

## What's New

This page lists all the additions and improvements incorporated in InfoWorks® ICM 2023.0 (March 2022) which were not available in previous versions.

See the InfoWorks ICM [release notes](#) for details on enhancements, resolved issues. (May 2023)

### InfoWorks ICM 2023.0 (March 2022)

This section contains important information regarding improvements included within InfoWorks ICM 2023.

### InfoWorks ICM is now available from Autodesk

InfoWorks ICM now supports Autodesk [named-user](#) subscription in single-user and Flex or Enterprise Business Agreement with two offerings.



#### InfoWorks ICM Standard



#### InfoWorks ICM Ultimate

InfoWorks ICM licenses can now be managed & delivered in the Autodesk Account portal. See <https://knowledge.autodesk.com/customer-service/account-management/account-profile>

Managers can deploy software so that an assigned user can access it from multiple devices, but only one authorized user can access a single license at a time.

Autodesk subscriptions will be delivered via standard Autodesk portal and will not be found on the Innovyze support portal. To find out more information regarding installing Autodesk software visit: <https://www.autodesk.com/support/download-install>

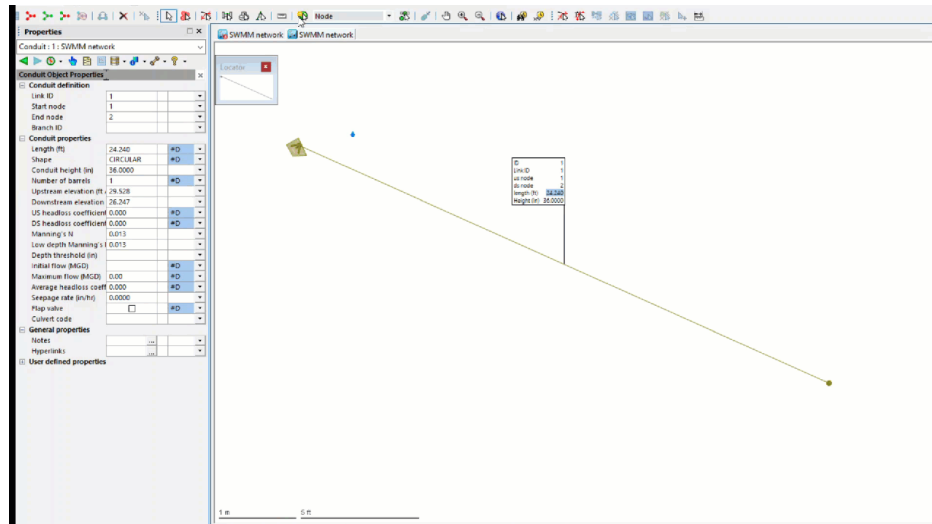
### Inserting a new node into an existing link in SWMM networks

When adding a new node in a SWMM network, either on the [GeoPlan](#) or [Long Section Window](#), the Split box in the [Create New Node](#) dialog is now enabled if the new node is being inserted into an existing link. Adding a check in the box will split the current link to create two links, each connected to the new node. If the new node intersects more than one link, the link to be split can be selected from a dropdown list. A [flag](#) can also be selected from a dropdown list, which will be applied to the start and end node and the upstream and downstream elevation properties for the applicable links.

The new link will have same name as the existing one but with a ! appended to it. All other parameters will be the same as the existing link, except for the [End node](#) and the [Downstream elevation](#) for the updated link and the [Start node](#) and [Upstream elevation](#) of the new link. The name of the new node is assigned to

the end node property for the updated link and the start node property for the new link. The elevation properties are:

- Calculated by splitting the existing elevation based on where the new node is placed in the existing link if the **#D** flag is not set in the [Create New Node](#) dialog.
- Assigned the **#D** flag if the **#D** flag set is set in the [Create New Node](#) dialog.

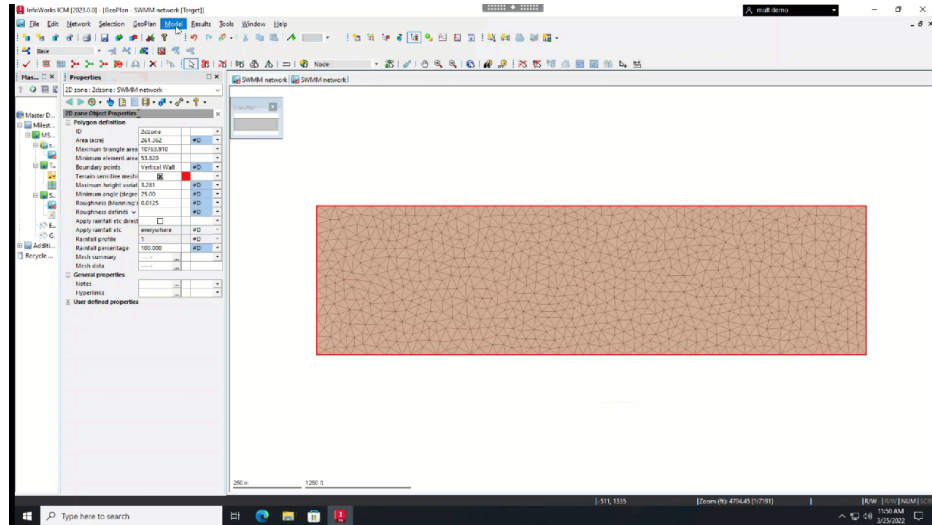


## Terrain-sensitive meshing for SWMM 2D zones

Terrain-sensitive meshing, which is used to increase the resolution of the mesh in areas that have a large variation in height, without increasing the number of elements in relatively flat areas, is now available for [2D zones](#) in a SWMM network. Two new [properties](#) have been added to a 2D zone object:

- A [Terrain-sensitive meshing](#) box which, when checked, applies terrain-sensitive meshing during the mesh generation process
- A [Maximum height variation](#) field that lets you to specify the maximum height variation that is permitted within a single triangle.

See the [2D Mesh Generation Methodology](#) topic for information about how terrain-sensitive meshing is used in the mesh generation process.



## Terrain-sensitive meshing usage indicated in mesh summary and log for InfoWorks 2D zones

Whether or not [terrain-sensitive meshing](#) is applied when a 2D mesh is [created](#) is now indicated in the mesh log or mesh summary for a [2D zone](#) in an InfoWorks network. If it is applied, the specified maximum height variation used will also be included.

The summary is displayed by selecting the [...](#) button located next to the relevant 2D zone's [Mesh summary](#) field, while the log is displayed by clicking the Show log button in the [Manage Mesh Results](#) dialog.

## Consistent selection of zones for attribution for clip meshing

When using the clip meshing method of [mesh generation](#), the attribution of mesh vertex elevations from [Mesh Zones](#) and [Mesh Level Zones](#) has changed for any vertices shared between two zones (i.e. when two zones are adjacent with at least partly aligned boundaries).

Previously, there was no consistency to which zone was selected for attribution during mesh generation, and repeating the same clip meshing job would result in different vertex attribution each time. Now the zone selected for attribution is dependent on the order that the zones are created, with a Mesh Level Zone always taking preference over a Mesh Zone. This provides consistent attribution when a mesh job is repeated. This change does not affect the mesh element elevations or results of a 2D simulation but you should notice the different levels when an element is inspected via the [2D Zone Mesh Element Properties](#) dialog.

In addition, the mesh log is simplified. Instead of a line for each affected vertex, which were often duplicated for many of the vertices, there is now a single warning in the log for each pair of "touching" zones. A list of the affected vertices, without duplicates, and ordered by X-coordinate, is also included. Show me

An example of a mesh log from before the change:

WARNING	Vertex (610.2860, 1021.0225) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (669.8632, 982.3253) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (669.8632, 982.3253) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (611.6204, 982.3253) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (610.2860, 1021.0225) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (669.8632, 982.3253) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (699.4591, 982.3253) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'
WARNING	Vertex (699.4591, 982.3253) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'
WARNING	Vertex (699.4591, 982.3253) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'
WARNING	Vertex (739.7263, 982.3253) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'
WARNING	Vertex (738.5893, 1090.5526) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'
WARNING	Vertex (739.7263, 1090.5838) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (738.5893, 1090.5526) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'
WARNING	Vertex (738.5893, 1090.5526) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'
WARNING	Vertex (626.8907, 1087.4924) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (647.1738, 1088.0481) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (608.0118, 1086.9751) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (626.8907, 1087.4924) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (647.1738, 1088.0481) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (610.2860, 1021.0225) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (610.0523, 1027.8019) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'
WARNING	Vertex (609.4383, 1045.6075) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'
WARNING	Vertex (610.0523, 1027.8019) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'
WARNING	Vertex (647.1738, 1088.0481) lies on the boundary of Mesh Zones 'b' & Mesh Zones 'a', and will be assigned a level from 'a'
WARNING	Vertex (609.4383, 1045.6075) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'
WARNING	Vertex (609.4383, 1045.6075) lies on the boundary of Mesh Zones 'a' & Mesh Zones 'b', and will be assigned a level from 'b'

An example of a mesh log after the change:

WARNING	The boundaries of Mesh Zone 'b' and Mesh Zone 'a' are touching; the following vertices will be assigned a level from Mesh Zone 'a': (610.2860, 1021.0225), (669.8632, 982.3253), (611.6204, 982.3253), (739.7263, 1090.5838), (699.4591, 982.3253), (739.7263, 982.3253) (626.8907, 1087.4924), (738.5893, 1090.5526), (647.1738, 1088.0481), (609.4383, 1045.6075), (608.0118, 1086.9751), (610.0523, 1027.8019)
---------	---

## Importing HEC-RAS data

When [importing](#) HEC-RAS data into InfoWorks networks, the import error messages now include the line number and associated text, from the HEC-RAS prj or g01 file, that caused the error to occur.

## Importing XPSWMM/XPStorm evaporation data to SWMM Climatology

It is now possible to import evaporation data from XPSWMM/XPStorm XPX files to SWMM [Climatology](#) database items. See [Importing XPSWMM/XPStorm Data to SWMM Networks](#) for details about how to import the data and [XPSWMM/XPStorm Conversion Notes \(SWMM\)](#) for information about the imported data.

## Resizable Additional Information window

You can now change the size of the [Additional Information](#) window. This window is displayed when you select the [About InfoWorks...](#) option from the [Help](#) menu and then click the Additional Information button.

For the list of features and improvements in previous releases, refer to [Features in Previous Releases](#).