig.xml file for the PersonAccount.</p>

Content Engine

Defect	Description
NA	<p>If you are using a thick Java client with CEWS transport and also use facilities of the WebSphere Application Client version 6.1 environment, you are likely to experience incompatibility between the XML parser library included with the Content Engine Java API and the library included with WebSphere Application Client. (This problem has not been observed with WebSphere Application Client 7.0.) This will result in one of the following exception situations.</p> <p>For a basic WebSphere Application Client 6.1 installation, the XML parser library does not include features required by the Content Engine Java API. In that case, you will get an exception with a root cause exception similar to: <code>java.lang.NoSuchMethodError: com/ibm/xml/xlsp/api/util/encoding/IANACharset.getCharsetType.</code> A more feature-rich XML parser package is provided if you install the <i>WebSphere Application Server Feature Pack for Web Services</i> into the WebSphere Application Client environment. In that case, a different conflict will give you an exception with a root cause exception similar to: <code>java.io.IOException: Stream is closed.</code></p> <p>Workaround (for both issues): Part of the client configuration for the WebSphere Application Client environment is to define additional directories whose contents are treated as trusted extensions of the JRE. This is done by setting the Java system property <code>java.ext.dirs</code> to a list of such directories. Create a new directory and copy into it the following JAR files provided with the CE Java API: <code>stax-api.jar</code>, <code>xlspScanner.jar</code>, <code>xlspScannerUtils.jar</code>. Add that directory at the front of the list of directories pointed to by Java system property <code>java.ext.dirs</code>. In that way, the Content Engine Java API version of those properties will be used instead of the WebSphere Application Client version.</p> <p>February 19, 2010 update: There is now an additional fix available for the second type of exception. If you have install the WebSphere Application Server Feature Pack for Web Services 6.1.0.25 (which leads to the second exception type), you can install WAS APAR PK94355; 6.1.0.25: IBM StAX serializer closes the OutputStream (APAR PK94355 is currently targeted for inclusion in Service Level (Fix Pack) 6.1.0.31 of WebSphere Application Server V6.1.).</p>
830462	<p>When the Content Engine resides on WebSphere Application Server (any supported version) and you are using CEWS transport, you might see an intermittent problem when exceptions are being returned to the client from the Content Engine server. (This problem does not occur with EJB transport.) In these cases, the socket for the HTTP response is prematurely closed. Depending on the exact timing of the packets arriving at the client side, this can result in an <code>EngineRuntimeException</code> with any of these <code>ExceptionCode</code> values: <code>TRANSPORT_WSI_DESERIALIZATION_ERROR</code> or <code>TRANSPORT_WSI_NETWORK_ERROR</code>. The underlying root cause exception will be an instance of <code>java.io.IOException</code>.</p> <p>Workaround: Change the HTTP response used by the Content Engine server when it is returning an exception. A different response code will be used if you set this Java system property in the JRE of the Content Engine server: <code>FileNet.WSI.HttpFaultResponseCode</code>. A value of 599 is recommended (the default value is 500). You would typically set this value via the WebSphere administrative console in the JVM parameters screen: - <code>DFileNet.WSI.HttpFaultResponseCode=599</code></p>
837762	<p>Multiple Oracle data sources for a JBoss 5.0.1 web server have connectivity problems to the database server. This prevents creation of object stores.</p>

Defect	Description
848698	<p>A CONTENT_FCA_FILE_DOES_NOT_EXIST error message intermittently occurs on cluster or multiple Content Engine configurations when trying to retrieve a document from a file store shortly after the file has been added.</p> <p>This issue occurs due to NFS directory attribute caching on NFS clients (Content Engine server host machines). When multiple NFS clients are accessing the same directory, directory updates made by one server might not be immediately visible to other servers. Renames of files from one directory to another do not force directory attribute caches to be refreshed on other NFS clients. A file rename occurs when adding a document to the file store. By default, Linux systems have a 60 second attribute cache. Other UNIX operating systems have a similar default. Disabling attribute caching with the noac option on the Linux NFS mount command will avoid this issue. Disabling attribute caching can effect document retrieval performance from NFS file shares (specifically, Content Engine file stores).</p> <p>To identify this issue, enable IBM FileNet P8 Content Engine tracing with Content Storage enabled on all Content Engine machines. The following should be apparent in the logs:</p> <ol style="list-style-type: none"> 1. A file rename occurs on CENode1. Note: {11111111-1111-1111-1111-111111111111} is an example GUID. CENode1.p8_server_trace.log: 2009-10-07T04:54:10.514Z 1D2A1D2A CSTG - rename [/apps/p8/FileStore/inbound/FN{11111111-1111-1111-1111-111111111111}{11111111-1111-1111-1111-111111111111}] to [/apps/p8/FileStore/content/FN9/FN5/FN8/FN{11111111-1111-1111-1111-111111111111}{11111111-1111-1111-1111-111111111111}-0] 2. After the file rename, attempts to retrieve the file occur on CENode2. The file retrieval attempts occur within 60 seconds of the file rename. CENode2.p8_server_trace.log: 2009-10-07T04:54:10.642Z 7FC27FC2 CSTG - file doesn't exist in the content directory, will search inbound /apps/p8/FileStore/content/FN9/FN5/FN8/FN{11111111-1111-1111-1111-111111111111}{11111111-1111-1111-1111-111111111111}-0 3. CENode2 fails with a CONTENT_FCA_FILE_DOES_NOT_EXIST error. CENode2.p8_server_trace.log: 2009-10-07T04:54:38.212Z 44A544A5 ENG - ERROR method name: retrieve principal name: xxxxx Global Transaction: false User Transaction: false Exception Info: com.filenet.api.exception.EngineRuntimeException: CONTENT_FCA_FILE_DOES_NOT_EXIST: The file does not exist /apps/p8/FileStore/content/FN9/FN5/FN8/FN{11111111-1111-1111-1111-111111111111}{11111111-1111-1111-1111-111111111111}-0.
853456	<p>When using Process Engine 4.5.1 and Content Engine 4.5.1, you cannot create Workflow subscriptions using FileNet Enterprise Manager.</p> <p>Workaround: Use Workplace or Workplace XT to create the subscriptions. The issue is resolved in CE-4.5.1-001.</p>
853401	<p>The base version of WebSphere Application Server that is bundled with Content Engine does not include cluster support. To configure clusters, you must have Content Engine installed on servers that are running the IBM WebSphere Application Server Network Deployment version.</p>
906221	<p>A document class whose default storage area is set to a storage area cannot be imported using FileNet Deployment Manager or FileNet Enterprise Manager. For a document class to be able to be imported, its default storage area must not be set.</p>

Defect	Description
906214	The mappings of document classes that have been mapped to an IBM Content Manager OnDemand (CMOD) application group do not work after an export and import using FileNet Enterprise Manager because CMOD mappings cannot be exported. Although mapped document classes are exported successfully, any mappings to CMOD application groups are lost.
906224	After using Enterprise Manager (EM) to export or import, Content Manager OnDemand (CMOD), mapping information associated with a document class is not retained. Therefore you must create the mapping information after importing a class.
929930	Exporting and Importing Important During an export and import of an object that contains security template ACEs from a security policy, FileNet Deployment Manager removes the security template ACEs. If the security template ACEs that are removed are Deny ACEs, access can be granted unintentionally to users or groups that were previously denied access.
931203	The fix for defect 817638: "CBR indexing fails for files with German characters in the file extension", is included in Content Engine 4.5.1. However, for the fix to work, Content Search Engine fix pack level 4.5.0-001 or higher is required, and, for Windows environments, the following system environment variable: VERTIY_CODE_PAGE=65001.

Content Federation Services

Defect	Description
JR34010	A problem occurs with ICI 8.5.1 when performing full-text search against an IBM Content Manager 8 repository on z/OS. APAR JR34010 against ICI 8.5.1 has been created to track this issue. Any customers affected by this issue must apply the ICI hot fix for this APAR.
948064	The CFS-IS software component is built into the Content Engine software, so when you install the Content Engine Software, you automatically get the CFS-IS capabilities. No separate CFS-IS software installation is necessary.

Content Search Engine

Defect	Description
945086	On a UNIX server, accessing the Autonomy K2 documentation might result in a "page not found" (HTTP 404) error message. This can occur when you click the Help link on the Verity Dashboard or when you enter the documentation URL directly into a browser. To resolve this problem: <ol style="list-style-type: none"> 1. Open the k2_docs.xml file in a text editor. The file is located in: /<Content_Engine_installation_directory>/verity/appserver/conf/Catalina/localhost. 2. Modify the docBase value as follows: docBase="/<Content_Engine_installation_directory>/verity/data/docs" where <Content_Engine_installation_directory> is the directory where Content Engine is installed.

Defect	Description
	<p>Example: docBase="/opt/IBM/FileNet/ContentEngine/verity/data/docs"</p> <p>3. Restart the Autonomy K2 Services.</p>

FileNet Integration for Microsoft Office (FIMO)

Defect	Description
846220	<p>When a document's attribute is assigned Read-Only and it is added from an integrated Office application using the default entry template, and then the document is saved, the document is successfully added to an object store. However, if users try to add the document again, users instead receive a "This file is read only" error. When users close the document, and then reopen a new document, users continue to receive the same error until they restart the application.</p>
861949	<p>It is possible to re-size the Browse pane so that the property validation error icon is covered by the vertical scrollbar. When this occurs, you will not receive visual indication for why you cannot move to other tabs, or complete the Save or Apply operation.</p> <p>Workaround: Resize the Browse pane by making it wide enough to show the error icon to the right of the property controls.</p>
862597	<p>Folder class properties can fail to expand when you select to modify folder properties, change the folder class, and then move to the security tab and select Save or Apply. If you switch back to the Properties tab, the folder class properties might be collapsed and you cannot expand and view the properties.</p> <p>Workaround: Show details for another item, and then return to the Details view for the previous folder.</p>
896527	<p>In FileNet Integration for Microsoft Office (formerly known as Application Integration BCS), when connecting to a P8 domain which is configured with Sun Java LDAP server, searching for a user or group in any Find User UI might cause a system error in the following circumstances:</p> <ul style="list-style-type: none"> Searching on a single character Searching on a string that contains only one or more space (space bar) characters <p>Workaround: Use a more complete search criteria to narrow the search scope.</p>

FileNet Services for Lotus Quickr

For additional Known Issues and Release Notes associated with FileNet Services for Lotus Quickr see:

- Known issues for IBM FileNet Services for Lotus Quickr Version 1.1 Fix Pack 1.0: <http://www.ibm.com/support/docview.wss?rs=3278&uid=swg27019141>
- IBM FileNet Services for Lotus Quickr Version 1.1 Fix Pack 1 Readme: http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8qkrfp1readme.doc/fp1/fp1_intro.htm
- Known issues for IBM FileNet Services for Lotus Quickr Version 1.0 Fix Pack 1.0: <http://www-01.ibm.com/support/docview.wss?rs=3278&uid=swg27017650>

- IBM FileNet Services for Lotus Quickr Version 1.1 Release Notes:
<http://www.ibm.com/support/docview.wss?rs=3273&uid=swg27018249>

Defect	Description
775463	When adding a document to a FileNet P8 library, then checking it out, modifying it, and checking it back into the library, the 'First created on' information for the file changes to the last modified date and time. The 'First created on' information should display the date and time the file was first added.
779920	When searching a FileNet P8 system in Lotus Quickr Search Center and the search criteria includes only invalid characters, such as {, }, and ., the following message appears: "A problem occurred during the search. If the problem persists, contact your System Administrator." Instead of displaying this message, the search should execute, but no documents should be returned.
780139 ISV	If you use the Microsoft Windows installer, you might see the following error message: No entry found: MakeExecutableAction_zg_ia_sf.jar. It is a non-fatal error and you can ignore this error. This error is caused by InstallAnywhere.
783889	If you want to use the Configuration Manager tool to deploy FileNet Services for Lotus Quickr product, you must manually modify the configuration files generated by Configuration Manager. In the deployapplication.xml file, change the following parameters from the default values to the required FileNet Services for Lotus Quickr product values. 1. <property name="Ear"> <value>C:\Program Files\IBM\lib\<insert product name here>\Engine-ws.ear</value> Replace Engine-ws.ear with the FileNet Services for Lotus Quickr product ear file name. For example: C:\Program Files\IBM\FN Services for Quickr\fnqs.ear. 2. <property name="ApplicationName"> <value>FileNetEngine</value> FileNet Engine is the Content Engine application name. Change the value to the application name for FileNet Services for Lotus Quickr product. For example: FNQuickrServices.
784386 785318	A search with a query string containing at least one hyphen (-) character might return unexpected results. This is due to a hyphen being treated as punctuation by the P8 search engine. Examples: <ul style="list-style-type: none"> A search for 010-68967707 returns documents containing either 010-68967707, or 010 68967707 A search for 9EA8249E-095A-4AFC-8244-64D9159309BE will not return documents containing that exact string. To resolve this issue, append a wildcard character to the end of the search string. For example: a search for 9EA8249E-095A-4AFC-8244-64D9159309BE* returns documents containing 9EA8249E-095A-4AFC-8244-64D9159309BE.

Defect	Description
785114 767882	Users with a double-byte character in their user name cannot log on to a FileNet P8 system using the Quickr Web UI. An "Invalid credentials for remote server" error occurs.
786243	<p>On HP-UX, HP-UX-Itanium, and AIX platforms, the FileNet Services for Lotus Quickr uninstaller fails if the Java Virtual Machine (JVM) is not included in the system path. The following error message is displayed:</p> <p>No Java virtual machine could be found from your PATH environment variable. You must install a VM prior to running this program.</p> <p>This issue is caused by InstallAnywhere.</p> <p>Work around: Add JVM to your path.</p> <p>For example: export PATH=\$PATH:/user/bin/jave.exe</p>
787126	If a folder contains only subfolders (no documents), and the number of subfolders displayed is a multiple of the page size, then the ATOM feed for the folder contains an unnecessary "next" link on the last page. The Lotus Quickr library viewer and the publish dialogs use ATOM feeds.
791334	<p>Using Quickr Connectors, if you rename a document, the document content is lost.</p> <p>Workaround: To save the content, right click the document and select Versions. Highlight the previous version with content, and then click Restore. This creates a new version with content and the old name.</p>
828000	The FileNet Services for Lotus Quickr version 1.0 scripts reference Content Engine client files and folders that do not exist in Content Engine version 4.5.1. The scripts run without error, and you do not need to take any action.

IBM Enterprise Content Management Widgets

Defect ID	Description
812830	<p>Business Space site is not displayed as expected after logging in or out of a Workplace XT site.</p> <p>By using the administrative console for WebSphere Application Server, you can configure ECM Widgets, Workplace XT, and Business Space to avoid potential session timeout issues. Perform the following steps:</p> <ol style="list-style-type: none"> 1. From the Enterprise Applications page, click the application name. For example, ECM Widgets, Workplace XT, or mm.was.ear. 2. Click session management. 3. On the session management page, select the Override session management check box, and click Enable Cookies. 4. In the Cookie path text box, enter a path to store the application's cookies. For Workplace XT for example, enter / Workplace XT. Enter a different path for each application. 5. Apply your changes. 6. When you have completed the above sequence of steps for all of the applications, go to the Enterprise Applications page and restart ECM Widgets,

Defect ID	Description
	<p>Workplace XT, and mm.was.ear.</p> <p>Completing Steps 1-6 provides the ability to manage the session and cookie for each application.</p>
817232	<p>On Internet Explorer 7.x running on Windows, the fonts in the Content List widget might not appear correctly on some monitors. If you encounter this issue, disable Clear Type fonts in Internet Explorer 7.x by completing these steps:</p> <ol style="list-style-type: none"> 7. In the browser, select Tools, Internet Options. 8. Go to the Advanced tab. 9. Scroll to the Multimedia section. 10. Clear the Always use ClearType for HTML check box.

IBM InfoSphere Enterprise Records

Defect ID	Description
836350	<p>IBM InfoSphere Enterprise Records does not support using the time zone settings set in the Site Preferences tool in Workplace or Workplace XT. The application always displays the date and time settings using the browser locale.</p>
837288	<p>On Turkish Solaris and HP-UX the installer will not launch and returns an error:</p> <p>"The wizard cannot continue because of the following error: could not load wizard specified in /wizard.inf (104)</p> <p>WARNING: could not delete temporary file /tmp/ismp001/955428</p> <p>WARNING: could not delete temporary file /tmp/ismp001/4784133"</p> <p>Workaround: Run the installer by changing the locale to any locale except Turkish.</p>
844857	<p>When running IBM InfoSphere Enterprise Records V4.5.1 on an Oracle WebLogic Server using the JRockit SDK, you might see errors during the deployment of the InfoSphere Enterprise Records software. As a work around:</p> <ol style="list-style-type: none"> 1. Locate and make a backup copy of the "web.xml" file at [IER_install_path]/FileNet/IER/RecordsManager/WEB-INF 2. Alter the web.xml by removing the following XML stanzas: <ol style="list-style-type: none"> a) <servlet> <pre> <servlet-name>AdminServlet</servlet-name> <display-name>Axis Admin Servlet</display-name> <servlet-class> org.apache.axis.transport.http.AdminServlet </servlet-class> <load-on-startup>100</load-on-startup> </servlet> </pre> b) <servlet-mapping>

Defect ID	Description
	<pre><servlet-name>AdminServlet</servlet-name> <url-pattern>/servlet/AdminServlet</url-pattern> </servlet-mapping></pre> <p>3. Save the file and redeploy InfoSphere Enterprise Records.</p>
844677	<p>In an HPUX or HPUXi environment, running the InfoSphere Enterprise Records Disposition Sweep tool might fail with a null pointer exception. This causes the tool to either fail to configure or terminate with an error.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1. Set the LANG environment variable with the appropriate locale. For example, if the desired locale is American English, the variable should be set as follows: <pre>export LANG=en_US.utf8</pre> 2. Manually edit the Disposition Sweep shell script file, RecordsManagerSweep.sh, and replace the following lines: <pre>FirstParam=`echo "\$1" tr '[A-Z]' '[a-z]'` SecondParam=`echo "\$2" tr '[A-Z]' '[a-z]'` FourthParam=`echo "\$4" tr '[A-Z]' '[a-z]'`</pre> with these lines: <pre>typeset -l FirstParam typeset -l SecondParam typeset -l FourthParam FirstParam=\$1 SecondParam=\$2 FourthParam=\$4</pre>
844747	<p>When attempting to configure the InfoSphere Enterprise Records Transfer Tool on a Solaris Application Server running WebSphere, you might receive an Exception:</p> <p>Exception in thread "AWT-EventQueue-0" java.lang.NoClassDefFoundError: com/ibm/misc/Debug</p> <pre>at com.ibm.crypto.provider.IBMJCE.<clinit>(Unknown Source)</pre> <p>Workaround:</p> <p>Include the endorsed folder to the -Djava.ext.dirs parameter in the RMTTransfer.sh file:</p> <pre>EXT_DIRS=./lib/ext:"\$WS_DIR"/java/jre/lib/ext:"\$WS_DIR"/java/jre/lib/endorsed:"\$WS_DIR"/lib:"\$WS_DIR"/plugins:"\$WS_DIR"/runtimes</pre>
844860	<p>When attempting to configure the InfoSphere Enterprise Records Transfer tool or File Plan Import Export tool on a Solaris Application Server running WebSphere, you might receive an error similar to the following error:</p> <pre>java.lang.SecurityException: Cannot set up certs for trusted CAs</pre>

Defect ID	Description
	<p>This occurs because the jurisdiction policy files are not signed by trusted signers</p> <p>Workaround:</p> <p>This can be resolved by obtaining unlimited jurisdiction policy files (local_policy.jar and US_export_policy.jar) from Sun.</p> <ol style="list-style-type: none"> 1. Go to the following Web site: http://java.sun.com/j2se/1.4.2/download.html 2. Go to 'Other Downloads'. 3. Locate the Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files <n.n> and click Download. The policy files are downloaded onto your machine. 4. Copy the downloaded local_policy.jar and US_export_policy.jar to the <WAS_HOME>/java/jre/lib/security/ <p>For example: /opt/IBM/WebSphere/AppServer/java/jre/lib/security/ folder.</p>
846730	<p>If IBM InfoSphere Enterprise Records is deployed with Workplace in Container-Managed Authentication mode, or if it is deployed in a Single Sign On (SSO) environment, you are prompted to login (only once during the user session) after clicking Next on the Manage Reporting page in order to launch InfoSphere Enterprise Records reports.</p>
844677	<p>On the HPUX or HPUNIX environment, running the RM Disposition Sweep tool might fail with a null pointer exception. This causes the tool to either fail to configure or terminate with an error.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1. Set the LANG environment variable with the appropriate locale. For example, if the desired locale is American English, the variable should be set as follows: <pre>export LANG=en_US.utf8</pre> <ol style="list-style-type: none"> 2. Manually edit the Disposition Sweep shell script file, RecordsManagerSweep.sh, and replace the following lines: <pre>FirstParam=`echo "\$1" tr 'A-Z' 'a-z'` SecondParam=`echo "\$2" tr 'A-Z' 'a-z'` FourthParam=`echo "\$4" tr 'A-Z' 'a-z'`</pre> <p>with these lines:</p> <pre>typeset -l FirstParam typeset -l SecondParam typeset -l FourthParam FirstParam=\$1 SecondParam=\$2 FourthParam=\$4</pre>
860223	<p>Do Not use auto destroy if you have more the 10,000 multi-filed records</p> <p>InfoSphere Enterprise records allows you to file the same record in two separate containers. These records are known as multi-filed records. Disposition sweep for an auto destroy action on a multi-filed record is designed to allow you to destroy the record in the container targeted in the auto destroy action while leaving the same</p>

Defect ID	Description
	record in another container not targeted in the auto destroy action intact. If the number of multi-filed records is high (more than 10,000), there is a chance that the sweep's multi-file query might not see that a record is multi-filed since that query is designed to only process the first 5000 multi-filed records returned by Content Engine. If you have more than 10,000 records that are multi-filed, do not use the auto destroy action.
860467	In InfoSphere Enterprise Records 4.5.1-001, you can no longer create or take actions on records with names like Record<Script>Name or Record<javascript>Name. You will also receive an Error 500--Internal Server Error, if you use My Search to search for previously declared records using the complete document title as the search criteria. To avoid this error during search, you must enter only the first part of the record name and drop the closing bracket (>) and everything that follows it. For example, you should enter only Record<Script in the search criteria to successfully receive search results.
860468	When creating documents or declaring documents as records in the IBM InfoSphere Enterprise Records application, use the Bulk Declare Service API with WSI mode instead of the Bulk Declare Service API with EJB/JACE mode. Using the EJB/JACE API to create documents or declare them as records may result in an error similar to the following: com.ibm.CORBA.iiop.ClientDelegate@6fc86fc8 invoke:824 Thread-11 ORBRas[default] Received SystemException org.omg.CORBA.NO_PERMISSION This issue was discovered with Content Engine V4.5.1 running WebSphere Application Server 7. This was not an issue with Content Engine V4.5.0 running WebSphere Application Server 6. The upgrade of WebSphere appears to be at the center of the issue.
867184	On InfoSphere Enterprise Records 4.5.1 systems, there is an existing deploymenttools.jar file in the .../RM/RecordsManager/WEB-INF/lib folder. This older version of the JAR file will cause any customized API programs to fail. If you want to use this JAR file for your custom applications, point the class path to a newer version of the deploymenttools.jar file found in .../RM/Workflow/configureRMworkflow/lib instead of pointing to the old JAR file.
889070	The RMWorkflowConfiguration.xml file contains a parameter that causes problems when importing the file to Process Engine. If a Process Engine region contains an unreadable malfunctioning work object, several issues can occur when transferring workflows to this Process Engine after importing the RMWorkflowConfiguration.xml file with its TrackingAttachment flag set to true: <ul style="list-style-type: none"> • This flag setting can result in an interrupted transfer operation which might result in a locked region. • This flag setting impacts performance if the region has many work objects. This is because the transfer process populates the VWAttached<region id> table of every work object in the region with F_WobNum and attachment information. If this issue occurs, you will need to restore the database. To avoid these issues, edit the RMWorkflowConfiguration.xml file and set the TrackingAttachment flag to false. <SystemConfiguration

Defect ID	Description
	<pre>MaxDBOperations="100" MaxInstructions="200" LoggingState="-1068427424" StatisticsCollection="true" TrackingAttachment="false"></pre>
860876	<p>Two topics within the bds_api/javadocs reference 'JACE'. These topics should reference 'Content Engine API' instead. The topics are: Interface BaseBulkService and Class BDSConstants. Note the terminology difference to avoid confusion. For example, an entry in the BDSConstants topic currently reads:</p> <p>Context Info Uri key. Used for JACE transport types. (Value is a String).</p> <p>This entry should read:</p> <p>Context Info Uri key. Used for Content Engine API transport types. (Value is a String).</p>
898398	<p>There is a new Multi-Filed Records Cache Size option in the Disposition Sweep Configuration user interface to help address performance issues when the Disposition Sweep tool is run on a container with multi-filed records. This new option allows you to configure your own cache size for these multi-filed records. The default value for this new option is 10,000. So, by default, sweep saves up to 10,000 multi-filed records' ids in cache. To achieve optimal performance, the number you put in the Multi-Filed Records Cache Size field should be greater than the total number of multi-filed records in the system to avoid having to check the Content Engine server for ids not found in the cache. However, setting sweep to cache a huge number of multi-filed records may exhaust the memory on the server.</p>
910094	<p>If IBM InfoSphere Enterprise Records is deployed on IBM Websphere Application Server, any of the InfoSphere Enterprise Records tools that rely upon JACE EJB transport protocol should use the JRE that comes with the same version IBM Websphere Application Server or IBM Websphere Application Client. If InfoSphere Enterprise Records is deployed on JBOSS or WebLogic Application Server, it is recommended that any of the InfoSphere Enterprise Records tools that rely upon JACE EJB transport protocol use the JRE that comes with the same version application server.</p> <p>You also must edit the JAVA_HOME environment variable in the appropriate application server section of the tool's BAT and SH file so the variable is pointing to the same JRE version as the application server where IER software is installed. For example, the WAS entry might look like the following entry: set JAVA_HOME=%WS_DIR%/java.</p>
938640	<p>When working with FileNet P8 security, keep in mind that IBM InfoSphere Enterprise Records is designed to use the RecordInformation property defined on the record object store with the Security Proxy Type property set to FULL (the default setting).</p>
945689	<p>The getTranscriptAsFile method returns a NULL value.</p> <p>When you use the getTranscriptAsFile method inside a custom workflow, you incorrectly receive a NULL return value even though the Transcript and Document IDs are valid.</p>

Process Engine

Defect	Description
820379	<p>If a user enters a malformed query into Process Administrator, a misleading error can be returned. For example, a user enters a query that includes the following condition:</p> <p>F_StepName="Reviewer"</p> <p>The error returned is "Column name is missing or invalid."</p> <p>Workaround: Enter the query as follows:</p> <p>F_StepName='Reviewer', using single quotation marks.</p>
958089	<p>On a Process Engine in a DB2 database environment, you might see the following message:</p> <p>2011/05/23 01:16:39.382 121,9,913 <fnsw> VW/Process (18874470.1.56 0x1200066.1) ... [SERIOUS] Error in GDBD_fetch: SQLFetch, STMT 65542 (&200423f0) (../src/GDBD.c, VERSION 4.1.1.0, @3649). SQLSTATE = 57033, NativeError = -913, ErrorMsg = '[IBM][CLI Driver][DB2] SQL0913N Unsuccessful execution caused by deadlock or timeout. Reason code "00C90088". SQLSTATE=57033</p> <p>When this condition occurs, the Process Engine automatically retries the database activity. This message is displayed for every retry:</p> <p>Even though the message is marked SERIOUS, you can normally ignore it. No corrective action is needed. However, if this message is accompanied by other messages related to the same activity, use the additional information in those messages to troubleshoot and correct the problem. If necessary, contact IBM Software Support.</p>

Rendition Engine

Defect	Description
839957	<p>The Rendition Engine is built on Ligent Enterprise Services, formerly known as RenderPerfect. The following Known Issues exist in Rendition Engine.</p> <ul style="list-style-type: none"> Errors occur when attempting to render Microsoft PowerPoint 2007 files to HTML. Installing the following Microsoft update for PowerPoint 2007 resolves the issue: Security Update for Microsoft Office PowerPoint 2007 (KB951338) http://www.microsoft.com/downloads/details.aspx?familyid=55FD618A-E9C5-4F1EB9A5-B2E47EC98EF1&displaylang=en [Ligent VCS-2931, 82647FW] On a 32-bit Windows 2008 server where Rendition Engine is installed, when Show/Hide Rendering is set to Hide, Microsoft Excel will fail and close when you attempt to open an Excel file. If you need to use Excel on the server, open Domain Manager and set Show/Hide Rendering to Show before opening the Excel file. This does not affect rendering of Excel documents. [Ligent VCS-3325] On a 32-bit Windows 2008 server where Rendition Engine is installed, to successfully render symbol fonts in bookmarks for Microsoft Word source documents, open Domain Manager and set Show/Hide Rendering to Show

Defect	Description
	<p>before rendering the Word documents to PDF. [Liquent VCS-3063, 92385FW]</p> <ul style="list-style-type: none"> On a 32-bit Windows 2008 server where Rendition Engine is installed and the BusinessServiceServer Windows Service is set to start automatically but is delayed, it can take several minutes for it to start after booting the server. Open the Task Manager to verify that the BusinessServiceServer.exe and BusinessServiceManager.exe has started if there are errors immediately after booting the server. On a 64-bit Windows 2003 server where Rendition Engine is installed, using the MS Doc Imaging plug-in for rendering .tif images causes Rendition Engine to stop responding. As an alternative, use the TIFFX plug-in for .tif images. [Liquent VCS-2946] On a 64-bit Windows 2008 server where Rendition Engine is installed, an informational-only printing dialog box appears for Microsoft Word, Microsoft Excel, and Microsoft Outlook. For Microsoft Project, the application opens fully. This may interfere with using the Domain Manager on the server while it is rendering. When generating rendered output, Rendition Engine works with the applications that are associated with the content types being rendered. By default, Rendition Engine uses these applications in non-interactive mode, which means the applications and any dialog boxes are hidden from the user during the rendering process. However, this is not possible on a 64-bit Windows 2008 server. WordPerfect documents that were converted from Word fail to render to HTML. When rendering Word-to-WordPerfect documents, a hidden save dialog is generated by the WordPerfect plug-in. BusinessServiceRender does not properly handle this dialog and the rendition job fails. [Liquent VCS-277, 23419] When installing, Microsoft Visual Studio erroneously generates the temporary files listed below in the server's root directory. These files are unnecessary and can be safely deleted. This known issue is planned to be fixed in Visual Studio 2008 SP1. <ul style="list-style-type: none"> eula.1028.txt eula.1031.txt eula.1033.txt eula.1036.txt eula.1040.txt eula.1041.txt eula.1042.txt eula.2052.txt eula.3082.txt globdata.ini install.exe install.ini install.res.1028.dll install.res.1031.dll

Defect	Description
	<ul style="list-style-type: none"> ○ install.res.1033.dll ○ install.res.1036.dll ○ install.res.1040.dll ○ install.res.1041.dll ○ install.res.1042.dll ○ install.res.2052.dll ○ install.res.3082.dll ○ RemoveLiquentServices.iss ○ SetupLiquentServices.iss ○ VC_RED.cab ○ VC_RED.MSI ○ vcredist.bmp ○ [Liquent VCS-3335, 114908FW] <ul style="list-style-type: none"> • When printing a Microsoft Excel file containing multiple sheets, page numbers in the header/footer print in sequential order across all the sheets in the workbook. However, the rendered output of the same workbook results in the page numbers starting over for each sheet. With Rendition Engine, you can render an entire workbook, but the pagination is not preserved in the PDF output. This is not a problem, works as designed. [Liquent VCS-1361, 39292WEB] • Excel cell comments will be rendered to HTML, but the comment place-holder might overlap or be overlapped by the cell content, and it is displayed differently in various browsers (specifically, Firefox, Chrome, Opera). Excel cell comments will only be rendered to PDF if, on a document by document basis, the comments are specified to be printed in the Print Page Setup dialog. To specify: Open the document in Excel, select the Page Layout tab > Sheet Options > Sheet tab > in the Print group change the Comments combo box from (None) to "As displayed on sheet". A printer must be available on the system to complete this setting. [Liquent VCS-3272, 110575FW] • Excel and PowerPoint hyperlinks with specified display text will not work as links in the PDF. When the default display text is used the links function as expected. This is a current limitation with the product. [Liquent VCS-3235, 105553FW] • Rendition Engine does not support the installation of Microsoft Office Compatibility Pack for Office 2003 on the server. The pack provides support for Word, Excel, and PowerPoint 2007 file formats in Office 2003. • When rendering HTML documents to PDF using Liquent PDF Creator with Internet Explorer 6, decrease the margins by approximately .25 inches to avoid having text cut off in the rendition. Margins are adjusted in Internet Explorer by clicking File > Page Setup. • When Rendition Engine attempts to install the Microsoft.NET 2.0 Framework, Windows Installer 3.0 must be present on the server. If it is not present, the Microsoft.NET 2.0 Framework installation "silently" fails without notification. To install Windows Installer 3.0, go to http://www.microsoft.com/downloads/details.aspx?familyid=5FBC5470-B259-

Defect	Description
	<p>4733-A914-A956122E08E8&displaylang=en.</p> <ul style="list-style-type: none"> Canceling an "In Work" job on the Rendition Engine server causes BusinessServiceRender.exe to crash. The call from the Content Engine Publishing code has been disabled, resulting in the Publish Request being canceled. The request will continue on the Rendition Engine server and fail in the distribute step when it attempts to write the result file to the removed temporary location on the Content Engine server. [Liquent VCS-3293, 112265FW]
910348	<p>When publishing Microsoft Project documents, the Gantt chart might not be included in the published document if the splitter bar between the resource descriptions and the Gantt chart is not automatically displayed in Microsoft Project during the publishing process. This can occur if the resolution of the client where the Project document was created is higher than the native resolution of the Rendition Engine server, or if the Project application is not resized properly on the Rendition Engine server desktop.</p> <p>Solution: Perform these actions on the Rendition Engine server while logged in as the FNRE_Admin user:</p> <ol style="list-style-type: none"> Increase the resolution of the Rendition Engine server display so that it is higher in comparison to most clients where Project files are created. This shifts the splitter bar to the left on the Rendition Engine display in relation to when it was viewed on the Project client machine, and therefore allows Project to display the Gantt chart. This may not completely solve the problem if a Project file is created on a client that has a higher screen resolution than the highest resolution of the Rendition Engine server, and the splitter bar was placed near the right edge by the user, but this will generally not occur. Resize the Microsoft Project window on the Rendition Engine server so that the entire Project application fits into the current screen size without maximizing the Project application. This forces Project into the current resolution on the server, and also allows Project to reset the splitter bar between the resource descriptions and the Gantt chart onto the current display. This should fix the exceptions where the Project client resolution is higher than on the Rendition Engine server. <p>Perform these actions when logged directly into the Rendition Engine server desktop or with a remote access solution that does not change the resolution of the display. Be aware that Remote Desktop might change the display resolution and cause this fix to fail if it is set to a different resolution than the native server desktop.</p>
923069	<ol style="list-style-type: none"> The Publish Style Template Manager does not support these XML special characters in Watermark text: <ul style="list-style-type: none"> &lt; < less than &gt; > greater than &amp; & ampersand &apos; ' apostrophe &quot; " quotation mark Publish Style Template Manager persists PDF security passwords, but the password settings appear blank when a user chooses the edit button to view the setting after saving the password.

Workplace

Defect	Description
780538	<p>When using Mozilla Firefox 2, the CM8 Viewer locks up when attempting to open a document for viewing.</p> <p>Workaround: Upgrade to the latest supported Firefox version or the most current supported version of JRE 1.6.</p>
799462	<p>When using Office 2007 on Vista, it is not possible to save a document to WebDAV.</p> <p>Workaround: Save a local copy of the document, then drag and drop the local copy into the WebDAV mapping folder.</p>
802838	<p>When Workplace (Application Engine 4.0.2) is configured with ISRA on JBoss 4.2.3 or 5.0.1, it is unable to retrieve Image Services documents.</p> <p>Workaround: Install and deploy Workplace (Application Engine) on JBoss 4.0.5 or upgrade to Application Engine 4.0.2.6.</p>
910498	<p>On an Application Integration client that is on Windows 7 (32 bit or 64 bit) or Vista 64 bit, and that has SSO with Kerberos enabled, clicking an inserted hyperlink in Microsoft Office or Microsoft Outlook results in an unexpected login page.</p> <p>Solution: This is a known issue from Microsoft. Refer to the workaround in Microsoft Knowledge Base article 943280: http://support.microsoft.com/?id=943280</p>

Workplace XT

Defect	Description
780538	<p>When using Mozilla Firefox 2, the CM8 Viewer locks up when attempting to open a document for viewing.</p> <p>Workaround: Upgrade to the latest supported Firefox version or the most current supported version of JRE 1.6.</p>
759915 ISV	<p>If you plan to use the migration tool to upgrade your WebLogic environment from 9.x to 10, and you have Workplace XT installed with user token configuration, you must remove the Workplace user token configuration before you attempt to upgrade WebLogic. Use the following steps to prepare for the upgrade:</p> <ol style="list-style-type: none"> 1. Log in to the WebLogic administrative console. 2. Navigate to Security Realms > myrealm > Providers > Authentication. 3. Click on Lock & Edit. 4. In the list, select the name of the custom provider you specified when you configured user token support. 5. Click Delete, and click Yes to confirm the deletion. 6. Click Activate Change. 7. Shut down the WebLogic server. 8. Remove the authentication-weblogic-9.jar file and the log4j-1.2.13.jar file from the following directory: <p style="text-align: center;"><WL_home>/server/lib/mbeantypes</p>

Defect	Description
	<p>9. Perform your WebLogic upgrade.</p> <p>10. Configure WebLogic per the instructions in the <i>Workplace XT 1.1.2 Installation and Upgrade Guide</i>, including the optional procedure to configure WebLogic to support user tokens for Workplace XT (including Application Integration, eForms, Records Manager, and others).</p>
799462	<p>When using Office 2007 on Vista, it is not possible to save a document to WebDAV.</p> <p>Workaround: Save a local copy of the document, then drag and drop the local copy into the WebDAV mapping folder.</p>
825425	<p>When using Mozilla Firefox 3 on a Microsoft Vista operating system, the following occurs when checking in a document:</p> <p>When browsing for a document to check in, the Select File dialog box is displayed in the background instead of in front of existing windows.</p> <p>When canceling the Select File dialog box. The Checkin wizard will no longer be displayed in front of existing windows. It is displayed in the background.</p> <p>Workaround: Install Microsoft Service Pack 1.</p>
844804	<p>When attempting to deploy Workplace XT 1.1.4.1 on JBoss 4.3.0, a stack trace displays with the following error:</p> <pre>java.lang.NullPointerException javax.faces.webapp.FacesServlet.init(FacesServlet.java:165) org.jboss.web.tomcat.security.SecurityAssociationValve.invoke(SecurityAssociationValve.java:182) org.apache.catalina.authenticator.AuthenticatorBase.invoke(AuthenticatorBase.java:433) org.jboss.web.tomcat.security.JaccContextValve.invoke(JaccContextValve.java:84) org.apache.catalina.valves.ErrorReportValve.invoke(ErrorReportValve.java:104) org.jboss.web.tomcat.service.jca.CachedConnectionValve.invoke(CachedConnectionValve.java:157) org.apache.catalina.connector.CoyoteAdapter.service(CoyoteAdapter.java:241) org.apache.coyote.http11.Http11Processor.process(Http11Processor.java:844) org.apache.coyote.http11.Http11Protocol\$Http11ConnectionHandler.process(Http11Protocol.java:583) org.apache.tomcat.util.net.JIoEndpoint\$Worker.run(JIoEndpoint.java:447) java.lang.Thread.run(Thread.java:619)</pre> <p>Workaround: Add the following to the web.xml.</p> <pre><listener> <listener-class>com.sun.faces.config.ConfigureListener</listener-class></pre>

Defect	Description
	</listener>
828344	In Workplace, you cannot multi-select for downloading documents with file names that contain double-byte characters. File names become garbled. Workaround: Select and download each file individually.
846888	In Workplace XT, when using JRE1.6.0_14 with Internet Explorer 7 and 8, a document with no content cannot be added to an object store using the entry template wizard. The add process fails.
849654	A search cannot be displayed completely when it is opened from a search template. This issue occurs when the screen resolution is 1024x768, the browser is Internet Explorer, and the browser has more than one toolbar enabled.
860835	When using Mozilla Firefox, hyperlinks to FileNet P8 documents that are inserted into a document do not open. This is a known issue from Microsoft. Refer to the workaround in Microsoft Knowledge Base article 218153: http://support.microsoft.com/kb/218153/en-us .
852386	After selecting an entry template by clicking its specific title link, a 404 Not Found error occurs. This issue occurs in Workplace XT 1.1.4.x.
893305	In Workplace XT version 1.1.4.0 and above, clicking the Entry Template title link from the selection wizard will result in a 404 Not Found error.
908502	In Workplace, some form templates can take longer than 15 seconds to open. Workaround ;Use the suggestions in the following technical notice to resolve the issue: http://www-01.ibm.com/support/docview.wss?rs=0&uid=swg21437750 :
910498	On an Application Integration client that is on Windows 7 (32 bit or 64 bit) or Vista 64 bit, and that has SSO with Kerberos enabled, clicking an inserted hyperlink in Microsoft Office or Microsoft Outlook results in an unexpected login page. Solution: This is a known issue from Microsoft. Refer to the workaround in Microsoft Knowledge Base article 943280: http://support.microsoft.com/?id=943280

Application Integration BCS

Defect	Description
845953	When a user checks in a document that was exclusively checked out by another user, no error appears to notify the user that the checkin was not successful.
853933	When invalid default values for a choice list property are defined in a class, users cannot add a document using the default entry template with this class.
846220	When a document's attribute is assigned Read-Only and it is added from an integrated Office application using the default entry template, and then the document is saved, the document cannot be added successfully. Users cannot get past the entry template. If the entry template is cancelled, and then reopened, users instead receive a "This file is read only" error.
860822	The hierarchical folder site preference for file tracker was implemented for Workplace

Defect	Description
	XT 1.1.4 and is not supported by Application Integration. When a document is checked out from a Microsoft Office application using Application Integration, the hierarchical folder structure will not be created. Instead the document will be downloaded to the tracked path, unless the user changes the download location.
893300	If you attempt to access the Help link from the Application Integration BCS Site Preferences page, you will encounter a File Not Found error. Workaround: Open the IBM FileNet help from another Site Preferences page, and search for or navigate to the Application Integration BCS Site Preferences help.
915540	For Application Integration BCS in an SSL environment, the steps to install the security certificate are different depending on the browser version. For IE6, you can accept all defaults in the wizard that installs the certificate. For IE7 and IE8, use the following steps: <ol style="list-style-type: none"> 1. In your browser, access the SSL link for Content Engine. 2. On the Certificate Error dialog, click View Certificate. 3. Click Install Certificate. 4. Click Next. 5. Choose Place all certificates in the following store. 6. Click Browse and choose Trusted Root Certification Authorities. 7. Click Next. 8. Click Finish. 9. Close all IE browser windows. 10. Open a new IE browser window and access the Content Engine SSL link again. If there are no warnings or messages, the certificate was properly installed.

WebDAV

Defect	Description
840608	Users cannot map a WebDAV driver using a non-SSL URL on a Microsoft Vista 64-bit operating system. Refer to the workaround for this issue by referring to Microsoft Knowledge Base article 841215: http://support.microsoft.com/kb/841215 .

Internationalization

Defect	Description
837257	Installing IBM FileNet P8 Platform for a Turkish locale on Sun and HP platforms fails. Workaround: Change locale to US English to install, configure and deploy IBM FileNet P8 Platform. You can then change the locale back to Turkish after installation and deployment are complete. This does not affect any Turkish support in P8 applications.
835374	Issues exist when attempting to check out multiple documents in a Japanese locale. You might see an error message such as "String index out of range: -26".

Defect	Description
	Workaround: In a Japanese locale, select one document at a time to check out.

IBM FileNet Connector for SharePoint Web Parts 2.2.1 and 2.2.1.1

Defect	Description
890246	<p>IBM FileNet Connector for SharePoint Web Parts 2.2.1 allows you to download a document when you select the Check Out option from the context menu. However, when you select the Check Out option and download a document with multiple content elements, the Close button on the Download window does not function. To close the Download window, click the Close icon in the menu bar instead.</p> <p>IBM FileNet Connector for SharePoint Web Parts 2.2.1.1 allows you to download a document with a single content element when you select the Check Out option from the context menu. However, when you select the Check Out option for a document with multiple content elements, the Download option does not function. To download a document with multiple content elements, select Download a Copy from the context menu instead.</p>

Development Tools

Content Engine Web Service

Defect	Description
860728	<p>When running a Content Engine Web Service client application created in Visual Studio 2005 with Web Service Enhancements (WSE) 3.0 that uses the 4.0 Message Transmission Optimization Mechanism (MTOM) endpoint, you might experience high memory usage or an OutOfMemoryException exception when you stream large MTOM attachments. This problem occurs because WSE 3.0 buffers attachments before they are sent, potentially creating very large buffers. When using WSE 3.0, you cannot stream MTOM attachments without buffering.</p> <p>Microsoft has a WSE hotfix available that allows proper, non-buffered streaming of content uploaded over MTOM, which does not require the entire source content to be loaded into memory at once. For more information, see article 943508 on the Microsoft support site: http://support.microsoft.com/?id=943508. This hotfix is not available for general download; to obtain it, you must call 1-800-MICROSOFT.</p> <p>To stream MTOM attachments as they are sent from the client application to the Web server, you must modify the definition of the generated InlineContent class, applying techniques similar to those described in the following MSDN article: How to Stream Large Amounts of Data from a Web Service (http://msdn.microsoft.com/en-us/library/aa528818.aspx).</p> <p>To prevent timeouts, increase the proxy class timeout value to a sufficient level. For example,</p> <pre>FNCEWS40ServiceWse objBinding = new FNCEWS40ServiceWse(); objBinding.Timeout = 1200000; // 20 minutes</pre>

Content Engine Java and .NET API

Defect	Description
860728	<p>When running a .NET client application created in Visual Studio 2005 with Web Service Enhancements (WSE) 3.0, you might experience high memory usage or an OutOfMemoryException exception when you stream large Message Transmission Optimization Mechanism (MTOM) attachments. This problem occurs because WSE 3.0 buffers attachments before they are sent, potentially creating very large buffers. When using WSE 3.0, you cannot stream MTOM attachments without buffering.</p> <p>Microsoft has a WSE hotfix available that allows proper, non-buffered streaming of content uploaded over MTOM, which does not require the entire source content to be loaded into memory at once. For more information, see article 943508 on the Microsoft support site: http://support.microsoft.com/?id=943508. This hotfix is not available for general download; to obtain it, you must call 1-800-MICROSOFT.</p>

Documentation

General Help

Defect	Description
835476	Most translated key FileNet terminology used in the product user interface (UI) in this release has been aligned with IBM standard terminology. Terminology alignment has not been applied to translated key FileNet terminology used in the online user help in this release. Terminological inconsistencies therefore exist between the product UI and the online user help.
906895	In the topic "Required minimum access rights by operation" (found in the ecm_help at System Administration > FileNet P8 Security > Authorization > Required minimum access rights by operation) the tables for Checkout minor version and Checkout major version should have stated that the required minimum access rights for a Document are Major Versioning or Minor Versioning. In other words, as of 4.x, a user with either the Minor Versioning or the Major Versioning rights can check out a document.
937571	In the Content Engine help topic 'IBM Tivoli Storage Manager configuration parameters', the field names are shown as starting with FCD (for Fixed Content Device). In Enterprise Manager, the field names actually start with FCP (for Fixed Content Provider).

Plan and Prepare Guide

Defect	Description
941668	The topic "Upgrade system requirements for FileNet P8 Platform" in the <i>Plan and Prepare Your Environment for IBM FileNet P8</i> document incorrectly implies that Workplace XT was supported on Content Engine 3.5. WorkPlace XT was not supported on Content Engine until the 4.0 release.
945545	<p>In the <i>Plan and Prepare Your Environment for IBM FileNet P8</i>, the topic "Preparing DB2 for z/OS servers" should include the following information:</p> <ul style="list-style-type: none"> The DB2 instance is dedicated to IBM FileNet P8. Parallelism is not supported for Content Engine. Disable parallelism by setting

Defect	Description
	CDSSRDEF=1.

Application Engine

Defect	Description
849682	<p>The installation instructions for Configuring Application Engine on JBoss are missing a step. The task "Configure Application Engine (JBoss)" should contain the following changes:</p> <p>The configuration edits must be made to the run.conf file instead of the application server startup script run.sh or run.bat.</p> <p>The step "Configure LDAP settings on Application Engine need to exactly match the Content Engine settings."</p> <p>The section should contain the following three additional substeps after step c:</p> <p>d. Copy the new <application-policy name="FileNetP8Engine"> entry, and paste the copied entry directly before the entry you copied (<application-policy name="FileNetP8Engine">).</p> <p>e. Change the first instance of the <application-policy name="FileNetP8Engine"> to <application-policy name="FileNetP8">.</p> <p>f. Move all the FileNet-related <application-policy name=> elements before the <application-policy name="other"> element.</p> <p>After the three new steps, continue with the remaining substeps to save the file and restart JBoss.</p>
934281	<p>The procedure in the topic "Configuring Lightweight Third Party Authentication (LTPA)", for both Install and Upgrade, should appear as follows:</p> <p>For the field that is named "Timeout value for forwarded credentials between servers," enter a LTPA timeout value that is larger than the default. If the timeout value is left at the default value of 120 minutes, users will not be able to perform any actions in Workplace after being logged in for 2 hours.</p> <p>This topic is in two locations:</p> <ul style="list-style-type: none"> • Install or upgrade IBM FileNet P8 Platform > Installing a distributed IBM FileNet P8 Platform system > Installing and configuring Application Engine > Configuring Application Engine on the application server > Configuring Application Engine on WebSphere Application Server > Configuring Lightweight Third Party Authentication (LTPA). http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.install.doc/p8pup173.htm • Install or upgrade IBM FileNet P8 Platform > Upgrading and configuring IBM FileNet P8 Platform > Upgrading and configuring Application Engine > Configuring Application Engine upgrades from 3.5 > Configuring Application Engine upgrades from 3.5 on WebSphere Application Server. http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.install.doc/p8pup205.htm

Content Engine

	Description
831449	The topic entitled "Storage area properties (Statistics tab)" describes the File bytes

	Description
	property as follows: "Identifies the space used by documents stored on the disk volume in which the storage area resides." This statement is incorrect. The File bytes property is the number of bytes of content stored on the disk volume in which the storage area resides. This number might be less than the total disk size of the content files because of the file system block size.
889862	The topic "Suppress duplicate content elements" implies that the duplicate suppression feature is available for file storage areas, database storage areas, and fixed content devices. However, the feature is not available for fixed content devices.
891990	In the <i>FileNet P8 4.5.1 Installation and Upgrade Guide</i> topic "Installing IBM FileNet Deployment Manager," step 3 ("If you have not already done so, install the required Windows components...") is not required.
893107	In the <i>FileNet P8 4.5.1 FP 2 Installation and Upgrade Guide</i> topic "Upgrading and configuring Content Engine and Content Search Engine > Upgrading from version 3.5.2 > Upgrading Content Engine and related client software > Installing Content Engine software updates," replace the following sentence: If no Content Engine software updates are available, skip this procedure. with these paragraphs: If no Content Engine software updates are available, skip this procedure. If you previously installed the latest fix pack on an existing Content Engine 4.5.1 server that already has a FileNet P8 4.5.1 domain, then skip to the topic "Upgrading and configuring Content Engine and Content Search Engine > Upgrading from version 3.5.2 > Configuring storage devices for upgrades." If you previously installed the latest fix pack on an existing Content Engine 4.5.1 server that does not have a FileNet P8 4.5.1 domain, then skip to the topic "Upgrading and configuring Content Engine and Content Search Engine > Upgrading from version 3.5.2 > Installing the latest Content Search Engine Client files on Content Engine servers."
893239	In the <i>FileNet P8 4.5.1 Installation and Upgrade Guide</i> topic "Upgrading and configuring Content Engine and Content Search Engine > Upgrading from version 3.5.2 > Upgrading Content engine and related client software" topic, replace the following paragraph: Migrating your Content Engine version 3.5.2 on a Windows server to Content Engine version 4.5.1 on UNIX requires a new installation of Content Engine on your UNIX machine. You also need access to a Windows machine to install and run IBM® FileNet® Enterprise Manager and the Content Engine Upgrader tool. with these two paragraphs: If you are migrating version 3.5.2 of Content Engine version 3.5.2 on a Windows server to version 4.5.1 on a UNIX server, you must install Content Engine 4.5.1 on the UNIX server. You also need access to a Windows machine to install and run IBM FileNet Enterprise Manager and the Content Engine Upgrader tool. You do not need access to a Windows machine to install and run Content Engine Web Upgrader Tool because the tool is deployed on the application server instance where Content Engine 4.5.1 is deployed. If you have an existing Content Engine 4.5.1 system to which you want to migrate the Content Engine 3.5.2 domain objects and object store, skip to the topic "Installing Content Engine software updates."
893360	In the <i>FileNet P8 4.5.1 Installation and Upgrade Guide</i> topic "Upgrading and configuring IBM FileNet P8 Platform > Upgrading and configuring Content Engine

	Description
	<p>and Content Search Engine > Upgrading from 4.0.1 or 4.5.0 > Configuring Content Engine instances upgraded from version 4.0.1 or 4.5.0 > Configuring upgraded instances using the command line', replace step 5 with the following step:</p> <p>Run one of the following two commands:</p> <ul style="list-style-type: none"> If you just created a configuration profile for an upgrade, run this command to update the EAR file with bootstrap information: <pre>configmgr_cl execute -task configurebootstrap -profile myprofile</pre> If a bootstrap task already exists, run this command (with no line breaks): <pre>configmgr_cl execute -task configurebootstrap -profile myprofile -taskfile configurebootstrap.2.xml</pre>
894146	<p>In the <i>FileNet P8 4.5.1 Installation and Upgrade Guide</i> section 'Upgrading and configuring Content Engine and Content Search Engine > Upgrading from version 3.5.2,' the topic "Updating CFS-IS settings" should follow, rather than precede, the topic "Upgrading Content Engine data."</p>
894354	<p>The following <i>FileNet P8 4.5.1 Installation and Upgrade Guide</i> subtopics of the topic "Upgrading a version 3.5.2 FileNet P8 domain into a new version 4.5.1 FileNet P8 domain" are in the wrong order:</p> <ul style="list-style-type: none"> - Upgrading object stores - Validating object stores <p>The correct order of the subtopics is:</p> <ul style="list-style-type: none"> - Validating object stores - Upgrading object stores
894401	<p>In the <i>FileNet P8 4.5.1 Installation and Upgrade Guide</i>, the subtopics "Updating CFS-IS settings" and "Upgrading Content Engine data" of the topic "Upgrading and configuring Content Engine and Content Search Engine > Upgrading from version 3.5.2" are misordered. The correct order is as follows:</p> <ul style="list-style-type: none"> - Upgrading Content Engine data - Updating CFS-IS settings
901676	<p>Steps 4 and 5 in the FileNet P8 Installation and Upgrade Guide topic "Upgrading a version 3.5.2 FileNet P8 domain into an existing version 4.6.0 FileNet P8 domain" can be skipped. They are duplicates of steps 6 and 7 in the topic "Starting Content Engine Web Upgrade Tool."</p>
902378	<p>In the topic titled Content Engine Encryption (Enterprise-wide Administration > FileNet P8 Security > Security tools and procedures > Encryption), the subtopic titled "Symmetric encryption of sensitive data at rest" should have been titled "Symmetric encryption of sensitive data at rest in the GCD".</p>
906453	<p>"P8 Bootstrap user should not be removed from the P8 domain permissions":</p> <p>There is an error in the security topic "Users and groups required by FileNet P8 Platform" in its description of the Content Engine system user (Bootstrap admin). The error is in the best practice advice in the following statement:</p>

	Description
	<p>"The ce_bootstrap_admin will remain on the list of GCD administrators unless some other GCD administrator explicitly removes it. However, it is a best practice to remove it, and to keep the ce_bootstrap_admin (in its role as application server administrator) for the sole purpose as the account that Content Engine will run as."</p> <p>The correct best practice for ensuring least required permissions is to add a new GCD administrator to the P8 domain's Security tab and to keep the ce_bootstrap_admin account on the tab, but with the reduced permission of "View all properties".</p>
913640	<p>The Content Consistency Checker documentation is missing a statement to describe how fixed storage areas are processed, as follows:</p> <p>If the object store uses a fixed storage area, Content Consistency Checker validates the existence of the documents that are stored in the fixed storage area. If the documents are not federated, Content Consistency Checker also compares the size of the document on the fixed device with the size recorded for the object in the object store.</p>
915771	<p>The permissions required by the Content Engine database account for SQL Server (ce_db_user) and described in the topic "Creating Content Engine database accounts" (located at http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.planprepare.doc/p8ppi075.htm) have changed. The db_owner permission is no longer required and has been replaced by db_datawriter, db_datareader, db_ddladmin. The public permission is still required.</p> <p>The full list of required permissions is therefore:</p> <ul style="list-style-type: none"> • public • db_datawriter • db_datareader • db_ddladmin <p>All other requirements described in that topic remain.</p>
932705	<p>In the P8 4.5.1 Information Center topic titled "Editing web.xml for container-managed authentication" omit step 5. It is a duplicate of step 4.</p>
936519	<p>In the topic Administering IBM FileNet P8 > Backing up and restoring IBM FileNet P8 components > Enterprise-wide recovery > Restoring Content Engine, the following note should be added to step 1:</p> <p>IMPORTANT Failure to stop the application server software can result in corrupted data in the restored object store database.</p>
936684	<p>The following sentence needs to be added to the IBM FileNet P8 4.5.1 Information Center topic "Upgrading a FileNet P8 3.5.2 domain into a nonempty FileNet P8 4.5.1 domain":</p> <p>No two object stores in the same FileNet P8 domain can have the same symbolic name. If an object store in the FileNet P8 4.5.1 domain has the same symbolic name as an object store in the FileNet P8 3.5.2 domain, you need to change the symbolic name of one of the object stores before upgrading the 3.5.2 domain into the nonempty 4.5.1 domain.</p>

	Description
934292	<p>In the High Availability Technical Notice topic "(WebSphere only) Configure Lightweight Third Party Authentication (LTPA)," step 1 reads as follows:</p> <p>Set timeout to 60,000.</p> <p>Step 1 should read as follows:</p> <p>Set the "Timeout value for forwarded credentials between server" value to one of the following values, depending on your version of WebSphere:</p> <ul style="list-style-type: none"> • (WebSphere 6.1) 35971 • (WebSphere 7.0) 60000
942086	<p>In the <i>Plan and Prepare Your Environment for IBM FileNet P8</i> document, the following sentences should be removed from the Notes section of the topic "Plan and prepare for IBM FileNet P8 installation > Perform the required installation preparation tasks > Prepare storage areas for object stores":</p> <p>File storage areas on encrypted NTFS devices are not supported. However, the Decru, Vormetric, and IBM Encryption Expert hardware-based encryption solutions are supported.</p> <p>These statements belong in the Hardware and Software Requirements document.</p>
943628	<p>The topic "Set Enterprise Manager user preferences" incorrectly implies that the logging that is enabled by the "Activate trace log" user preference is the same as Content Engine trace logging. The correct description of this user preference is as follows:</p> <p>Activate trace log</p> <p>Select to enable trace logging if instructed to do so by IBM Software Support. Trace logging can provide more information for diagnosing a problem. The log is created in the Windows temporary folder (\%windir%\Temp), and is named EM_Trace_date_time.log. A new file is created each time you select this option, or each time you start Enterprise Manager while this option is selected</p> <p>Tip To avoid using up disk space, make sure that you clear this option after the requested trace logging files have been provided to IBM Software Support.</p>
947115	<p>In the P8 4.5.1 Information Center topic "Deploying Content Engine Web Upgrade Tool (WebSphere Application Server)," the following changes apply to step 9:</p> <p>Replace the first sentence in the step with the following sentence:</p> <p>If your deployment environment does not use the default SOAP port (8880) or you are using WebSphere Application Server Network Deployment, complete the following substeps:</p> <p>Replace substep b with the following substep:</p> <p>Find the line in the file that starts with SOAP_CONNECTOR_ADDRESS and change the port (the value after the =) to the port number that the WebSphere deployment manager uses. You need to edit this line to include a port number, and in some cases a host name, as determined by the SOAP_CONNECTOR_ADDRESS entry in the WebSphere administrative console.</p> <p>Add substep c:</p> <p>Start the WebSphere administrative console, navigate to System Administration > Deployment Manager > ports, and check the SOAP_CONNECTOR_ADDRESS</p>

	Description
	<p>entry:</p> <ul style="list-style-type: none"> If the entry contains a port number and an asterisk (as the host name), then replace the SOAP_CONNECTOR_ADDRESS line in the file with the following line: SOAP_CONNECTOR_ADDRESS=port_number <p>If the entry contains a port number and a host name, then replace the SOAP_CONNECTOR_ADDRESS line in the file with the following line: SOAP_CONNECTOR_ADDRESS=host_name:port_number</p> <p>host_name and port_number must match the values in the SOAP_CONNECTOR_ADDRESS entry in the administrative console.</p>
956808	<p>In the "Managed deployment" section of the "Planning Content Engine deployment" topic in the P8 4.5.1 Information Center, the first two paragraphs should read as follows:</p> <p>When you deploy Content Engine in a WebSphere Application Server managed environment, you can install and configure Content Engine on any managed node. Then use Configuration Manager to deploy the bootstrapped Content Engine EAR file to the servers on each managed node or to a cluster.</p> <p>When you deploy Content Engine in an Oracle WebLogic Server managed environment, you can install and configure Content Engine on any managed server. Then use Configuration Manager to deploy the bootstrapped Content Engine EAR file to any of the managed servers. The managed servers can be in a cluster.</p>
962994	<p>The topic "Prepare to create an object store" (http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.doc/ce_he lp/objectstores/os_prepare_to_create_an_object_store.htm in the IBM FileNet P8 V4.5.1 information center) contains an example that could be read to imply that you can create object stores that use different types of the IBM DB2 database. The bullet that contains this example should read as follows:</p> <ul style="list-style-type: none"> Which database type you are using. All the object stores that you create for Content Engine must be based on the same database type. For example, you cannot create an object store that is based on IBM DB2 for Linux, UNIX and Windows and another object store that is based on IBM DB2 for z/OS or Microsoft SQL Server.

Content Federation Services

	Description
843855	<p>The "Planning for documents with offline content" page for Content Federation Services does not display when the corresponding table of contents entry is selected in the FileNet P8 Information Center.</p>
845908	<p>The following issues exist In the <i>Content Federation Services for Content Manager OnDemand Configuration Guide</i>:</p> <ul style="list-style-type: none"> References to Content Manager OnDemand 8.4.1.0 should not be version-specific. Hyperlinks to the Content Manager OnDemand Web Enablement Kit and the hardware requirements are incorrectly directed to the FileNet P8 Information

	Description
	<p>Center home page.</p> <ul style="list-style-type: none"> Installation-related links are incorrectly directed to the home page of the FileNet P8 Information Center.
916117	<p>The P8 version 4.5.1 Information Center contains conflicting information about the maximum number of Import Agents allowed for CFS-IS.</p> <ul style="list-style-type: none"> The FileNet P8 domain properties (IS Import Agent tab) topic states that the maximum is 5. The IS Import Agents topic states that the maximum is 32676. <p>.Although the valid range of Import Agents in P8 version 4.5.1 is from 1 to 32676, you should use 10 as the maximum number.</p> <p>Most sites employ the default of 3 Import Agents. Depending on the size of the system, some sites might have 5 or as many as 10 Import Agents. However, any number higher than 10, even on a large system, could potentially cause problems.</p>

Content Search Engine

	Description
901072	<p>The P8 4.5.1 Installation and Upgrade Guide topic “Upgrading and configuring IBM FileNet P8 Platform > Upgrading and configuring Content Engine and Content Search Engine > Upgrading from version 3.5.2 > Upgrading Content Search Engine from version 3.5.2 > Upgrading Content Search Engine (Windows) > Upgrading Content Search Engine silently (Windows)” has incorrect instructions.</p> <p>When you reach this topic, do not complete the instructions in it. Instead, complete the instructions in the topic “Installing and configuring IBM FileNet P8 Platform > Installing and configuring Content Search Engine > Installing Content Search Engine > Installing Content Search Engine (Windows) > Installing Content Search Engine silently (Windows).”</p>
901099	<p>Step 2 of the following topics in the <i>IBM FileNet P8 4.5.1 Installation and Upgrade Guide</i> is incorrect:</p> <ul style="list-style-type: none"> Installing and Configuring IBM FileNet P8 Platform > Installing and configuring Content Search Engine > Collections directory Upgrading and Configuring IBM FileNet P8 Platform > Upgrading and configuring Content Engine and Content Search Engine > Upgrading from version 3.5.2 > Upgrading Content Search Engine software from version 3.5.2 > Configuring Autonomy K2 for version 4.5.1 index areas > Collections directory requirements for Content Search Engine <p>Step 2 should reads as follows:</p> <p>2. Create a temp directory on the Autonomy K2 machine on which you created the collections directory. The temp directory will be used by the K2 Index Server and Content Engine Server during operations.</p> <p>This path must be visible to both the Content Engine and the Content Search Engine servers. If the K2 Master Administration Server and Content Engine are not installed on the same machine, then the temp directory must be on a network-mounted file system, so that every server has the same path to the directory.</p>

	Description
	Note: The recommendation to create the temp directory local to the Autonomy K2 machine is a best practice to provide better performance.

FileNet Integration for Microsoft Office (FIMO)

Defect	Description
914360	<p>The <i>IBM FileNet Integration for Microsoft Office Installation and Upgrade Guide</i> contains an incorrect statement. In the topic "Preparing to use FileNet Integration for Microsoft Office in a Single Sign-On (SSO) environment," the following statement is incorrect:</p> <p>To use FileNet Integration for Microsoft Office with SSO, Workplace XT must be collocated with the Content Engine.</p> <p>This requirement is not valid, and will be removed from future versions of the guide.</p>

IBM InfoSphere Enterprise Records

	Description
857023	Step 9 of the "Installing the IBM InfoSphere Enterprise Records software" section of the <i>IBM InfoSphere Enterprise Records Installation and Upgrade Guide</i> , Version 4.5.1 needs to be changed to reflect that the step applies to JBoss Application Server 5.0.1 and later. Version 4.5.1 now supports JBoss 5.1.0 as well.
894875	<p>The first bullet in the Notes at the end of the "Declare a classified electronic records" Help topic and in the middle of the "IBM InfoSphere Enterprise Records configuration overview" Help topic should be updated to:</p> <p>The IBM InfoSphere Enterprise Records user interface has no mechanism to declare all parts of a compound document as a single record. However, you can declare individual child or parent documents as records. You can also make documents that have already been declared as records part of a compound document later.</p> <ul style="list-style-type: none"> Certain compound document settings (such as Prevent delete, or Delete child when parent is deleted) can affect the normal disposition of a record. If any part of a compound document (the parents, the children, or both) will be declared as record, it is required that the Default Settings are used (Prevent delete of Neither Parent nor Child, and, Do not delete Child when Parent is deleted.) Other settings will result in failure or inconsistent behavior when the records go through disposition, and are not supported by IBM InfoSphere Enterprise Records. Any application using Darwin Information Typing Architecture (DITA) file functionality created the components as compound documents. Therefore, the restrictions that apply to compound documents in the previous note also apply to DITA files.
898247	Step 3c, sub-step iii of the 'Configuring component queues' topic in the <i>IBM InfoSphere Enterprise Records Installation and Upgrade Guide</i> should also list ContentExtendedOps.jar as one of the JAR files to add when you are adding additional required JAR files. This should be listed for upgrades only since the JAR file is included in the installation of 4.5.1.
904256	This topic titled "Generating reports using third-party report generation tools" in the <i>InfoSphere Enterprise Records Developer's Guide</i> is incorrect and should be

	Description
	<p>removed.</p> <p>http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/index.jsp?topic=/com.ibm.p8.doc/developer_help/records_manager_api/guide/rm_dev_generating_reports_using_third_party_report_generation_tools.htm</p> <p>In place of that topic, use the section inside the product's user Help titled "Report Generation" to create a new customized report.</p> <p>http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.doc/rm_help/report_generation.htm</p>
907722	<p>The following information should be appended to the end of the CAUTION in the Inherited Security section of :</p> <p>http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/index.jsp?topic=/com.ibm.p8.doc/rm_help/object_security.htm</p> <p>There are several places in the IBM InfoSphere Enterprise Records code which require a security parent in order to work correctly with multi-filed records: viewing folders filed in, Disposition Sweep, and Autodestroy. So, if you are performing one of these types of tasks, you cannot disable the inherit security function by clearing the "inherit security from folder" checkbox. You will receive a security parent error.</p>
914755	<p>Step 4 of the Set vital records help topic needs to be reworded to reduce ambiguity. The new wording for Step 4 should be as follows:</p> <p>4. Select the Vital Record Indicator check box to indicate that the category/folder will be processed by the vital record workflow.</p>
937094	<p>The "Define and run a search" user help topic needs to have the following bullet added to the end of the NOTES in the "Specify content" section:</p> <p>When you are performing a property search with the OR operator with full text search in Dynamic mode, the default order of the result set is sorted by ranking. Be aware that the result set can have duplicate entries. For example, one item might display twice in the result set, once from the search by property and the other from the full text or content based retrieval search. Further, when you click on a different column in the result set to sort the results, such as sorting by Document Title instead of ranking, the initial duplication might get filtered out. This results in the total number of records being different in the search sorted by Document Title when compared to the total number of records returned when sorted by ranking. If you need to know the relevancy of the search results, sort by the ranking, which is the default. If it is important for you to eliminate the possible duplicate entries, sort by metadata.</p>
952163	<p>In the help topic titled "Modify report title and description," the InfoSphere Enterprise Records installer copies property resource bundle (PRB) files to <rm_install_path>\FileNet\RM\RecordsManager\WEB-INF\Resources. Be aware that, as of IER 4.5.1, there is no longer a Resources directory under <rm_install_path>\FileNet\RM\RecordsManager\WEB-INF directory. The PRB files are now packaged into the p8RecordsManagerResources.jar file in the <rm_install_path>\FileNet\RM\RecordsManager\WEB-INF\lib directory.</p> <p>In addition to the instructions currently in the topic, in the "Change the report title and description in the PRB file" section, add these steps:</p> <ol style="list-style-type: none"> 1. Copy the p8RecordsManagerResources.jar to a temporary directory and extract

	Description
	<p>the PRB file for your environment from the JAR file.</p> <ol style="list-style-type: none"> After editing and saving the PRB file, update the JAR with the modified PRB file and replace the original JAR with the updated JAR in the <rm_install_path>\FileNet\RM\RecordsManager\WEB-INF\lib directory. <p>Important: The PRB file packaged in the p8RecordsManagerResources.jar must be extracted to the com\filenet\rm\apps\server\util directory and re-packaged with the directory path, as indicated in the path column of the p8RecordsManagerResources.jar.</p>
952177	<p>In the "Upgrading InfoSphere Enterprise Records Crystal Reports" sections located in the <i>IBM InfoSphere Enterprise Records Installation and Upgrade Guide</i>, if you are using Crystal Reports 2008, the various references to the Crystal Reports templates file path as:</p> <p>install_drive:\Program Files\Business Objects\BusinessObjects Enterprise 11\Samples\En\Reports</p> <p>Should be changed to:</p> <p>install_drive:\Program Files\Business Objects\BusinessObjects Enterprise 12.0\Samples\En\Reports</p> <p>The following two user help topics also have the same change:</p> <p>http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.doc/rm_help/admin/customize_report.htm</p> <p>http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.doc/rm_help/admin/create_report.htm</p>
961854	<p>In the Customizing General Steps topic of the <i>InfoSphere Enterprise Records Developer's Guide</i>, v4.5.1, (http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.doc/developer_help/records_manager_api/guide/rm_dev_workflow_xml.htm) ignore the section titled "Modifying the user interface for a general step " because it is not supported in this release.</p>

Image Viewer

Defect	Description
896378	<p>Portable Network Graphics (PNG) file types are supported and can viewed in the Image Viewer. The content_redir.properties file must be configured to view PNG files.</p> <p>To view PNG file types in the Image Viewer:</p> <ol style="list-style-type: none"> Open the content_redir.properties file in, for example: <installed_dir>\FileNet\AE\Config, Add image/png=/WcmJavaViewer.jsp?{JSP_QUERY_STRING} to the content_redir.properties file. Edit the wcmjavaviewer.jsp file in Workplace/UI-INF/jsp/ui, and do the following: <ul style="list-style-type: none"> Replace ji.jar with ji.jar,daeja1.jar. Change cacheVersion from three parameters to four parameters, such as "4.0.2.7, 4.0.2.7, 4.0.2.7" to "4.0.2.7, 4.0.2.7, 4.0.2.7, 4.0.2.7. "

Installation documentation

	Description
NA	<p>The Oracle database account required by Content Engine (<i>ce_db_user</i>) is described in two places in the 4.5.1 Information Center. The description in <i>Plan and Prepare for IBM FileNet P8</i> at: http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.planprepare.doc/p8ppi075.htm is the version you should use, and not the one in the Security help's Users and Groups section at http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.doc/admin/security/sec_start_users_groups.htm#cotce.</p>
NA	<p>The Installation and Upgrade Worksheet, (<i>p8_worksheet.xls</i>), has a Column N titled "PPG help link." This column contains hyperlinks that, when clicked, run a query against the Plan and Prepare for IBM FileNet P8 Information Center. The queries link you to more information about the property in that row. (Not all rows contain a hyperlink.) Although the display text of the hyperlinks is correct, in some versions of the worksheet that were released, the actual destination of the hyperlink is not correct.</p> <p>For example, the worksheet might show the following link: <a ce_appserver_admin\""="" href="http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/index.jsp?tab=search&searchWord=\">http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/index.jsp?tab=search&searchWord=\"ce_appserver_admin\" However, when you click the link, it attempts to open a server that is not available. You can download the corrected version of the Installation and Upgrade Worksheet (Excel file) from the one of following Web sites:</p> <ul style="list-style-type: none"> Product Documentation for FileNet P8 Platform at: http://www-01.ibm.com/support/docview.wss?rs=3278&uid=swg27010422 The Plan and Prepare for IBM FileNet P8 Information Center at: http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8toc.doc/p8_worksheet.xls
843106	<p>The following entries need to be updated in the <i>IBM InfoSphere Enterprise Records Installation and Upgrade Guide</i>:</p> <p>On page 27, in the table before File Permissions - (Table 6 in the PDF) add the following to the table description: For WebSphere, set the WS_DIR variable to your WebSphere Application Server or WebSphere Client installation directory. Give read/write/execute permission to the folders below, all their subfolders, and all files within those folders. If the subfolders and subfiles are not included an error is returned.</p> <p>On page 54, in the 'Installing the latest Content Engine client files ...' section of the guide, add this line: Log in as the same user that installed InfoSphere Enterprise Records software to install the Content Engine Client.</p> <p>On page 56, in the 'Installing the latest Process Engine client files ...' section of the guide, add this line: Log in as the same user that installed InfoSphere Enterprise Records software to install the Process Engine Client.</p>
843113	<p>There is documentation missing from the <i>IBM InfoSphere Enterprise Records Installation and Upgrade Guide</i>. Please use (insert) the information in the two sections presented here immediately before the section '(Optional) Adding report viewing support' on Page 50 of the <i>IBM InfoSphere Enterprise Records Installation and Upgrade Guide</i>.</p> <p>Configuring IBM InfoSphere Enterprise Records Disposition Sweep Tool to use a WSI or EJB protocol</p> <p>The IBM InfoSphere Enterprise Records Disposition Sweep tool now supports</p>

	Description
	<p>several EJB protocols (iiop, t3, jnp), in addition to the default WSI protocols (http, https), for communicating with the Content Engine.</p> <p>A Connection menu has been added to the Disposition Sweep Configuration user interface to allow the selection of one of the WSI protocols or one of the EJB protocols. By default, the Connection field displays the WSI protocols. If you want the EJB protocols to be displayed, the InfoSphere Enterprise Records Sweep batch file (RecordsManagerSweep.bat for Windows or RecordsManagerSweep.sh for UNIX), must be modified.</p> <p>This does not apply to Hold Sweep, only to Disposition Sweep.</p> <p>To modify the IBM InfoSphere Enterprise Records tool so it displays EJB protocols when configuring disposition sweep:</p> <ol style="list-style-type: none"> 1. Log on to the machine where you installed the InfoSphere Enterprise Records Sweep Tool. 2. Open the RecordsManagerSweep.bat (Windows) or the RecordsManagerSweep.sh (UNIX) file for editing. 3. Set the CONNECTION_TYPE variable to EJB. WSI is the default. If anything other than EJB or WSI is entered, WSI is assumed. For example: set CONNECTION_TYPE=EJB (Windows) CONNECTION_TYPE=EJB (UNIX) 4. Set the APP_SERVER variable to your application server type; either WebSphere, WebLogic or JBoss. For example: set APP_SERVER=WebSphere (Windows) APP_SERVER=WebLogic (UNIX) 5. Depending on your Application Server, make the following additional changes: <ol style="list-style-type: none"> a. For WebSphere: <ol style="list-style-type: none"> i. Set the WS_DIR variable to your WebSphere Application Server or WebSphere Client installation directory. For example: set WS_DIR=C:\Program Files\IBM\WebSphere\AppServer (Windows) WS_DIR=/opt/IBM/WebSphere/AppServer (UNIX) ii. Set the NAMING_PROVIDER_URL to the URL for your Content Engine. For example: set NAMING_PROVIDER_URL=iiop://<CE Server>:2809 <p>Notes:</p> <ul style="list-style-type: none"> ▪ <CE Server> is the name of your Content Engine Server machine. ▪ iiop is the default protocol used. Specify the protocol that your Content Engine Server is using. ▪ 2809 is the default port. Specify the port number used by your Content Engine. <ol style="list-style-type: none"> iii. For the CORBA_CONFIGURL, ensure that the path to the sas.client.props file is correct. In particular, be sure that the default AppSrv01 folder is correct. If not, change it to match your WebSphere installation. b. For WebLogic 9 or earlier: <ol style="list-style-type: none"> i. Copy the weblogic.jar file from <WebLogic install path>/lib folder

	Description
	<p>to the <RM install path>/RecordsManagerSweep/lib folder.</p> <ul style="list-style-type: none"> ii. Uncomment the line: REM set CLASS_PATH=%CLASS_PATH%;lib/weblogic.jar iii. Uncomment or comment other lines as necessary to use one of the various JRE levels. <p>c. For WebLogic 10 or later:</p> <ul style="list-style-type: none"> i. Copy the wfullclient.jar file from <WebLogic install path>/lib folder to the <IER install path>/RecordsManagerSweep/lib folder. ii. Uncomment the line: REM set CLASS_PATH=%CLASS_PATH%;lib/ wfullclient.jar iii. Uncomment or comment other lines as necessary to use various JRE levels. <p>d. For JBoss:</p> <ul style="list-style-type: none"> i. Copy the jbossall-client.jar file from <JBoss install path>/client folder to the <IER install path>/RecordsManagerSweep/lib folder. ii. Uncomment the line: REM set CLASS_PATH=%CLASS_PATH%;lib/ jbossall-client.jar iii. Change other lines as necessary to use one of the various JRE levels. <p>To modify the IBM InfoSphere Enterprise Records Configuration user interface so it displays WSI protocols again, simply reset the CONNECTION_TYPE variable to WSI.</p> <p>Configuring IBM InfoSphere Enterprise Records Disposition Sweep Tool to use FIPS 104-2 security (WebSphere only)</p> <p>The IBM InfoSphere Enterprise Records Disposition Sweep tool now supports FIPS 104-2 security on WebSphere Application Servers. In order to use this feature on the IBM InfoSphere Enterprise Records Sweep Configuration user interface, you must modify the RecordsManagerSweep tool to use the WebSphere JRE:</p> <ol style="list-style-type: none"> 1. Log on to the machine where you installed the InfoSphere Enterprise Records Sweep Tool. 2. Open the RecordsManagerSweep.bat (Windows) or the RecordsManagerSweep.sh (UNIX) file for editing. 3. Set the JAVA_EXE variable to WebSphere java executable. For example: set JAVA_EXE="C:\Program Files\IBM\WebSphere\AppServer\bin\java" (Windows) JAVA_EXE="/opt/IBM/WebSphere/AppServer/bin/java" (UNIX)
843857	<p>The Configuring IBM InfoSphere Enterprise Records tools servers section of the 4.5.1 version of the <i>IBM InfoSphere Enterprise Records Installation and Upgrade Guide</i> is missing the following section:</p> <p>In WebLogic environments use the wfullclient.jar, complete the following procedures for each of the IBM InfoSphere Enterprise Records client tools:</p>

	Description
	<p>For WebLogic 9 environments, copy the weblogic.jar file from the BEA_HOME/server/lib WebLogic Server directory on the Application Engine or the Workplace XT machine to the following installed lib directory of the tool machine: IER_install_path/FileNet/IER/FilePlanImportExportTool/lib IER_install_path/FileNet/IER/RMTransfer/lib IER_install_path/FileNet/IER/RecordsManagerSweep/lib</p> <p>For WebLogic 10 environments and later, client applications should use the wfullclient.jar file. To use the wfullclient.jar, complete the following procedures for each of the IBM InfoSphere Enterprise Records client tools:</p> <ol style="list-style-type: none"> 1. Change directories to the WebLogic server/lib directory. For example, use the following command on UNIX systems: cd WL_HOME/server/lib 2. Create the wfullclient.jar in the WebLogic server/lib directory: java -jar ../../modules/com.bea.core.jarbuilder_X.X.X.X.jar, where X.X.X.X is the version number of the jarbuilder module in the WL_HOME/server/lib directory. For example: java -jar ../../modules/com.bea.core.jarbuilder_1.2.0.0.jar 3. Copy the newly-created wfullclient.jar file from the BEA_HOME/server/lib WebLogic Server directory on the Application Engine or the Workplace XT machine to the following installed lib directory of the tool machine: IER_install_path/FileNet/IER/FilePlanImportExportTool/lib IER_install_path/FileNet/IER/RMTransfer/lib IER_install_path/FileNet/IER/RecordsManagerSweep/lib 4. Edit the batch file for the IBM InfoSphere Enterprise Records tool to include wfullclient.jar in the CLASS_PATH. For example, for the Transfer tool, edit RMTransfer.bat file to include the following: set CLASS_PATH=%CLASS_PATH%;lib/wfullclient.jar <p>For more information on creating the wfullclient.jar, refer to Oracle site and search for references to wfullclient.jar.</p>
844339	<p>The "Upgrading and configuring Content Engine and Content Search Engine" > "Upgrading from version 3.5" section is missing the steps for creating the object store data sources.</p> <p>To configure the object store data sources for Content Engine upgrade from version 3.5:</p> <ol style="list-style-type: none"> 1. After you complete the upgrade section "Establishing the FileNet P8 domain and Global Configuration Data," complete the steps in the "Installing and configuring Content Engine" > "Creating the data sources for an object store" section. Use the database information for your existing object stores to complete the task. 2. Return to the "Upgrading and configuring Content Engine and Content Search Engine" > "Upgrading Content Search Engine software from version 3.5" section to complete the upgrade. Note that you do not need to create the object stores for an upgrade, but you do need to create the data sources for the object stores.
852145	<p>In the <i>IBM FileNet Workplace XT 1.1.4 Installation and Upgrade Guide</i> task called "Deploy IBM FileNet Workplace XT (WebSphere)," there are several instances of "Workplace" that should be "Workplace XT."</p>
893738	<p>The following topics in version 4.5.1 of the <i>FileNet P8 Plan and Prepare Guide</i> state</p>

	Description
	<p>the need to install the Java SDK:</p> <ul style="list-style-type: none"> Setting up Java SDK for Content Search Engine (section on planning an installation) Setting up Java SDK for Content Search Engine (section on planning an upgrade) Configuring Windows for Content Search Engine (section on planning an installation) Configuring Windows for Content Search Engine (section on planning an upgrade) Configuring Content Search Engine servers (all UNIX) Configuring UNIX <p>The following topics in version 4.5.1 of the FileNet P8 Install and Upgrade Guide state the need to install the Java SDK:</p> <ul style="list-style-type: none"> Installing the core IBM FileNet P8 Platform documentation Installing the IBM FileNet P8 Platform information center <p>In each of the topics listed above, "SDK" should be "JDK."</p>
894647	<p>The topic "About EMC Centera" contains incorrect information in the section entitled "Pool address site mapping XML data."</p> <p>In the XML example, the following line: <code><FnProviderAttribute Name='ConnectionString' Id='400'></code> should be changed to: <code><FnProviderAttribute Name='PoolAddress' Id='300182'></code></p>
894649	<p>In step 2 of the topic "Configuring EMC Centera SDK environment variables for version 3.2," replace the following sentence:</p> <p>Note that the CENTERA_LIB_PATH variable needs to point to the sample script, not just the installation directory that contains the script.</p> <p>with this sentence:</p> <p>Note that the CENTERA_LIB_PATH variable needs to point to the library directory, not just the installation directory that contains the library directory.</p> <p>In the table in step 3 of the topic "Configuring EMC Centera SDK environment variables for version 3.2," the name of the startup script for JBoss Application Server on Windows should be run.bat.</p>
895567	<p>In the topic 'Configuring Kernel Parameters for Process Engine on HP-UX platforms', in the <i>Plan and prepare for IBM FileNet P8</i> information, the nfile parameter is obsolete in HP 11i V3.</p>
896273	<p>The topic 'Increasing the operating system kernel limits (Solaris 10)' in the <i>Plan and Prepare for IBM FileNet P8</i> has errors.</p> <p>Step 4 instructs you to move a file. Instead, you should make a copy of the file.</p> <p>Instead of:</p> <pre>mv /etc/system /etc/system.sav</pre> <p>Use:</p> <pre>cp /etc/system /etc/system.sav</pre>

	Description
	Step 12 in this topic can be eliminated based on the changes in step 4.
899839	<p>The <i>IBM FileNet P8 Platform Installation and Upgrade Guide</i> is missing a topic specific to WebLogic Server 10.x.</p> <p>Enabling passing user credentials to client applications (WebLogic Server 10.x only)</p> <p>Some client applications such as WebDAV and Application Integration can require passing user credentials with Application Engine. Enable this communication by editing the config.xml file on the WebLogic Server.</p> <p>Important: If you do not change config.xml, users are prompted to enter their user name and password to complete any client operations, such as adding a document.</p> <p>To enable passing user credentials:</p> <ol style="list-style-type: none"> 1. Stop the WebLogic server. 2. Make a backup copy of config.xml located in deployment directory. <p>For example: BEA_home/bea/user_projects/domains/domain_name/config/config.xml</p> <ol style="list-style-type: none"> 3. Edit config.xml. <p>Important: The enforce-valid-basic-auth-credentials entry must be entered as a single line without line breaks.</p> <ol style="list-style-type: none"> 4. Locate the <security-configuration> section and add the following line to the end of the section, just before the </security-configuration> tag. Also, if there is a <cross-domain-security-enabled> element, be sure to add the new element before the <cross-domain-security-enabled> element. <pre><enforce-valid-basic-auth-credentials>false</enforce-valid-basic-auth-credentials> <cross-domain-security-enabled>false</cross-domain-security-enabled> </security-configuration></pre> <ol style="list-style-type: none"> 5. Save your changes to config.xml and close the file. 6. Restart WebLogic.
904515	<p>In the <i>Plan and prepare for IBM FileNet P8</i> > Planning your deployment > Application server planning considerations > WebSphere Application Server and WebLogic Server > Content Engine multi-server deployment section there is an entry that states:</p> <p>In an environment of load-balanced or highly-available farmed (or clustered) application servers, you will initially install Content Engine on the Deployment Manager node (IBM WebSphere Application Server) or the Administrator node (WebLogic Server).</p> <p>It should read:</p> <p>In an environment of load-balanced or highly-available farmed (or clustered)</p>

	Description						
	application servers, you can install Content Engine on any node: Deployment Manager node (IBM WebSphere Application Server), the Administrator node (WebLogic Server), or any Managed node. It is important that when using the Content Engine Configuration Manager tool, that you specify the Deployment Manager/Administrator machine host name when specifying the application server hostname property.						
906382	<p>In the <i>IBM FileNet P8 4.5.1 Plan and Prepare Guide</i> topic "Configuring Windows for Enterprise Manager, .NET and COM compatibility clients," the table should appear as follows:</p> <table> <tr> <th>Option</th><th>Description</th></tr> <tr> <td>Microsoft Windows XP, Microsoft Windows Server 2003</td><td>Microsoft .NET Framework 2.0 and Web Services Enhancements (WSE) 3.0.</td></tr> <tr> <td>Microsoft Windows Vista, Microsoft Windows Server 2008, Microsoft Windows 7</td><td> <p>Microsoft .NET Framework 2.0 and Web Services Enhancements (WSE) 3.0 is required during installation of Content Engine version 4.5.1 GA and Fix Pack 001.</p> <p>Microsoft .NET Framework 3.0 and Windows Communication Foundation (WCF) is supported with Content Engine version 4.5.1 Fix Pack 002 and higher.</p> </td></tr> </table>	Option	Description	Microsoft Windows XP, Microsoft Windows Server 2003	Microsoft .NET Framework 2.0 and Web Services Enhancements (WSE) 3.0.	Microsoft Windows Vista, Microsoft Windows Server 2008, Microsoft Windows 7	<p>Microsoft .NET Framework 2.0 and Web Services Enhancements (WSE) 3.0 is required during installation of Content Engine version 4.5.1 GA and Fix Pack 001.</p> <p>Microsoft .NET Framework 3.0 and Windows Communication Foundation (WCF) is supported with Content Engine version 4.5.1 Fix Pack 002 and higher.</p>
Option	Description						
Microsoft Windows XP, Microsoft Windows Server 2003	Microsoft .NET Framework 2.0 and Web Services Enhancements (WSE) 3.0.						
Microsoft Windows Vista, Microsoft Windows Server 2008, Microsoft Windows 7	<p>Microsoft .NET Framework 2.0 and Web Services Enhancements (WSE) 3.0 is required during installation of Content Engine version 4.5.1 GA and Fix Pack 001.</p> <p>Microsoft .NET Framework 3.0 and Windows Communication Foundation (WCF) is supported with Content Engine version 4.5.1 Fix Pack 002 and higher.</p>						
909464	In the <i>FileNet P8 4.5.1 Installation and Upgrade Guide</i> topic "Installing P8 - Encrypting passwords for Process Engine" states that on UNIX platforms, the executable name is RunEncryptApp.sh. The UNIX executable is RunEncrytApp.						
916117	<p>The P8 version 4.5.1 Information Center contains conflicting information about the maximum number of Import Agents allowed for CFS-IS.</p> <ul style="list-style-type: none"> The FileNet P8 domain properties (IS Import Agent tab) topic states that the maximum is 5. The IS Import Agents topic states that the maximum is 32676. <p>Although the valid range of Import Agents in P8 version 4.5.1 is from 1 to 32676, you should use 10 as the maximum number.</p> <p>Most sites employ the default of 3 Import Agents. Depending on the size of the system, some sites might have 5 or as many as 10 Import Agents. However, any number higher than 10, even on a large system, could potentially cause problems.</p>						
930555	<p>The SQL query is incorrect in step 2 of the topic Installing or upgrading IBM FileNet P8 Platform > Upgrading and configuring IBM FileNet P8 Platform > Upgrading and configuring Content Engine and Content Search Engine > Upgrading from version 3.5.2 > Completing pre-upgrade Content Engine preparation > Determining the CBR-enabled properties in an object store.</p> <p>The correct SQL query is as follows:</p> <pre>select p.dbg_class_name, p.dbg_display_name, c.is_cbr_enabled, p.is_cbr_enabled from ClassDefinition c inner join PropertyDefinition p on p.parent_id = c.object_id where</pre>						

	Description
	p.is_cbr_enabled = 1 AND c.is_cbr_enabled = 1
939790	<p>The following paragraph belongs in the IBM FileNet P8 4.5.1 Information Center topic "Plan and prepare for IBM FileNet P8 > Planning and preparing for IBM FileNet P8 Platform upgrade > Performing the required upgrade preparation tasks > IBM FileNet P8 administrator upgrade tasks":</p> <p>After upgrading IBM FileNet P8 to version 4.5.1, you need to reapply customizations (such as changes to the display names or descriptive texts) to predefined AddOns (such as property templates, document classes and choice lists) because the upgrade reverts custom changes back to the original AddOn values. Any customization that modifies symbolic names of predefined AddOn property templates is never advised. Consult IBM Software Support before making such modifications.</p>
940597	<p>There is an error in the definition of the GroupSearchFilter property in the topics "Directory Configuration Properties" for all supported directory servers. These directory server topics are in the section "Directory Service Providers" at http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/topic/com.ibm.p8.doc/admin/security/sec_start_auth.htm.</p> <p>The description of the GroupSearchFilter property incorrectly says: "GroupSearchFilter and UserNameAttribute must use the same LDAP attribute." It should say: "GroupSearchFilter and GroupNameAttribute must use the same LDAP attribute."</p>
941633	<p>In the <i>FileNet P8 4.5.1 Installation and Upgrade Guide</i> topics "Creating an ODBC data source" and "Creating the Process Engine ODBC data source and testing the connection" the correct default locations for the 32-bit and 64-bit executables are as follows:</p> <ul style="list-style-type: none"> 32-bit: C:\Windows\SysWOW64\odbcad32.exe 64-bit: C:\Windows\system32\odbcad32.exe

Process Analyzer

Defect	Description
915450	<p>The topic 'Size the Process Analyzer database' is not retrievable through the Table of Contents nor through the search process of the IBM FileNet P8 Version 4.5.1 Information Center. The 'Size the Process Analyzer database' topic can be found at the following location:</p> <p>http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/index.jsp?topic=/com.ibm.p8.doc/pa_help/admin/pa_sizing.htm</p>

Process Engine

Defect	Description
913635	<p>In the topic 'Configure Process Engine e-mail notification', the correct description for the Email Logon ID and password fields should be as follows:</p> <p>Usage of the fields is shared between Process Engine server Email Notification and</p>

Defect	Description
	<p>Component Manager SendMail Operation.</p> <p>The Process Engine server Email Notification requires anonymous access to the configured SMTP host. The Email Logon ID and Email Logon Password fields are only used by the Process Engine server to fill out the From field in an email message. The SMTP host server must allow anonymous access for Process Engine email notification to function.</p> <p>The Component Manager SendMail operation always uses the values configured in the Email Logon ID and Email Logon Password fields to authenticate against the SMTP host. In order for the Component Manager SendMail operation to authenticate to the SMTP host using anonymous access, the Email Logon ID and Password fields must be blank.</p>

Rendition Engine

Defect	Description
938044	<p>In the Installing and configuring Rendition Engine topic in the FileNet P8 High Availability Technical Notice, the second sentence in step 3a should be:</p> <p>If the Content Engine is clustered or farmed, create a Java Repository in the Liquent Vista domain for each Content Engine instance in the cluster or farm.</p>
945334	<p>The topic "Change the Rendition Engine database password" is incomplete. For complete instructions, see the IBM Techdoc "Changing the FileNet Rendition Engine database password" at: http://www.ibm.com/support/docview.wss?uid=swg27020816</p>

WebDAV

	Description
802978	<p>The following information is not currently documented in the WebDAV documentation and should be included:</p> <p>WebDAV performance issues occur when the IBM HTTP server 6.x is configured using the IBM Web Server plug-ins to distribute load balancing between one or more WebSphere instances. To avoid the performance issue, the plugin-cfg.xml file must be modified.</p> <p>To improve performance:</p> <ol style="list-style-type: none"> 1. Navigate to the IBM HTTP server. For example, c:\program files\IBM\HTTPServer\Plugins\config\webserver1. 2. Open the plugin-cfg.xml file. 3. Change the value for AcceptAllContent to "true." 4. Restart the IBM HTTP server.
862062	<p>The 'Work with FileNet P8 WebDAV Servlet' help topic incorrectly states WebDAV is not available for Workplace XT. The following sentence includes the correct information:</p> <p>The FileNet P8 WebDAV Servlet, referred to in these help topics as WebDAV, is installed as part of the Application Engine installation. WebDAV is available for Workplace XT.</p>

	Description
862064	<p>In the Supported WebDAV Clients help topic, the list of supported clients need to be updated with the following clients:</p> <ul style="list-style-type: none"> • Microsoft Windows Vista 32bit processor • Microsoft Windows Vista 64bit processor • Microsoft Windows 7 32bit processor • Microsoft Windows 7 64bit processor

Workplace XT

Defect	Description
849682	<p>If a user has been granted explicit access to a folder with an entry template association, and the user has been deleted from the LDAP group, that user is unable to add a document to the folder. Workaround: Check out the entry template and check it back in.</p>
896691	<p>In the <i>Workplace XT Installation and Upgrade Guide</i> (both 1.1.3 and 1.1.4), the procedures for configuring acceptance of user tokens is missing an optional step. If you want to choose maximum strength keys for user tokens, you must perform an additional set of steps as part of the procedure.</p> <ol style="list-style-type: none"> 1. From the update page on ibm.com, search for and download the unlimited strength versions of the following two jar files to the Workplace XT server: US_export_policy.jar local_policy.jar Tip: There are different versions of the files for different JDKs. 2. Stop the Workplace XT application server. 3. On the Workplace XT server, use the new .jar files that you downloaded to replace the files of the same name in the <JDK>/jre/lib/security folder. 4. Restart the Workplace XT application server. 5. Continue with the other steps in the procedure as it is presented in the guide.

Content Engine Java and .NET API Developer's Guide

	Description
866148	<p>An invalid list of restrictions on object locking exists in the Content Engine Java and .NET API Developer's Guide > Cooperative Locking Concepts > Locking an Object.</p> <p>Because there are no restrictions on locking an object, the following statement and associated list items are incorrect and should be disregarded:</p> <p>However, you cannot lock the following:</p> <ul style="list-style-type: none"> • A Document object that is checked out by another user • A "frozen" Document object (that is, one whose IsFrozenVersion property is

	Description
	<p>true).</p> <ul style="list-style-type: none"> An object that is locked by another cooperating application The root folder"
893523	<p>In a JBoss 5.x environment, following the instructions in Step 2 as documented in the "EJB or CEWS transport protocol with JBoss" topic in the Content Engine Java and .NET API Developer's Guide > Getting Started > Procedures > Setting Up a Thick Client Development Environment can cause connection failures. Amend step 2 as follows, adding the note text:</p> <p>2. Add the jbossall-client.jar file from the JBoss client directory (Windows: <i>jboss-home\client</i>, UNIX: <i>jboss-home/client</i>) to the classpath.</p> <p>Tip If you are using JBoss 5.x, be aware that jbossall-client.jar no longer contains every class that a client application needs. It contains a manifest file that refers to other JAR files. If JBoss 5.x is not installed on your development system, you must copy all JAR files from the JBoss\client directory on the JBoss application server to your client library or copy all of the JAR files referenced in the jbossall-client.jar manifest to your client library. See your JBoss documentation for more information about the jbossall-client.jar manifest.</p>
929436	<p>Documentation for Java API method ContentTransfer.setCaptureSource() and .NET API method IContentTransfer.SetCaptureSource() says that the API will not close the stream provided by the caller. The .NET API behavior matches the documentation, but the Java API does close the provided stream. Since redundant closing of streams is harmless in Java and .NET, you do not need to make any changes to your application for this issue if you are not currently experiencing problems. The inconsistency will be addressed in a future release of the APIs.</p>
939587	<p>In the ReservationType Enumeration topic, the documentation for the Exclusive constant is incorrect. It should read: Exclusive reservation. Only the user who checked out the document can check it in. This user and a user with Full Control access can delete the reservation.</p>
951310	<p>The Process Engine uses the Java™ Authentication and Authorization (JAAS) login context for establishing sessions. The default JAAS login context uses the Enterprise Java Beans (EJB) transport and is specified in a FileNetP8 stanza in the JAAS configuration file.</p> <p>If you are using the Web Services transport, rather than the EJB transport, you need to change the FileNet P8 stanza to reference the FileNet WS-I login module:</p> <pre>FileNetP8 { com.filenet.api.util.WSILoginModule required; };</pre> <p>Tip The format for specifying the FileNet WS-I login module can differ depending on the application server platform.</p>

Content Engine Web Service

	Description
939587	<p>In the ReservationType Enumeration topic, the documentation for the Exclusive constant is incorrect. It should read: Exclusive reservation. Only the user who</p>

	Description
	checked out the document can check it in. This user and a user with Full Control access can delete the reservation.
949778	In the Introduction topic of the Web Service Developer's Guide, the documentation states that DIME support has been dropped for this release. This statement is incorrect. It should state that DIME is deprecated in version 4.5.1, but is still supported.

Resolved Known Issues

Resolved in Application Engine fix pack 4.0.2.6-P8AE-FP001

Defect ID	Description
851714	Oracle WebLogic 10.3.1 is not supported because of a change which added support for HTTP only and enabled this setting by default.

Resolved in Workplace XT fix pack 1.1.4.3-WPXT-FP003

Defect ID	Description
846210	When using an entry template that is configured with updated properties to check in a document, the updated properties do not appear during the check in process. This fix is not documented in the XT-1.1.4.3 readme as it was an internally found problem.

Resolved in Workplace XT fix pack 1.1.4.6-WPXT-FP006

Defect ID	Description
851714	Oracle WebLogic 10.3.1 is not supported because of a change which added support for HTTP only and enabled this setting by default.

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan, Ltd.
1623-14, Shimotsuruma, Yamato-shi
Kanagawa 242-8502 Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
J46A/G4
555 Bailey Avenue
San Jose, CA 95141-1003
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.com/legal/copytrade.shtml.

Adobe is a registered trademark of Adobe Systems Incorporated in the United States, and/or other countries.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Oracle is a registered trademark of the Oracle Corporation.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.
Other company, product, and service names may be trademarks or service marks of others.

U.S. Patents Disclosure

This product incorporates technology covered by one or more of the following patents: U.S. Patent Numbers: 6,094,505; 5,768,416; 5,625,465; 5,369,508; 5,258,855.



Product Number: 5724-R76, 5724-R81, 5724-R74, 5724-R96, 5724-R81,
5724-R85, 5724-S13, 5724-S19, 5724-S17

Printed in USA

SC19-2876-10

