

Installation and Configuration of IBM FileNet Information Management Software

*A step-by-step guide to installing and configuring
IBM FileNet ECM and Case Manager on RHEL 8.0*

Alan Bluck



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Dedicated to

My beloved Wife, Jennifer

&

My Children, Julie and Rosalie

&

Their Families

About the Author

Alan Bluck is a systems architect providing a broad range of services, with over 45 years of IT Experience. Elected an IBM Champion 2022 and re-elected for 2023, he is a Member of the British Computer Society with experience in both Business and Scientific systems. He is a Chartered Information Technology Professional (CITP) with 20 years as a Solutions Architect, working for both Xerox and IBM on Document Management systems.

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I also extend my gratitude to the team at BPB PublicationS for their support in allowing me to publish this as the fourth book in the series, as IBM and RedHat Software installation covers a wide range of application products.

Preface

This series of books consolidates and rationalizes over 30 publications describing the Installation and Configuration of IBM Software Products on RedHat Enterprise Linux 8.0, IBM Cloud, IBM Cloud Private (Community Edition), and the Windows 10 Operating System. The book is being released as a series of four books to keep the volumes manageable.

The first book in the series was a consolidation and rationalization of 5 separate publications describing the Installation and Configuration of IBM Watson Analytics on RedHat Enterprise Linux 8.0, IBM Cloud, IBM Cloud Private (Community Edition), and the Windows 10 Operating System.

The second book of the series was an expansion and rationalization of several separate publications describing the Installation and Configuration of the IBM Cognos Analytics software and supporting systems on RedHat Enterprise Linux 8.0, IBM Cloud, IBM Cloud Private (Community Edition), and the Windows 10 Operating System.

The third book in the series was a consolidation and rationalization over several publications describing the Installation and Configuration of IBM DB2 on RedHat Enterprise Linux 8.0, IBM Cloud, IBM Cloud Private (Community Edition) and the Windows 10 Operating System .

This book is the fourth and last book of the series, consolidation, and rationalization of more than a dozen separate publications describing the Installation and Configuration of IBM FileNet Software Products on RedHat Enterprise Linux 8.0, IBM Cloud, IBM Cloud Private (Community Edition) and the Windows 10 Operating System.

The book focuses on the initial preparation and configuration of the prerequisite requirements for each of the system platforms covered and the initial Installation and configuration of the supporting systems for the successful deployment of the IBM software products listed below:

- **IBM BAW 18.0 - IBM Security Directory Suite 8.x**
- **IBM Content Search Services 5.5.x Installation and Configuration**
- **IBM Case Manager Preparation of a new Target Object Store in a FileNet P8 Docker Container**

- **IBM BAW 18.0 - IBM Workflow Center 8.6.1.1900x**
- **Case Manager 5.3.3 Installation with Content Navigator 3.0.x**
- **WebSphere 8.5.5.5 Installation and Configuration**
- **IBM Case Analyzer 5.5 Installation and Configuration**
- **Case Monitor Dashboard 5.3.x plugin**
- **IBM Cloud Private and IBM FileNet P8 CPIT Installation**
- **IBM Content Navigator 3.0.x Installation**
- **IBM Content Foundation 5.5.x Installation**
- **Oracle 12C on the Linux operating system Configuration for IBM Content Foundation 5.5.x**
- **IBM Security Directory Services 6.4**
- **Importing Case Manager solution Auto Claims example into Case Manager 5.3.3**

This fourth book of the series consists of the following seventeen chapters, in which you will learn the following:

Chapter 1: Introduction – This chapter covers the *Bill of Materials* for IBM information management products, including IBM FileNet P8 5.5.x, IBM BAW 21.0.x - IBM Workflow Center 8.6.1.1900x, IBM Case Manager 5.3.3, IBM Case Analyzer 5.5, IBM Content Navigator 3.0.x and IBM Content Foundation 5.5.x. It also covers the download of the supporting software systems; IBM Cloud Private and IBM FileNet P8 CPIT, IBM Security Directory Services 6.4, IBM Security Directory Suite 8.x, IBM WebSphere 8.5.5.20 (minimum support for IBM FileNet 5.5.9), IBM CEBI Content Engine Bulk Import Document Batch Tool, IBM Content Search Services 5.5.x, IBM Case Monitor Dashboard 5.3.x plugin, IBM Case Manager auto claims example, Oracle 12C on the Linux operating system, and LibreOffice 6.3.x. Further, the chapter describes the download site URLs, product codes, descriptions, and size and name of the download GZIP tar files for each software download. It also includes the summary contents of each of the available IBM Redbook publications, which supports the use of the listed IBM software products.

Chapter 2: Installation Preparation – This chapter covers the RedHat 8.0 .iso disk image installation procedure on VMware Workstation Pro 15.5 and 16.2.x, Disk resource, and sizing requirements, network card(s) and mapping **yum**, **dnf**, **pip**, and **conda** installations, and Firewall Port set-up for the IBM Software Product Prerequisites of the products listed in *Chapter 1: Introduction*. It includes the installation procedure for the base IBM supporting products on Red Hat Linux 8.0

and Windows 10. The Disk resource and Sizing requirements are also described. The RedHat Linux **Red Hat Enterprise Linux CoreOS (RHCOS)** server cluster machine requirements for OpenShift 4 on-premise cloud installation and the support for Kubernetes-controlled containers are outlined.

Chapter 3: System Sizing – This chapter covers procedures for System Sizing for IBM Software systems. There is a program called **IBM Content Capacity Planner (ICCP)** (originally called IBM SCoat) which can be used to enter system volume and hardware data to provide estimates of performance loading, which we describe in this chapter.

Chapter 4: Installation Downloads – This chapter describes the procedures for the installation downloads of IBM Fix Packs, IBM Cloud PAK systems, Docker container installations, RedHat OpenShift 4.x Installations, and the IBM Cloud Private system on several platforms, including Base VMWare Linux system platform downloads for use with the Docker Container system. The RedHat OpenShift system, which forms a front-end for container management of a Cloud cluster of load-balanced control plane and worker servers, along with The IBM Cloud Private system covering the installation of IBM Cloud Private 3.2.0 (Community Edition) is also included in the chapter. It describes the download and installation using docker pull and the requirements of a single node cluster required for IBM FileNet CPIT installation. The readers will learn about downloading and installing the RedHat 8.1 operating system disk image on VMware Workstation Pro 15.1 and the prerequisite library and size requirements for IBM software products. The setup and use of IBM Cloud are further described. (IBM Cloud is a set of cloud computing services for business).

Chapter 5: Operating System and Platforms – This chapter describes the procedures for installing and configuring IBM software on an IBM Cloud Private cluster, the Windows 10 server and IBM Cloud. It includes installation of IBM Cloud PAK systems, Docker Container Installations, and the IBM Cloud private system on several platforms, including Base VMWare Linux system platform downloads for use with the Docker Container system and the functions of the main docker commands; The RedHat OpenShift system which forms a front-end for container management of a Cloud cluster of load-balanced control plane and worker servers; the IBM Cloud private system covering the installation of IBM Cloud Private 3.2.0 (Community Edition). The download and installation of the RedHat 8.1 operating system disk image on VMware workstation Pro 15.1 are described, and the prerequisite library and size requirements for IBM software products are outlined. The use of IBM Cloud is covered. (IBM Cloud is a set of cloud computing services for business).

Chapter 6: Security and Users – This chapter describes the step-by-step installation of IBM Security Directory Services 6.4, including the set-up of the supporting RHEL 8.0 Linux operating system. It also describes the addition of the LDAP users and groups required by the IBM Business Automation and the supporting IBM Case Manager and IBM FileNet Content Engine systems.

Chapter 7: IBM BAW 21.0.3 Upgrade Installation from BAW 18.6.1.19002 – This chapter covers the upgrade installation of IBM BAW 21.0.3 (Business Automation Workflow). It will upgrade to version 21.0.3 from 18.0.0.x, 19.0.0.x, 20.0.0.x, or version 21.0.1.

Chapter 8: Cloud Based Systems – This chapter covers the installation and configuration of IBM Cloud Based systems. We cover the installation of IBM Cloud Private for installing the IBM FileNet P8 container-based systems on a RedHat Linux RHEL 8.0 Docker container system running on a VMware virtual host server on a Windows 10 Server operating system. We also describe the installation of the Eclipse Codewind development environment. It is used to create Docker containers using the Docker Compose development environment. Finally, we describe the script changes made to prepare a new Object Store for IBM FileNet P8 Content Manager using a modified CPIT installation script.

Chapter 9: IBM Security Directory Server for IBM Content Foundation – This chapter describes the procedure for the installation and configuration of IBM Security Directory Suite for the support of the User and Group security systems for IBM FileNet P8 Content Foundation and supporting IBM system components, IBM WebSphere Application server, the IBM DB2 Database server and the installation of IBM Case Manager 5.3.3.

Chapter 10: Installing IBM WebSphere 9.0.5.14 – This chapter describes the procedure for the installation and configuration of the IBM WebSphere Application server for the support of the web application systems for IBM FileNet P8 Content Foundation, IBM Case Manager 5.3.3 and IBM Content Navigator.

Chapter 11: Problem Resolution Procedures and Installing DB2 11.5.7 – This chapter describes the procedures for resolving installation and configuration issues for IBM FileNet P8 Content Foundation and installing the supporting IBM system component, the IBM DB2 Database server.

Chapter 12: Installing IBM Content Foundation 5.5.10 – This chapter describes the procedures for the installation and configuration of IBM FileNet P8 Content Foundation 5.5.10, following the installation of the supporting IBM system

components, IBM Security Directory Suite, IBM WebSphere Application server, and the IBM DB2 Database server which have been described in Chapters 9,10 and 11, respectively.

Chapter 13: Installing Content Navigator 3.0.13 and Case Manager 5.3.3 – This chapter describes the procedures for the installation and configuration of **IBM Content Navigator 3.0.13** and the **IBM Case Manager 5.3.3** systems.

Chapter 14: Importing the Case Manager Solution – In this chapter, we describe the procedures for importing a Case Manager solution, using the **Auto Claims** example with the use of the **IBM Case Manager Builder 5.3.3** and the **IBM FileNet P8 Standalone Process Designer**.

Chapter 15: Configuring the Case Manager Solution – In this chapter, we describe the procedures for the configuration of a Case Manager solution, using the **Auto Claims** example with the use of the **IBM Case Manager Builder 5.3.3**, the **IBM FileNet P8 Standalone Process Designer** and the Windows **IBM eForms Designer**.

Chapter 16: Installing and Configuring IBM Content Search Services 5.5.10 – In this chapter, we describe the procedures for the installation and configuration of **IBM Content Search Services 5.5.10** and configuration with the use of the **IBM FileNet P8, Content Platform Engine 5.5.10**.

Chapter 17: Installing and Configuring IBM Case Analyzer 5.5 and IBM Case Monitor Dashboard 5.3.3 – In this chapter, we describe the procedures for installing and configuring **IBM Case Analyzer 5.5** using the **IBM Case Monitor Dashboard 5.3.3**.

Code Bundle and Coloured Images

Please follow the link to download the *Code Bundle* and the *Coloured Images* of the book:

<https://rebrand.ly/7sylo14>

The code bundle for the book is also hosted on GitHub at **<https://github.com/bpbpublications/Installation-and-Configuration-of-IBM-FileNet-Information-Management-Software>**. In case there's an update to the code, it will be updated on the existing GitHub repository.

We have code bundles from our rich catalogue of books and videos available at **<https://github.com/bpbpublications>**. Check them out!

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CHAPTER 1

Introduction

Introduction

This chapter covers the *Bill of Materials* for IBM information management products, including IBM FileNet P8 5.5.x, IBM BAW 21.0.x - IBM Workflow Center 8.6.1.1900x, IBM Case Manager 5.3.3, IBM Case Analyzer 5.5, IBM Content Navigator 3.0.x and IBM Content Foundation 5.5.x. It also covers the download of the supporting software systems; IBM Cloud Private and IBM FileNet P8 CPIT, IBM Security Directory Services 6.4, IBM Security Directory Suite 8.x, IBM WebSphere 8.5.5.20 (minimum support for IBM FileNet 5.5.9), IBM CEBI Content Engine Bulk Import Document Batch Tool, IBM Content Search Services 5.5.x, IBM Case Monitor Dashboard 5.3.x plugin, IBM Case Manager auto claims example, Oracle 12C on the Linux operating system and LibreOffice 6.3.x.

Further, the chapter describes the download site URLs, product codes, descriptions and size and name of the download GZIP tar files for each software download. It also includes the summary contents of each of the available IBM Redbook publications which supports the use of the listed IBM software products.

Structure

In this chapter, we will discuss the following topics:

- IBM resources
- License requirements UVU PVU
- Fix Pack Location and versions
- Compatibility Matrix URLs
- IBM RedBook publications
- ASB Software Development Limited Publications
- Online technical references
- Supporting databases
- Component Interactions with system architecture diagrams and performance issues
- Upgrade paths and supported versions for upgrade
- Version end-of-life and roadmap

Objectives

After studying this unit, you will be able to identify the prerequisite versions of the supporting software components required for support of a number of leading IBM software application systems, including:

- IBM FileNet as document management system
- IBM Business Automation workflow
- IBM Case Management

1.1 IBM resources

The IBM FileNet latest release, has the dependencies and related IBM Software Products covered by the IBM Cloud Pak for Business Automation up to V 21.0.3 (V22.0.1, for the container versions) with URL reference:

<https://www.ibm.com/support/pages/ibm-cloud-pak-business-automation-2201-download-document>

The main IBM Support site for the links to each version of IBM Business Automation Workflow for on-site, bare-metal servers, can be found using the following URL link:

<https://www.ibm.com/support/pages/ibm-business-automation-workflow-download-documents>

The following table extract lists the Part Numbers for the packages which can be used to upgrade the on-premises version V19.0.0.2 to V21.0.3, which we cover fully in *Chapter 7: IBM BAW 21.0.3 Upgrade Installation from BAW 18.6.1.19002*, of this book.

For IBM BAW 21.0.3 on a VMware Linux server (on a Windows server host), use the following eAssembly numbers (you will see that the download is split into 3 parts) as illustrated in *Table 1.1*:

(Refer: <https://www.ibm.com/support/pages/node/6507347>)

Part number	For IBM BAW 21.0.3 on Linux
M04CCML	IBM Business Automation Workflow Enterprise 21.0.3 for Linux X86 64Bit (1 of 3) Multilingual
M04CDML	IBM Business Automation Workflow Enterprise 21.0.3 for Linux X86 64Bit (2 of 3) Multilingual
M04CFML	IBM Business Automation Workflow Enterprise 21.0.3 for Linux X86 64Bit (3 of 3) Multilingual

Table 1.1: Part numbers for the Linux IBM BAW software installation package

For the IBM FileNet Multiplatform V5.5.9 Multilingual eAssembly, use the software listed in *Table 1.2*:

Part number	Windows and Linux Servers and DB2 License Keys
CC9WGML	IBM Db2 OEM High Capacity - Restricted Use V11.5.6 - Activation
G01LWML	IBM Db2 Standard - Restricted Use - Activation

Table 1.2: The Part numbers for IBM FileNet V 5.5.9 compatible DB2 11.5 installation

The full screenshots for the step-by-step download of the DB2 10.5 base version (Part Number CIXV0ML) is covered on the pages 107 -108 of the document **DB210.5InstallationonRHEL8.0_V1.docx** which can be downloaded from the URL, <https://doi.org/10.13140/RG.2.2.10491.67369>. (Titled, *DB2 10.5 Installation on CENTOS 8.0 V1*)

The URL, <https://www.ibm.com/support/pages/download-ibm-filenet-content-manager-version-559> lists all the components supported for the latest version of IBM FileNet Content Manager 5.5.9.

Search using the M070SML Part number as shown in the *Table 1.3*:

IBM FileNet Content Platform Engine 5.5.9

Component description	eSD Part number
IBM FileNet Content Platform Engine V5.5.9 Linux Multilingual - Date Posted 6/30/2022 Size 1,033 MB	M070SML

Table 1.3: The Part number and description displayed in the search results

The following example downloads can be repeated for all the part numbers listed in *Tables 1.1 to 1.3*, using the link, <https://www-356.ibm.com/partnerworld/partnertools/eorderweb/ordersw.do>.

Log in, then scroll down and use **Find By Part Number** as shown in *Figure 1.1*:

Software access catalog downloads

Overview

IBM's Software Access Catalog allows you to download IBM software products at no charge. The products downloaded may only be used for demonstration, evaluation, development, testing, education, and limited internal "Run Your Business" purposes as specified in the PartnerWorld Software Usage Attachment.

Note that some products require a license key for operation. Look for links to more details in the "Related links" list on the left navigation bar of this page.

Notice: QRadar 7.3.1 contains an operating system upgrade. This upgrade has been found to cause occasional spontaneous reboots on some M5 hardware. Please see APAR IJ02902 for more detail. Additional information can also be found in this Flash.

Search options

Text Brand **Part number**

Find by part number

Part numbers

M063QML

Enter single or multiple part numbers (separated by commas) and click Search. Example: CRPQ4EN, C47EHML.

Download method ⓘ

Download Director HTTP

Search

Figure 1.1: The current version of IBM FileNet V5.5.9 released 30th June 2022