

# Regionalisation

**Regionalisation** allows the elements of InfoDrainage to be reordered or removed in order to keep the workspace uncluttered, and provide quick easy access to various functionality.

## Region Detection

Upon first opening InfoDrainage, the region will be set by determining your PCs format region, in the same manner that the [language translation](#) and [units](#) are re configured. If InfoDrainage could not recognise the format as being specific to a region, then the **Global** region must be selected.

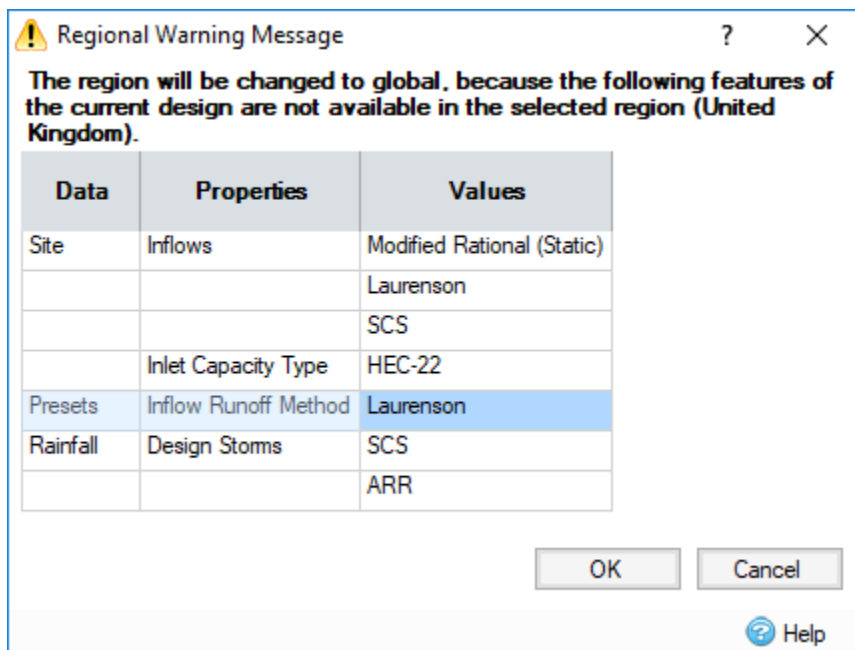
The region can be changed using [Preferences](#). InfoDrainage will then remember the set region, and will then open in that region rather than using your PCs format region.

## Region Validation

The following actions can create a scenario where an attempt to load values restricted for a region is made:

- Loading new files, including [presets](#) and [rainfall](#).
- Changing the region with files already loaded.
- Performing an undo/redo with the region being changed in between.

If one of these actions does result in attempting to load values restricted to the region, the following warning message will appear:



This warning provides a brief description of the issue, including the current region, followed by a table that enumerates all issues. The following columns are shown in the error form:

- **Data** - The area / file where the issue occurred. This will be either **Presets**, **Rainfall**, or **Site**.
- **Properties** - The property in the data that has caused the issue.
- **Values** - The specific value used by the property that has caused the issue.

If you click **OK**, the warning message will set the region to global. If you click **Cancel**, the action will be terminated. The undo/redo does not allow the option to cancel.

## What is Regionalised?

The following tables display the values that are available in InfoDrainage for the given property, in the order they appear.

### Autosizing

Layout ([Network Design Report](#))

Region	Available Layouts
Global	<ol style="list-style-type: none"> <li>1. Methode de Caquot</li> <li>2. Default</li> <li>3. HEC-22</li> <li>4. Full</li> </ol>
Australia	<ol style="list-style-type: none"> <li>1. Default</li> <li>2. Full</li> </ol>
China	<ol style="list-style-type: none"> <li>1. Default</li> <li>2. Full</li> </ol>
France	<ol style="list-style-type: none"> <li>1. Methode de Caquot</li> <li>2. Default</li> <li>3. Full</li> </ol>
United Kingdom	<ol style="list-style-type: none"> <li>1. Default</li> <li>2. Full</li> </ol>
United States	<ol style="list-style-type: none"> <li>1. HEC-22</li> <li>2. Default</li> <li>3. Full</li> </ol>

Method ([Network Design Criteria](#))

Region	Available Methods
Global	<ol style="list-style-type: none"> <li>1. Rational Method</li> <li>2. (UK) Modified Rational Method</li> <li>3. Methode de Caquot</li> </ol>
Australia	<ol style="list-style-type: none"> <li>1. Rational Method</li> </ol>
China	<ol style="list-style-type: none"> <li>1. Rational Method</li> </ol>
France	<ol style="list-style-type: none"> <li>1. Methode de Caquot</li> <li>2. Rational Method</li> </ol>
United Kingdom	<ol style="list-style-type: none"> <li>1. (UK) Modified Rational Method</li> <li>2. Rational Method</li> </ol>
United States	<ol style="list-style-type: none"> <li>1. Rational Method</li> </ol>

## Default Preset Values

The values of properties associated with default [presets](#) (the items available in the toolbox) can be varied across regions. The default values are used in the global region. All properties that differ in any region are listed in the following table:

Preset	United Kingdom	United States
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Urb-Res-Dev (US exclusive area inflow)	Not Available (US only)	<ul style="list-style-type: none"> <li>• Preliminary Sizing <ul style="list-style-type: none"> <li>• Volumetric Runoff Coefficient 0.7</li> <li>• Percentage Impervious: 85%</li> <li>• Time of Concentration 8 min</li> </ul> </li> <li>• Dynamic Sizing <ul style="list-style-type: none"> <li>• Runoff Method: SCS <ul style="list-style-type: none"> <li>• Pervious Curve Number 69</li> <li>• Time of Concentration 8 min</li> <li>• Shape Type: Curvilinear</li> <li>• Shape Factor 484</li> <li>• Initial Abstraction Type: Fraction</li> <li>• Initial Abstraction Fraction 0.2</li> <li>• Percentage Impervious 85%</li> </ul> </li> </ul> </li> </ul>
Urb-Res-Existing (US exclusive area inflow)	Not Available (US only)	<ul style="list-style-type: none"> <li>• Preliminary Sizing <ul style="list-style-type: none"> <li>• Volumetric Runoff Coefficient 0.25</li> <li>• Percentage Impervious: 15%</li> <li>• Time of Concentration 12 min</li> </ul> </li> <li>• Dynamic Sizing <ul style="list-style-type: none"> <li>• Runoff Method: SCS <ul style="list-style-type: none"> <li>• Pervious Curve Number 69</li> <li>• Time of Concentration 12 min</li> <li>• Shape Type: Curvilinear</li> <li>• Shape Factor 484</li> <li>• Initial Abstraction Type: Fraction</li> <li>• Initial Abstraction Fraction 0.2</li> <li>• Percentage Impervious 15%</li> </ul> </li> </ul> </li> </ul>
Manhole	<ul style="list-style-type: none"> <li>• Toggle: Invert Level</li> </ul>	<ul style="list-style-type: none"> <li>• Toggle: Invert Level</li> </ul>
Standard MH (UK & US exclusive manhole)	<ul style="list-style-type: none"> <li>• Toggle: Invert Level</li> <li>• Depth 1.5m</li> <li>• Chamber Shape: Circular</li> <li>• Diameter 1.2m</li> </ul>	<ul style="list-style-type: none"> <li>• Toggle: Invert Level</li> <li>• Depth 5ft</li> <li>• Chamber Shape: Circular</li> <li>• Diameter 4.2ft</li> </ul>
Rectangular Vault (US exclusive manhole)	Not Available (US only)	<ul style="list-style-type: none"> <li>• Toggle: Invert Level</li> <li>• Depth 8ft</li> <li>• Chamber Shape: Rectangular</li> <li>• Length 20ft</li> <li>• Width 10ft</li> </ul>
Pipe Connection	<ul style="list-style-type: none"> <li>• Colebrook-White Roughness 0.6</li> <li>• Diameter 100mm</li> </ul>	<ul style="list-style-type: none"> <li>• Diameter 12in</li> </ul>
Trapezoidal Channel	No changes	<ul style="list-style-type: none"> <li>• Base 36in</li> <li>• Side slope 1:2</li> </ul>
Bioretention	<ul style="list-style-type: none"> <li>• Toggle: Base</li> </ul>	<ul style="list-style-type: none"> <li>• Toggle: Base</li> <li>• Depth 2ft</li> <li>• Freeboard 6in</li> <li>• Filtration rate 20in/hr</li> <li>• Underdrain on <ul style="list-style-type: none"> <li>• Number of barrels 1</li> <li>• Diameter 6in</li> </ul> </li> <li>• Soil layer <ul style="list-style-type: none"> <li>• Depth 18in</li> <li>• Porosity 30%</li> <li>• Percolation rate 8in/hr</li> </ul> </li> <li>• Storage layer <ul style="list-style-type: none"> <li>• Depth 6in</li> <li>• Porosity 40%</li> </ul> </li> </ul>

Pond	<ul style="list-style-type: none"> <li>Toggle: Base</li> </ul>	<ul style="list-style-type: none"> <li>Toggle: Base</li> <li>Depth 60in</li> <li>Freeboard 6in</li> </ul>
Tank	<ul style="list-style-type: none"> <li>Toggle: Base</li> </ul>	<ul style="list-style-type: none"> <li>Toggle: Base</li> <li>Depth 48in</li> <li>Freeboard 6in</li> <li>Porosity 95%</li> </ul>
Porous Paving	<ul style="list-style-type: none"> <li>Toggle: Base</li> </ul>	<ul style="list-style-type: none"> <li>Toggle: Base</li> <li>Depth 24in</li> <li>Paving Layer Depth 4in</li> <li>Membrane percolation rate 20in/hr</li> <li>Porosity 40%</li> </ul>
Swale	<ul style="list-style-type: none"> <li>Toggle: Base</li> </ul>	<ul style="list-style-type: none"> <li>Toggle: Base</li> <li>Depth 42in</li> <li>Side slope 1:4</li> <li>Freeboard 6in</li> <li>Filtration rate 8in/hr</li> </ul>
Dry Swale (UK & US exclusive swale)	<ul style="list-style-type: none"> <li>Toggle: Base</li> <li>Side Slope 1:4</li> <li>Trench On</li> </ul>	<ul style="list-style-type: none"> <li>Toggle: Base</li> <li>Depth 42in</li> <li>Side slope 1:4</li> <li>Freeboard 6in</li> <li>Filtration rate 8in/hr</li> <li>Trench on <ul style="list-style-type: none"> <li>Depth 24in</li> <li>Porosity 30%</li> <li>Underdrain on <ul style="list-style-type: none"> <li>Diameter 6in</li> <li>Number of barrels 1</li> </ul> </li> </ul> </li> </ul>
Infiltration Trench	<ul style="list-style-type: none"> <li>Toggle: Base</li> </ul>	<ul style="list-style-type: none"> <li>Toggle: Base</li> <li>Depth 48in</li> <li>Porosity 30%</li> </ul>
Chamber	No changes	<ul style="list-style-type: none"> <li>Arch <ul style="list-style-type: none"> <li>Length 8.5ft</li> <li>Wall thickness 2in</li> <li>Base 52in</li> <li>Height 30.5in</li> </ul> </li> <li>Embedded on <ul style="list-style-type: none"> <li>Porosity 30%</li> <li>Above 0.5ft</li> <li>Below 0.5ft</li> <li>Sides 1ft</li> <li>Ends 1ft</li> </ul> </li> </ul>

## Inlets

All [inlets](#) are available for all regions, except **HEC-22** inlets, which are not available in the United Kingdom region.

## Preliminary Sizing Calculators

The following values are available for the [Preliminary Sizing Calculators](#).

Region	Available Calculator
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Global	<ol style="list-style-type: none"> <li>1. Quick Storage Estimate</li> <li>2. Water Quality Volume</li> <li>3. First Flush</li> <li>4. UK and Ireland Rural Runoff</li> <li>5. Methode des Pluies</li> </ol>
Australia	<ol style="list-style-type: none"> <li>1. Quick Storage Estimate</li> <li>2. Water Quality Volume</li> <li>3. First Flush</li> </ol>
China	<ol style="list-style-type: none"> <li>1. Quick Storage Estimate</li> <li>2. Water Quality Volume</li> <li>3. First Flush</li> </ol>
France	<ol style="list-style-type: none"> <li>1. Methode des Pluies</li> <li>2. Quick Storage Estimate</li> <li>3. Water Quality Volume</li> <li>4. First Flush</li> </ol>
United Kingdom	<ol style="list-style-type: none"> <li>1. Quick Storage Estimate</li> <li>2. UK and Ireland Rural Runoff</li> <li>3. Water Quality Volume</li> <li>4. First Flush</li> </ol>
United States	<ol style="list-style-type: none"> <li>1. Quick Storage Estimate</li> <li>2. Water Quality Volume</li> <li>3. First Flush</li> </ol>

## Rainfall

Regionalisation only applies to design [rainfall](#). Other forms of rainfall (**IDF**, **Table IDF**, and **Known Rainfall**) are available to all regions.

Region	Available Design Rainfall
Global	<ol style="list-style-type: none"> <li>1. SCS</li> <li>2. FEH</li> <li>3. FSR</li> <li>4. ARR</li> <li>5. Desbordes</li> <li>6. Chinese Design Rainfall</li> <li>7. User Defined</li> </ol>
Australia	<ol style="list-style-type: none"> <li>1. ARR</li> <li>2. User Defined</li> </ol>
China	<ol style="list-style-type: none"> <li>1. Chinese Design Rainfall</li> <li>2. User Defined</li> </ol>
France	<ol style="list-style-type: none"> <li>1. Desbordes</li> <li>2. User Defined</li> </ol>
United Kingdom	<ol style="list-style-type: none"> <li>1. FSR</li> <li>2. FEH</li> <li>3. User Defined</li> </ol>

United States	<ol style="list-style-type: none"> <li>1. SCS</li> <li>2. User Defined</li> </ol>
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## Runoff Methods

The following methods are available for [Inflows](#).

Region	Available Runoff Methods
Global	<ol style="list-style-type: none"> <li>1. Time of Concentration</li> <li>2. SCS</li> <li>3. SBUH</li> <li>4. Time Area Diagram</li> <li>5. FSR</li> <li>6. FEH</li> <li>7. ReFH</li> <li>8. ReFH2</li> <li>9. Green Roof</li> <li>10. Laurenson</li> <li>11. Modified Rational (Static)</li> </ol>
Australia	<ol style="list-style-type: none"> <li>1. Laurenson</li> <li>2. Time of Concentration</li> <li>3. Green Roof</li> </ol>
China	<ol style="list-style-type: none"> <li>1. Time of Concentration</li> <li>2. SCS</li> <li>3. Green Roof</li> </ol>
France	<ol style="list-style-type: none"> <li>1. Time of Concentration</li> <li>2. Time Area Diagram</li> <li>3. SCS</li> <li>4. Modified Rational (Static)</li> <li>5. Green Roof</li> </ol>
United Kingdom	<ol style="list-style-type: none"> <li>1. Time of Concentration</li> <li>2. Time Area Diagram</li> <li>3. FSR</li> <li>4. FEH</li> <li>5. ReFH</li> <li>6. ReFH2</li> <li>7. Green Roof</li> </ol>
United States	<ol style="list-style-type: none"> <li>1. SCS</li> <li>2. SBUH</li> <li>3. Time of Concentration</li> <li>4. Green Roof</li> <li>5. Modified Rational (Static)</li> </ol>

## Analysis

The **Static** runoff method in [Analysis Criteria](#) is only available in the following regions:

- Global
- France
- United States

The **Safety Factor** for analysis is only available in the UK and Global regions. Default values are as follows:

- UK - 2.0 (required)

- Global - 1.0