

# MDOpen for VS Code Installation Guide

These instructions provide the customer with the necessary information to install and configure the MDOpen VS Code based extension from Midrange Dynamics. These instructions are for VS Code itself as well as the Cursor variant.

## General Information

### General MDOpen Client Information

MDOpen consists of an extension package that is available from the VS Code Extension Marketplace. This extension provides functionality for the MDChange suite of products from within the Visual Studio Code IDE.

### General MDOpen Server Information

MDOpen connects to MDCMS database libraries that reside on 1 or more IBMi partitions. All MDCMS information is retrieved from, and stored to, these libraries, so that all MDCMS interfaces (MDOpen, MDWorkflow or emulator) use the same database.

When a connection is established with an IBM i partition, a job is submitted under the user profile in the connection definition to the job queue defined within the MD Job Settings (option 12 from the MDCMS Setup Menu) for property MDOpen/MDWorkflow Job Queue.

The default CCSID of the job is defined in the system settings (option 11 from the MDCMS Setup Menu). This can be overridden for a specific user in the MDSEC user definition. If issues are encountered with source editing or compiling due to incorrect characters, it is likely because of the CCSID value. In which case, change it to the value used for the interactive jobs of your developers.

The name of the job will be MDRPnnnnnn. The number represented by nnnnnn of a specific connection is visible by hovering the mouse pointer over the active connection within the MDOpen connections panel.

## Installation and Configuration of MDOpen

### Prerequisites

- MDCMS with a minimum version of 8.5.2 must be installed on each IBM i partition that this extension will connect to.
- A valid MDOpen license must be active on each IBM i partition that this extension will connect to.

- You have a user profile and are registered in MDSEC on each IBM i partition that this extension will connect to.
- The MDCMS HTTP Server, which is an Apache http server that provides MDCMS REST APIs, must already be generated, active and available through any firewall on each IBM i partition that this extension will connect to. See [configuring the MDCMS HTTP Server](#) for full instructions.
- The OpenSSH server must be active and available through any firewall on each IBM i partition that this extension will connect to.
- The Code for IBM i extension from Halcyon Tech should also be installed, though connections do not have to be created in the Code for IBM i extension for MDOpen to function, as MDOpen creates its own connections.

## Installing the MDOpen Extension for VS Code

To find the extension, open the Extensions panel within VS Code and search for MDOpen. There will be one package per release of MDCMS. For example, MDOpen for MDCMS 8.5.x will be compatible for any version of MDCMS 8.5 (beginning with 8.5.2 as that is the first version providing this functionality).

Once the correct extension is selected, click the Install button to install. Once installed, the extension will automatically update as new versions of the extension become available for the given MDCMS server release.

## Updating the MDOpen Extension for VS Code

VS Code automatically updates to the newest extension for the same server release once it has been published to the Marketplace. If you upgrade to a new major release of MDCMS (for example: an upgrade from 8.5.2 to 8.6.1), you should uninstall the current extension and find and install the 8.6.x extension from the Marketplace.

## Updating the MDCMS Server-Side Code

The MDOpen extension for VS Code provides a very simple mechanism for applying all available patches for the currently installed build of MDCMS on a partition. To check and apply the patches, do the following:

1. Connect to the partition in MDOpen for VS Code
2. Expand System and click Check for Updates
3. Within the window, click the Check for Patches button. If there are any available, the count will be provided along with the Apply Patches button.
4. Click the Apply Patches button.

Note: The ability to perform this operation depends on having MDSEC authority to code md/11 - System Settings

## Uninstall the MDOpen Extension

If MDOpen is no longer necessary, it can be uninstalled within VS Code using the following steps:

1. Open the Extensions Panel and scroll down to the MDOpen for MDCMS extension
2. Click on the Extension
3. Click the Uninstall button

## Getting Started with a Connection

1. Once installed, the MD icon will appear in the side bar. Click on it to open the MDOpen Connections panel.
2. Click the + or the Add New Connection button to create a connection

## Connection Properties

Instructions for the Connection Properties