The following is a list of all changes made to the MDChange product family version 8.5

Date	Category	Component	Description
January 13, 2023	ENHANCEMENT	ALL	BETA Release of version 8.5
January 23, 2023	ENHANCEMENT	MDRapid	Significant performance improvements when performing the initial bulk copy for keyed files
	FIX	MDRapid	remove usage of QTEMP objects to avoid problems with running from within an ASP for keyed files
	FIX	MDCMS	integration of 8.4.1 fixes
	FIX	MDCMS	Fix allocation of projects/tasks for CI requests resulting from a Git pull-request
January 26, 2023	ENHANCEMENT	MDCMS	Set default backup library retention to 3 days for new installations of MDCMS and grant a user newly registered into MDSEC during the installation the right to edit authorities in MDSEC.
	ENHANCEMENT	MDRapid	Display the name of the oldest necessary journal receiver in the MDRapid console detail screen so that the operator can know which receivers can or cannot be deleted to recover disk space.
	FIX	MDCMS	Avoid data locking and RFP merge collisions during merge processing for multiple parallel RFP receive jobs
	FIX	MDCMS	fix issue of potentially ignoring the copy of subsequent table partitions during the deployment of a partitioned table when not using MDRapid.
	FIX	MDRapid	modify timing of adding an MDRapid trigger to the new version of a file to reduce risk of an object lock

January 29, 2023	FIX	MDCMS	During the Submit/Bundle phase of an RFP - if a logical file is created that is based on physical files that aren't part of the RFP, duplicate those files into the temporary install library and re-create the logical file to avoid locks occurring on the logical prior to it getting deployed.
February 5, 2023	ENHANCEMENT	MDCMS	Command MDCRTSND has been added, which provides all of the same capabilities as pressing F6 from the Send RFP screen. A Send RFP can be systematically created containing all installed object requests that match the values of a number of filters.
	ENHANCEMENT	MDRapid / MDTransform	The October 2022 IBM technical refresh for V7R4 and V7R5 provides the ability to override the generated always clause for table columns when inserting rows from another table - such as during the modification of a table or when using the MDTransform Data Copy template. MDTransform and MDRapid now check for the existence of this TR, and if available, will be able to copy the data as is rather than getting disabled or required new values for existing rows.
	FIX	MDCMS	fix authentication handling for Git repositories
	FIX	MDCMS	fix check of number of days for backup library retention before deleting a temporary backup library created by the RFP install process.
	FIX	MDOpen	Fix visibility of MDCMS attribute parameters in the Attributes view
February 6, 2023	FIX	MDCMS	MDJIRA - allow for the entry of very long API Tokens, now that Atlassian generates long token strings.

	FIX	MDCMS	Ignore based-on files when they reside in QSYS2 when trying to duplicate to the temporary RFP library or for getting a shared lock, since they typically don't allow for it.
	FIX	MDCMS	Fix validation checking of the Send Source for Modifications parameter for an OS/400 Location.
February 8,2023	FIX	MDCMS	Fix the product installation for MDCMS so that existing SSH keys don't get deleted.
February 12, 2023	FIX	MDRapid	Fix MDRapid handling when target file is already partitioned
February 19, 2023	ENHANCEMENT	MDOpen	If the Project mapping for a Continuous Integration definition is set to *BRANCH, the Webhook will first check if a custom Project/Task field is defined and assigned the wildcard value of ++BRANCH++. If this is the case, the Webhook will use the newest task/subtask that has the custom field value set to the name of the feature branch. If not found, the Webhook will check if the branch name = a Task Reference ID or MD Project/Task name just as it did in the past.
	FIX	MDCMS	Fix the retrieval of Azure Workitems when the priority of a workitem isn't set. Prior to the fix, the MDAZUR job would go into MSGW with a decimal data error.
	FIX	MDCMS	If the secondary message in the RFP deployment log is "Definition supplied multiple times for symbol", append the symbol name to the log message, since the IBM API fails to do so.
	FIX	MDCMS	Automatically delete the MDCMS

			IFS clone of a branch when the Webhook is invoked after the deletion of a branch on the server.
	FIX	MDCMS	reduce amount of logging comments for MDGIT for better readability.
February 27, 2023	ENHANCEMENT	MDCMS/MDOpen	When requesting to modify an object of MDCMS type *SQL..., the DDL code can be automatically generated based on the SQL or DDS object definition and the code will be placed in the selected target member or IFS file. In MDCMS, use the *GEN option for the from member/IFS file. In MDOpen, use the button Generate DDL Source.
	ENHANCEMENT	MDOpen	Git Webhook Deliveries view - every time that a Git Webhook to MDCMS is delivered, this can now be viewed/filtered directly within MDOpen. If the delivery for the specific push needs to be repeated, option Repeat can be used for a delivery, which is very helpful when the configuration on the MDOpen side needed to be altered. If Object Requests were attempted for the delivery, they can also be listed and filtered, providing comprehensive and easy-to-use auditing and troubleshooting for Continuous Integrations.
	FIX	MDCMS	Fix posting of job log messages for RFP logs when the CCSID of the MDLOG job doesn't allow for character conversions of message keys.
	FIX	MDCMS	Optimize the Level Checking phase of an RFP submission to be much faster and require less I/O
	FIX	MDOpen	handle Git branch names up to 160

			characters in length instead of 80
	FIX	MDCMS	MDAZUR – fix the transfer of large files via SFTP to avoid data loss
March 8, 2023	FIX	MDCMS	Fix identification of indirect source / source for signing when a recompile is performed on a level higher than the most recent modification and lower than the target level of indirect source.
	FIX	MDCMS	Process the installation of SQL Functions and SQL Procedures in sequence with other SQL entities when they contain an SQL body or the externally called program/service program isn't part of the RFP. Otherwise, continue to delay install until after the programs are installed, so that the routine will exist after the move of the program.
	FIX	MDCMS	Avoid warning message during running MDINSSAVF due to an IFS file in /JAVA/KEYS that couldn't be restored due to ownership mismatch.
	FIX	MDCMS	MDAZUR – map Azure user against email address in MDSEC when the address isn't in mapping for the pipeline server.
	FIX	MDCMS	MDJIRA Changes: • Fix the time setting to 1 second after midnight if user selects to get all issues, provides a date, but doesn't provide a time. • Change REST consumer for retrieving projects to match new payload in Jira Cloud • Change page size to 50 rows to match new maximum for some Jira REST APIs
	ENHANCEMENT	MDCMS	MDCMS can now migrate

Date	Type	Product	Description
March 13, 2023			installation history and archived source from the ChangefIT product using new command MDMIGCF
	ENHANCEMENT	MDCMS	If source is pushed to MDCMS after the push of commits to a Git repository, and the folder structure for the source matches the Library/Source File naming for the target application, MDCMS will use this naming to correctly apply the appropriate attributes for source not previously installed using MDCMS.
	FIX	MDCMS	If the Project and Task for a continuous integration delivery can't be ascertained, MDCMS can skip creating the object requests if the Developer Library Naming Template for the target level is defined to require this information at request time.
	FIX	MDCMS	When a physical file object is migrated without being compiled from source, MDCMS will now retain any data in the prior version of the file that is in the backup library.
	FIX	MDCMS	Object Signing during the submit phase of an RFP has now been reduced to only sign IFS files and *REMOTE files. This is for performance, relevance and avoidance of false positives. Source continues to be signed.
	FIX	MDCMS	fix option handling in the Arcad Migration tool
March 19, 2023	FIX	MDCMS	Fix update of Jira Custom Fields when field values are changed for multiple tasks at once on a remote partition
	FIX	MDCMS	Invoke the Ready for Installation exit point whether Approval was granted automatically or manually
	FIX	MDCMS	fix ability to generate object

			requests from the MDRest4i SDK
	FIX	MDOpen	fix ability to edit the user for an object request containing committed source
8.5.1 April 2, 2023	FIX	MDCMS	Improve performance of the MDSFTP service when a disconnect to the server has occurred since the last file transfer
	FIX	MDCMS	Fix potential decimal data error when using the MDMIGMD command
	FIX	MDCMS	Improve performance of identity column checking for modified tables or migration of data group data during the RFP install
	FIX	MDCMS	append symbol value to the Definition not found for Symbol job log message in the RFP Deployment Log
	FIX	MDCMS	Handle column-level sub-select statements in the MDTransform SQL result field for use during an RFP deployment
	FIX	MDCMS	MDTransform - Allow a column that is designated as a Key field to also have a custom SQL Result value.
	FIX	MDCMS	Allow change of a PF or LF attribute to *SQLIDX, *SQLTAB or *SQLVW when current object is a DDS file in order to be able to switch to a DDL file.
	FIX	MDCMS	Continuous Integration - when task assignment is based on the branch name, filter out any projects or tasks that are closed in case a historically used branch name is repeated.
	FIX	MDCMS	allow edit of PF and LF parameters in the Object Manager when object doesn't exist in the target library as long as the Dft Source Type for the Attribute is set to PF or LF.

	FIX	MDCMS	when storing indirect source, capture the record length of the source file for correct reuse of the indirect source when used for *TEMP source files.
	FIX	MDOpen	Fix the display of the Receive, Install and Problem status columns in the MDOpen Send Listing
April 12, 2023	FIX	MDCMS	MDGIT service - the following changes have been made: • full validation checking when user selects to repeat a Git Webhook delivery • significantly faster processing of new branches for a Git repository • save disk space by only storing deltas of branch checkouts • queueing mechanism for parallel Git client requests to avoid timeout errors
	FIX	MDCMS	ignore retrieval of attributes of certain special system IFS folders to avoid non-ending response from the IBM stat64 API
	FIX	MDRAPID	Avoid going into MSGW when a journal receiver is corrupt
April 21, 2023	FIX	MDCMS	MDGIT - fix pull of changes from remote git server
May 11, 2023	FIX	MDCMS	improve performance of setting the next value for an identity column when a table is installed on an RFP.
	FIX	MDCMS	fix retention of custom MDTransform column values when an RFP is prepared for the next level or for sending to target levels.
	FIX	MDCMS	fix of regression errors in MDJIRA interface

	FIX	MDRapid	fix ability to use MDRapid on systems with a CCSID of *HEX
	FIX	MDRapid	fix ability to use MDRapid when the insert statement is longer than 10,000 characters
	FIX	MDRapid	use SQL field names instead of system field names for MDRapid triggers when SQL naming is present.
May 13, 2023	FIX	MD Installer	Fix build package so that it includes the MDINSSAVF save file and the PDF containing the installation instructions
	FIX	MDCMS	Avoid archiving physical file objects with their data - only archive the objects without the data, but retain the data in the backup library.
	FIX	MDRapid	Handle the syncing of updates to records when replication override is enabled for tables that contain the GENERATE ALWAYS clause
	FIX	MDRapid	Handle the situation when the SQL name for an existing field is modified or when the SQL name is > 30 characters in length
	FIX	MDTransform	fix the ability to syntax check a custom SQL result for a column for tables that contain the GENERATE ALWAYS clause
	FIX	MDXREF	Fix search for field usage within source members
May 28, 2023	FIX	MDCMS	Retain Object-Specific Object Replication rules when merging and copying RFPs
	FIX	MDOpen	Fix update of token for pipeline servers
	FIX	MDTransform	use SQL field naming for the target fields in case of handling columns

			with the GENERATED ALWAYS clause.
8.5.2 June 7, 2023	ENHANCEMENT	MDOpen	The BETA release of MDOpen for VS Code is now available from the VS Code Extension Marketplace. The extension requires MDCMS 8.5.2 or higher to function.
	FIX	MDCMS	Fix auto-update of X-Analysis information for an object after it has been installed using MDCMS.
	FIX	MDCMS	When deploying data for a Data Group, copy the data for the mandatory files before copying for non-mandatory files, in case of record-level dependencies.
June 8, 2023	ENHANCEMENT	MDOpen for VS Code	various enhancements and fixes
June 18, 2023	ENHANCEMENT	MDOpen for VS Code	various enhancements and fixes
	FIX	MDCMS	MDJIRA - Fix retrieval of Jira projects from a Data Center
	FIX	MDCMS	MDJIRA - Fix possible MCH3601 error when trying to create/update the Jira Webhook to MDCMS
	FIX	MDCMS	Fix deployment of a message description as part of a *MSGD attribute
	FIX	MDCMS	Fix search for Project Description/Comments when the filter values is only in the Project Summary
	FIX	MDCMS	Allow the path symbol / or \ to be part of the object request name when for data groups or dummy requests
	FIX	MDOpen	Fix listing of branches for a Git Repository when credentials are required

June 26, 2023	ENHANCEMENT	MDOpen for VS Code	RFP Pre-Submit validation plus various enhancements and fixes
June 30, 2023	ENHANCEMENT	MDOpen for VS Code	MDXREF functions plus various enhancements and fixes
8.5.3 July 9, 2023	ENHANCEMENT	MDCMS	MDSEND Service Job – ability to configure the number of times that a failed send of an RFP should be automatically retried and the delay between attempts.
	ENHANCEMENT	MDCMS	Auto-Delete logical files during the RFP cleanup phase when the logical files were added after the submit phase occurred and when they reside in a non-managed library. This is typically when performance indexes are auto-created by the system.
	ENHANCEMENT	MDOpen for VS Code	- Object Command maintenance - View spool files for current job - Request Linked objects after request for a new object - Approve RFPs - Smart update of Project and Task status - View archived and current source from Object History - View job log of current job - New Development status for objects requested and prepared in VS Code. Easily toggle between To Do, In Progress and Done to keep track of development work. - Default target for compare when for non-checkout levels - request of message descriptions
	FIX	MDCMS	Fix cleanup of pipeline logs and of IFS files that are generated from spooled files

July 24, 2023	ENHANCEMENT	MDOpen for VS Code	MDRapid launch and console now available from VS Code
	FIX	MDCMS	Any temporary indexes that are added over a table after the submit of an RFP are automatically deleted during the cleanup phase of the RFP so that the backup library containing the prior version of the table can be synced/deleted appropriately.
	FIX	MDCMS	Fix copy of copybooks to developer source files during a Git import.
August 3, 2023	ENHANCEMENT	MDOpen for VS Code	- Additional API Server Admin functions - Project Type and Task Type management - minor fixes and enhancements
	FIX	MDOpen for Eclipse	fix viewing of Project and Task details
	FIX	MD Installer	fix copying of all email and script templates to the IFS when MDCMS is installed or upgraded using MDINSSAVF.
8.5.4 September 2, 2023	ENHANCEMENT	MDCMS	Automated Testing Templates – the ability for automatic testing when specific objects or objects of specific attributes are installed. Option of a quality gate to block further migration of objects until testing is successful. Currently full y integrated with the TestBench product from Original Software. All configuration points for Automated Testing are performed in MDOpen for VS Code.
	ENHANCEMENT	MDOpen for VS Code	Ability to easily move object requests to a different

project/task with the Assign to Project/Task option and then clicking button Replace Assignment
- Automated Testing Templates
- Code Review Templates
- Application settings
- Level settings
- Attribute settings
- Object Commands
- Object Scripts
- FTP Servers settings
- Continuous Integrations
- Attribute Pipelines
- User Group settings
- Project Mapping for Azure DevOps
- Auto-close Request Objects panel if all rows are successfully processed

FIX	MDCMS	Fix Jenkins interface to avoid an infinite loop during the RFP post-install phase
FIX	MDCMS	Fix GitLab interface to handle pending and running status updates from GitLab to MDCMS
FIX	MDCMS	don't auto-import dependencies for service programs during import of pushed Git source changes.
FIX	MD Installer	- fix restore of mail templates during product installation - fix listing of patch history objects
FIX	MDOpen	- fix request of more than 200 dependencies during the submit of an RFP - fix paging for fields in file listing - allow for use of MDOpen in VS Code with only a MDOpen

			license – MDWorkflow license no longer required
September 17, 2023	ENHANCEMENT	MDCMS	KACE Service Desk Interface – MDCMS can now automatically import and update tickets that are generated in the KACE Service Desk product.
	ENHANCEMENT	MDCMS	When checking for active locks of views or display files, the first job in the list that has the lock will be posted to the job log for the RFP job.
	ENHANCEMENT	MDOpen for VS Code	- Magnifying Glass added to an active connection to filter the list of functions - Distribution Levels - Target Attributes for Distribution Levels - Data Group configuration - Linked Attributes - OS400 Location Groups - OS400 Locations - Attribute Pipeline Parameters
	FIX	MDCMS	Fix reversal of ignore errors flag for Object-Level Send Scripts
	FIX	MDCMS	Fix replace of data group data records when based on a variable length field
September 24, 2023	ENHANCEMENT	MDCMS	When an SQL Index is to be created into a developer library or during the RFP submit phase, MDCMS now parses the create script to get the based-on table and will duplicate the table to the dev/temp library of the index prior to creation to reduce creation time and avoid premature locking on the table in the target library.
	ENHANCEMENT	MDOpen for VS Code	ability to use Db2 SQL to query contents of files from

			MDXREF and MDRapid • eMail Bodies • Script Templates • External Reference Levels and File Extensions
	FIX	MDCMS	Fix ability to change Ignore Errors flag for Object Commands of type C or U
	FIX	MDOpen for VS Code	fix ability to request *DUMMY objects
October 12, 2023	FIX	MDCMS	Auto-Close RFP in Send Listing when local DB-Sync target levels aren't applicable for the given RFP
	FIX	MDCMS	Fix command authority for MDUPDLWC
	FIX	MDOpen for VS Code	fix potential codepage issues for the escape character in the communication layer between MDCMS and MDOpen
	FIX	MDOpen for VS Code	fix ability to generate DDL source from a system file at checkout time
	FIX	MDXREF	fix lookup of source in the IFS for system objects
October 14, 2023	ENHANCEMENT	MDOpen for VS Code	• MDTransform columns for changed files • Trace Object Requests • Project/Task Status Codes • Project/Task Status Boundaries • Project/Task Status Triggers • Custom Fields • Acceptance Group Types per Level • Distribution Level Attributes • allow for case-sensitive Apache servers for the API connection to the MDCMS server

	ENHANCEMENT	MDOpen	*LAST can be used as the special value for the Project on Continuous Integration definitions. When used, the Project/Task/Subtask for the most recently installed object into a lower level will be used. The use case for this is if requests for higher MDCMS environments are triggered by pull-requests into higher branches for a Git Repository.
	ENHANCEMENT	MDOpen	All source members that are requested by a Git Continuous Integration push will be copied to the developer's work library if auto-creation into the library is defined to occur.
	FIX	MD Installer	fix ability to check for and auto-end any jobs that are locking MD libraries when running the MDINSSAVF command to update to a new build. This fix does not require restoring a new version of MDINSSAVF.
October 23, 2023	ENHANCEMENT	MDOpen for VS Code	• performance and reliability enhancements to the communication layer between VS Code and MDCMS on the IBM i partition • status messages to provide updates and avoid a timeout error when creating a large number of objects • status messages to provide updates and avoid a timeout error when checking dependencies during the pre-submit phase of an RFP • handle load more/load all of the Create Object listing
	ENHANCEMENT	MDSEC	performance improvements to the MDSEC functional security checking

	FIX	MD Installer	Fix the ability to apply license keys when MDINSSAVF is run to update to a new build of MDCMS
	FIX	MDCMS	Suppress overflow messages from the QMHCTLJL API that ports job log entries to the RFP Deployment Log
	FIX	MDCMS	fix setting of the source location wildcards during execution of Post-Installation commands
February 2, 2024	FIX	MDCMS	Fix MDJIRA interface to use version 3.0 of the API catalog
	FIX	MDCMS	Fix archiving/rollback of *DTAGRP deployments
	FIX	MDCMS	Fix source attribute to be system attribute rather than MD attribute
	FIX	MDCMS	Fix status update to be reflected in Jira and set code page for the MDJIRA jobs to avoid wrong character sets.
	FIX	MDCMS	Change user for an RFP action to *STSTRG when action triggered by a status transition
	FIX	MDOpen for VS Code	fix compare of archived IFS source