Release Notes - MIKE OPERATIONS 2025.0

Release date

November 2024

Welcome

Welcome to MIKE OPERATIONS 2025.0

In this Release Note, you will find information about new features of MIKE OPERATIONS and what you need to know to install and get started with Release 2025.

MIKE OPERATIONS is a software product designed for data management and model-based forecast services for online operational control of river systems, water collection systems and water distribution systems. MIKE OPERATIONS empowers you to build real-time systems by offering flexible tools that help you deal with complexities such as acquiring and combining online data sources in preparation for real-time modelling.

MIKE OPERATIONS is a product consolidation of software tools developed and applied in projects since 2010. Hence, although MIKE OPERATIONS is a relatively new member of the MIKE product family it builds on proven software products that already serve many customers worldwide.

Note

Note the model adapters of MIKE OPERATIONS support the official MIKE 2025 release only. This means that previous and future releases of MIKE engines are NOT supported.

System requirements

Operating systems

Fully supported Windows operating systems (*)

- Windows 11 Pro, version 24H2 (64 bit)
- Windows 11 Pro, version 23H2 (64

bit)

Operating systems	
	 Windows 10 Pro, version 22H2 (64 bit) Windows Server 2022, version 21H2
Non-supported but partially tested operating systems (**)	• Windows Server 2019 Standard, version 1809

(*) Fully supported operating systems are systems that have been tested in accordance with MIKE's Quality Assurance procedures and where warranty and software maintenance agreement conditions apply.

(**) Non-supported but partially tested operating systems are systems, which are not officially supported by the MIKE software products. These operating systems have only undergone very limited testing for the purpose of MIKE software, but the software and key features are likely to work. Installation of MIKE software on a non-supported operating system is done so at the user's own risk. The MIKE software warranty and software maintenance agreement conditions do not apply for unsupported operating systems and DHI is under no obligation to provide assistance or troubleshooting for cases where the software is being used on a non-supported operating system.

Please note that when running a fully supported operating system as a 'guest operating system' on a virtualization platform, it is automatically downgraded to a non-supported operating system under the conditions provided above.

	Minimum hardware/software requirements
Processor	Compatible with x64 instruction set, 2.2 GHz or higher
Memory (RAM)	16 GB or higher *
Storage	64 GB or higher *
Display	Resolution 1024 x 720 (High-Definition) or higher, 24-bit color (true color)
Graphics adapter	64 MB RAM (256 MB RAM or higher recommended), 32-bit true color
Software requirements	Microsoft .NET Framework 4.7.2 or higher

(*) The actual required amount of memory and disk space depend on the usage (application, model setup, size of data files etc.)

PostgreSQL

With this release, the following combinations of PostgreSQL and PostGIS are supported.

PostgreSQL	PostGIS
PostgreSQL 13	PostGIS 3.1.*
PostgreSQL 13	PostGIS 3.2.*
PostgreSQL 14	PostGIS 3.1.*
PostgreSQL 14	PostGIS 3.2.*
PostgreSQL 14	PostGIS 3.3.*
PostgreSQL 15	PostGIS 3.3.*
PostgreSQL 15	PostGIS 3.4.*
PostgreSQL 16	PostGIS 3.4.*
PostgreSQL 17	PostGIS 3.5.*

Read more about database version support on DHI Developers

Installation

To install MIKE OPERATIONS, please go to the **MIKE OPERATIONS** product folder and execute the setup.exe file from the downloaded, un-zipped installation files. Before you press the 'Install' button, we recommend that you read the note describing how to install MIKE OPERATIONS - this is available here.

License file and dongle

To use MIKE OPERATIONS in licensed mode, please refer to the DHI License Manager Release Notes.

Product invocation

Launch MIKE OPERATIONS from the Windows Start menu.

Support

For general support, please refer to our FAQ or the MIKE OPERATIONS Online Help.

If you experience any difficulties, or if you have questions, please contact our Customer Care team at mike@dhigroup.com.

You can also contact your local Customer Care team for support in your local language. A list can be found here.

Breaking Changes

Breaking changes are changes made to functionality that requires user action as part of an upgrade to ensure that specific functionality will work after the upgrade.

If any breaking changes has been made to a release, the breaking changes will be described in the release notes.

MIKE1D and MIKE+ adapter models

As a result of fixing issues with identifying and reading output time series on links, models registered with the MIKE1D or the MIKE+ adapters, should be reregistered in order to parse links correctly.

In case links output is not used, there is no need for doing a re-registration of the models.

New features

Every new release of MIKE OPERATIONS consists of new modules, new features and/or corrections to problems or significant inconsistencies discovered in previous releases.

Please find below, a brief description of the most significant news.

The MIKE OPERATIONS 2025 release is a public release based on version 2025 Update MIKE Zero, MIKE+ and FEFLOW (8.2).

The feature list of MIKE OPERATIONS 2025 includes features included in the release of MIKE OPERATIONS 2024, and features added since this release.

Module	Description
Time series Folder Provider	DFS0 folder time series can be registered when configured in Time Series Manager
Scripting	Extending entity Scripting to ease Python scripting in MIKE Workbench
MODFLOW Adapter	New MODFLOW Adapter for MIKE Mine
MIKE+ Adpater	Enhacement to MIKE+ adapter feature allowing configuration of new scenario from MIKE HYDRO River and MIKE 11 template
MIKE+ Adpater	Enhacement to MIKE+ adapter feature highlighting the model scenario it belongs to if the names are identical
MIKE12 Structures Results for Links	Linking model with link
Security Upgrades	Password Encryption has been upgraded to use Aes/AesCryptoServiceProvider encryption
Documentation	Updated documentation for tools and tool sequence
Find Data- new Ribbon	Results in searching for providers in MIKE OPERATIONS
Find Data- new Ribbon	Additonal enhacements highlighting search options for the providers like- feature associations, workflow, report defination, Find Data for Job instance on Source details
Trobleshooting Wizard	Logging the license logs for Job Service
Time series Import Wizard	Provides a import wizard to import time series data from multiple files from disk

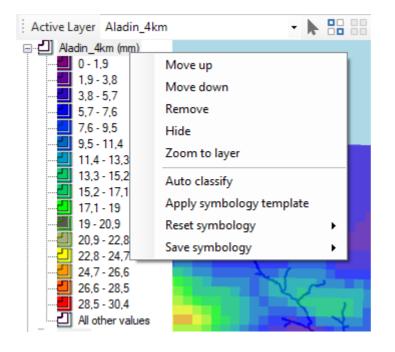
Module	Description
Map layer Symbology template for raster	Allows to apply a symbology template to map styles, from a list of predefined symbology templates

GIS Manager

Map layer Symbology template for raster

A new feature is added where one can choose to apply a symbology template to a map Layer Style for Style type 'Value ranges'.

The default template applied to raster layer is the MIKE Zero 16 color rainbow template but one can choose to apply an alternative symbology template from the context menu of the layer by right clicking.



Pro	operties	□ Ŧ ×					
Alac	Aladin_4km - Raster Layer						
	ੈ ‡↓ 🕮						
~	Appearance						
\sim	Layer Style	Raster Value Range Layer Style					
	Base color	Black					
	Name	Raster Value Range Layer Style					
	Num. of intervals	16					
	Reset max. min.	True					
	Transparency	0					
	Unit	mm					
	Values	(Collection)					
	Style Type	Value Ranges					
\sim	Misc						
	Current map scale	1:2.306.999					
>	Layer visibility range	[-]					
	Name	Aladin_4km					
	OwnOverlay	False					
	Public	True					
	Show In Legend	True					
	Visible	True					

For detailed explanation on working with map and applying asymbology template refer to the user documentation

Time Series

Folder Provider (DFS0)

User can access the time series stored on disk as dfs0 files through Folder Provider option in Time Series Explorer. When a Time series Folder provider connection is configured, it is possible to register .dfs0 time series from the context menu of the Time Series Explorer root node as shown below.

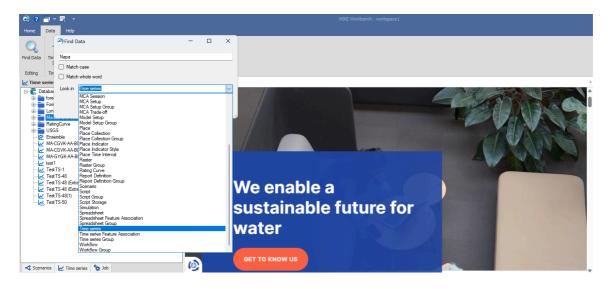
For detailed explanation on configuring Folder Provider connection, refer to the user documentation

Core

Find Data

New Ribbon item for finding entities in providers is implemented.

The user can enter a string or a text, select the data provider to search, as shown below.



Once the search completes, the results corresponding to the search will be listed. Double clicking a result will take to the exact path in the explorer of the data provider.

Home Data Help							
Find Data Time Series							
Editing Time seri	× #	Start Page ×					
	× T	Start Page ×					
Image: Constant of	Find Data apa Match ca Match wi nok in Ti	ase hole word	_	Krid All			
TestTS-48 TestTS-48 (Extract)	Fin	d "Napa"					Ψ ×
TestTS-48 (Extract)_1		Туре	Name	Path	Source	Line	Col
TestTS-48(1)	Þ	Time series	Napa	/USGS/Napa	Napa		
		Time series	Napa	/ForecastedYR/ForecastedYR Raw/N	Napa		
		Time series	Napa River Upper-Total Ru	/Models and Scenarios/Napa_Training	Napa River Upper-Total Runoff		
		Time series	Napa Middle Reach-Total R	/Models and Scenarios/Napa_Training	Napa Middle Reach-Total Runoff		
		Time series	Napa River Lower-Total Ru	/Models and Scenarios/Napa_Training	Napa River Lower-Total Runoff		
		Time series	NapaRiver - 21917.755859	/Models and Scenarios/Napa_Training	NapaRiver - 21917.755859375 - HPoint-Water level		
		Time series	NapaRiver - 22211.377929	/Models and Scenarios/Napa_Training	NapaRiver - 22211.3779296875 - QPoint-Discharge		
		Time series	NapaRiver - 46068.5 - QPo	/Models and Scenarios/Napa_Training	NapaRiver - 46068.5 - QPoint-Discharge		
式 Scenarios 🔛 Time series 🎇 Job		Time series	NapaRiver - 46291 - HPoin	/Models and Scenarios/Napa_Training	NapaRiver - 46291 - HPoint-Water level		

Time Series

Time Series Import Wizard

Time Series Import Wizard allows importing time series files from disk into the database using Time Series Import tools.

The Time Series Import Wizard is located in the Data ribbon page as shown below.

Selecting *Time Series Import* from the Data section will show the Wizard.

In connection with making the new wizard, tool properties grouping has been updated for easing the use of the import tools.

i Da	Data Help Time Series Import me Series Import Wizard							
	t tool Import from ASCII		~	Select Files Re	fresh			Import
					aresn			Import
npor	t to /		R	ead for import.				
	perties 2↓ □							
	Description							
	Tool	Import from ASCII	1	itandard data.C				
~	File options			Timo	app1_q [l_s]	app1_h [m]	app1_v [m_s]	app1_t_wate
	First Data Row	11		Time	[m^3/s]	[m^3/s]	[m^3/s]	[°C] [m^3/s]
	Item Name Row	9		03-08-2023 09:20:00		1		
	Separator	SemiColon						
	Value Column	5		03-08-2023 09:21:00		1		
	Decimal separator	RegionalSetting		03-08-2023 09:22:00		1		
~	Date and time			03-08-2023 09:23:00	9,4	0,184	0,353	
	Enable Time Zone	False 4		03-08-2023 09:24:00	9.23	0.184	0.347	
	Date Column Date time format	4 dd.MM.yyyy H:mm						
	Date time format Time Column	dd.MM.yyyy H:mm 0		03-08-2023 09:25:00	9,76	0,184	0,367	
	Time Format	U HH:mm:ss		03-08-2023 09:26:00	9,12	0,184	0,343	
	Allow Duplicate Dates	False		03-08-2023 09:27:00	12.21	0,184	0.459	
~	Import Selection							
	File path			03-08-2023 09:28:00	10,45	0,184	0,393	
	Import from	SingleFile		03-08-2023 09:29:00	9,34	0,184	0,351	
	Target Group			03-08-2023 09:30:00	10,2	0,184	0,384	
	Import as	TimeSeries	· · ·	03-08-2023 09:31:00	11,11	0.184	0.418	
	To Database	True						
~	Time series properties			03-08-2023 09:32:00	10,48	0,184	0,394	
	Variable	Discharge		03-08-2023 09:33:00	10,18	0,184	0,383	
	Unit	m^3/s		03-08-2023 09:34:00	10,73	0,184	0.403	
	Value type	Instantaneous		03-08-2023 09:35:00	10,15	0,184	0.382	
То	ort from ASCII			03-08-2023 09:36:00	9,08	0.184	0.342	

To load the files, click on the **Select Files** button and chose the file or files that needs importing.

For every file selected, a new tab will be shown and more than one file, tabs for respective file will be shown as shown below.

The **Refresh** button will parse the files using the property values specified in **Properties** and show the results as parsed according to the properties specified.

Clicking on the **Import** button will import the data into the path specified in the **Import to** field.

Im	port tool	Import from	n Excel 🗸 🗸		Select Files Re	efresh	Import
Im	port to	/Models ar	nd Scenarios	Rea	ad for import.		
F	roperties						
e	2↓ ⊂			Co	py of Daily p rainguag	je_1.xls	
	Group By Item Nam		0		Time	Dailyutil [V]	
	Sheet na		Sheet1		04-09-2023 08:00:00	0	
	Time colu Time form		HH:mm:ss		04-09-2023 08:02:00	0	
	To Datab		True		04-09-2023 08:04:00	0	
	To Date		_		04-09-2023 08:06:00	0	
	Value col	umn ries group	В		04-09-2023 08:08:00	0	
	Group	nes group	/Models and Scenarios		04-09-2023 08:10:00	0	
`		ries propert			04-09-2023 08:12:00	0	
	Time serie Unit	es name	Dailyutil V		04-09-2023 08:14:00	0	
	Value typ	e	Instantaneous		04-09-2023 08:16:00	0	
	Variable		Voltage		04-09-2023 08:18:00	0	
	lime series				04-09-2023 08:20:00	0	
1	he name of t	the imported ti	ime series.		04-09-2023 08:22:00	0	

For detailed explanation on TimeSeries Import Wizard, refer to the user documentation.

Model Adapter

New MODFLOW Adapter

A new model adapter was introduced with MIKE OPERATIONS 2024.3 that allows working with the MODFLOW modular hydrologic model.

When registering a model using the Scenario Manager, a new entry for the MODFLOW adapter named **MODFLOW USG** will appear. Selecting this option will provide the user interface to register.

		MIKE Workbench	- workspace 1			
	S MODFLOW Model F	Registration			×	
Amodel Reg	MODFLOW model re This wizard helps	gistration wizard to register MODFLC				
	To register a MODFLOW - a model setup in a fo Please specify the mode	lder structure whe	ere all necessary file	es are located.		
S	Model name MODFLOW file MODFLOW GSF file Coordinate system X offset Y offset Rotate Start time USG exe file Model Object Types	0 0 0 21. august 2024		· · · · · · · · · · · · · · · · · · ·)	~
	Element Element (first layer)	 Well Multilayer Well 	MODFLOW	patial Output		Cancel
			Next >	Cancel		uch

For a detailed explanation on MODFLOW adapter registration, refer to the user documentation.

Fixed issues (2025)

Module/type	Error/Inconvenience fixed
TIM - TimeSeries Manager	TimeSeries Import Wizard, index error
TIM - TimeSeries Manager	TimeSeries Import Wizard, timezone time conversion

Module/type	Error/Inconvenience fixed
TIM - TimeSeries Manager	TimeSeries Import Wizard, importing date in incorrect format
TIM - TimeSeries Manager	TimeSeries Import Wizard, loading huge file size
TIM - TimeSeries Manager	TimeSeries Import Wizard, incorrect unit in the review panel
TIM - TimeSeries Manager	TimeSeries Import Wizard, duplication of the icon when setting layout to default
TIM - TimeSeries Manager	TimeSeries Import tool, import shows successful but timeseries did not import when logged is as reviewer
TIM - TimeSeries Manager	Editing long time series causing slowness
Tools - TimeSeries	TimeseriesCalculatorTool showing None values in the output
SCM - Scenario Manager	MIKE11 Adapater-Invalid Q/h-relations written to the bnd11 file
SCM - Scenario Manager	Shell crushing when template set to default while running big models
SCM - Scenario Manager	Saving an MCA sheet throws an error
SCM - Scenario Manager	Unable to register one MIKE HYDRO basin model
SCM - Scenario Manager	MIKE+ unable to run simulation
SCM - Scenario Manager	MIKE+ unable to use template scenario for model setup as output time series name already exist

Module/type	Error/Inconvenience fixed
SCM - Scenario Manager	Registering MIKE SHE model failed
SCM - Scenario Manager	Running Feflow own module throws Object reference error
SCM - Scenario Manager	Shell crashing when running a big modue in background and setting the layout to default
GIS - GIS Manager	Creating a new or editing a feature class, shell crashes/exits while saving without any logs
DOC - Document Manager	Large files failed to download from MO Export tool
JOB - Job Manager	Unable to find the job instance that was run using Find Data when the language setting is regional
SPR - Spreadsheet Manager	Uploading a large PNG file downloaded over internet failed with out of memory error
ANM - Analysis Manager	saving an MCA sheet threw a property name error
COR - Core	Correcting the FAQs redirection
COR - Core	Trouble shooting wizard shows DB version being incorrect