

Changes Since...

For an overview of recent developments, please see the [here](#).

[Version 9.24](#)

[Version 9.22](#)

[Version 9.20](#)

[Version 9.16](#)

[Version 9.11](#)

[Version 9.10](#)

[Version 9.08](#)

[Version 9.07](#)

[Version 9.04](#)

[Version 9.03](#)

Version 9.24

19-Dec-2008

- Fix a minor bug where Outlet connectivity could fail in very large designs with many changes made.
- Fix a bug in the HGL report where the lateral pressure band was incorrect in some cases.
- Fix a bug where the HGL curve for spraylines was incorrect.
- Enable rounding for all labels.
- Fixed a minor bug where OLE items and images were not exported to PDF files in some circumstances.

Version 9.22

29-Oct-2008

- Fixed a bug introduced in 9.16 where the autobackup feature was not saving all design files to the backup folder. The symptoms would be a "DBS 5" error being generated when attempting to open a backup design.

Version 9.20

23-Oct-2008

- Fixed a crash that would occur if "Delete Type" was used to delete Block entities and then a zoom tool was selected (e.g., Zoom All).
- Fixed a problem where Irricad would "hang" when the "Hydraulic Grade Line" tool was used when the current pressure units were anything other than metres.

Version 9.16

07-Oct-2008

- Fixed a problem that would cause an access violation crash when trying to perform management functions with more than 10 supplies.
- Added the ability to automatically create a Management symbol (a symbol of the current graphical management).
- Improved the resizing of System Flow dialogs.
- Fixed bug introduced in 9.16 where Spray Block dialogs didn't work correctly.
- Hide unused items in Spray block dialogs.
- Hide Arc orientation in Tape Block dialog.

- Changed the limits for warnings about outlet spacing in block dialogs.
- Suppressed spacing warning for drippers in Block dialogs.
- Added automatic generation of pipe stubs for submain and control valves in block entities.
- Added a facility to graphically display the position of the maximum and minimum emitter pressures in a zone ("Reports/Show Zone Pressure Limits").
- Added an option to the block entity valve position. The valve position can now be specified as a percentage of the submain length.
- Added the ability to round label values to a closest value and by roll lengths. New keywords are "ROLLS" and "ROLLS3D".
- Added a tool that displays the hydraulic gradeline for spraylines, tapes, submains and mainline pipes ("Reports/Hydraulic Gradeline").
- Fixed a bug that could cause block entities to become corrupted (e.g. lateral spacing set to zero). This occurred when canceling from the change or change/match dialog (when using change type) and then selecting some tools (e.g. Clear Selection, Zoom Window).
- Make OLE objects print first in PDF files, so that they don't obscure the design.
- Ensure that the Valve Connector does not create very short pipes. Instead it now connects valves directly to the mainline if they are very close.
- Fixed a minor bug where some block entities didn't appear to be closed.
- Added a Water Supply elevation field to mainline reports (Sysflow->WSElevation).
- The headloss through a control valve is now available in the MLItem->Outloss mainline report field.
- The minimum and maximum emitter pressures (and their positions), in a connected sprayline, are now calculated. These calculations are based on the actual flow and take into account the DEM elevations at the emitters.
- Allow for zones spanning multiple Irrigation Areas (e.g. a zone made up of multiple block entities) when calculating area and water requirements. A zone may span a maximum of 10 areas. Note that the V7 style reports (if enabled) still only allow for zones being in one area.
- Changed the 489 warning ("Tape pressure range cannot be met for conditions given") to logging only (warnings can be seen under "View Errors"). A single warning message, for each zone, is now displayed on screen if necessary.
- Added a "band" to the submain gradeline to display the minimum and maximum pressures on individual laterals.
- When loading a design Issue warning if an assembly contains no items. This avoids the confusing "Item is an assembly of itself" warnings in this case.
- The text colour for labels can now be specified ("Settings/Labels/Text").
- Added settings for the minimum and maximum zone pressure labels. These settings are located in "Reports/Report Settings".
- The management symbol is now automatically saved so that when a design is reopened management does not need to be re-run in order to draw the symbol.
- Fixed a problem where "Extra Outlets" would not correctly 'belong' to a block entity (this could cause connectivity problems).
- Added functionality to allow pipes, created with the "Zone Pipe" tool, to belong to block entities they connect to (e.g., so that manual submain pipes also 'belong' to the block).
- Fixed a bug that could cause a crash when more than 963 symbols/labels were used in a design.
- In the database editor the "Save Changes" and "Quit" buttons are disabled when working with an assembly. This fixes a problem where assemblies containing no items could be created.
- Fixed a bug where the "Length3D" and "Rolls3D" label keywords only calculated 2D lengths.
- Fixed a problem where the allowable pressure ranges in "Zone Design Configuration" were not used in a limited number of situations.

- Any selected entities on invisible layers are now deselected.
- Use the DEM method to get the elevation of any new junctions created as part of the sprayline sizing process. This fixes a possible problem in the hydraulic gradeline tool.
- Fix bug where changing the outlet in a sprayline block entity, but not the lateral or outlet spacing, would look for a blank symbol.
- Fixed a minor problem which could cause pipes to be individually labelled after initial labels were deleted.
- Increased to 25 the maximum number of Areas a Zone can span.
- Fixed a problem that could, in certain circumstances when a mainline includes a misc hydraulic item, cause the required water supply pressure to be calculated incorrectly. Note this problem only occurred in 9.12+ Beta versions.
- Fixed a minor problem in the new valve connector tool when valves had been moved and the tool rerun.
- A utility to "clean" fields in databases has been added to the database editor. This utility is used to correctly format fields in the database after directly importing data via Access. It is not necessary to use this if data has been entered via the Irricad database editor. To use the utility simply:-
 - a. Close the current database.
 - b. Select "Clean Fields" from the "Utility" menu.
 - c. Choose the database and click the "Clean" button.
 - d. When the progress bar stops the operation is complete.
 - e. "Cancel" exits from the utility.

A backup of the original database will be created (~tmp then the database name) this may be deleted when required.

- Changed the way Zone Design operates when zones are turned off in Zone Design Configuration. It is no longer necessary to design all zones initially. This also fixes a problem where the maximum number of lateral/submain sizes was ignored the first time zone design was run.

Version 9.11

07-Mar-2008

- Added OLE functionality. This means that items such as Irricad reports, spreadsheets, documents etc. can be inserted into Irricad. There are two ways of doing this either by "Edit/Paste" or "Tools/Insert OLE". In both cases the required data needs to have been copied to the clipboard in the appropriate application (e.g. the Irricad report viewer) or a file copied in "My Computer"/"Windows Explorer". When "Paste" or "Insert OLE" is chosen the size and shape of the OLE object is selected by specifying two corners of a rectangle. "Insert OLE" allows multiple instances of the object to be inserted while "Paste" allows only one. It is a restriction of OLE that only the first page of the copied data can be displayed. Irricad allows OLE data to be displayed, printed and exported to PDF. NOTE: in order for Irricad reports to be displayed correctly an application that can render RTF data, including tables, must be installed on your system - examples of suitable applications are MS Word, Open Office etc.
- Line widths of placeholder lines in pipe legend templates are now used when pipe legends are created as part of "Draw/Plot Layout".
- More Keywords have been enabled for use in Plot Templates, those added are:-

#EDATE# End Date	#MCOST# Mileage Cost
#SDATE# Start Date	#TAXR# Tax Rate
#ADATE# Acceptance date	#COSN# Company Short Name

#REPCO#	Rep Code	#COLN#	Company Full Name
#REPNM#	Rep Name	#BRCO#	Branch Code
#LHRS#	Labour Hours	#BRNM#	Branch Name
#MILE#	Mileage	#BRPH#	Branch Phone
#ICOST#	Installation Cost	#BRFX#	Branch Fax
#SIGNT#	Signitary	#BRAP#	Branch After Hours Phone
#SIGTL#	Signitary Title	#BRCT#	Branch Contact
#LCOST#	Labour Cost		

- A tool that automatically connects control valves to the nearest mainline has been added.

Version 9.10

07-Mar-2008

- Fix a bug where using a manual snap would stop a polyline being closed (e.g in block tools).
- Added an "OutletFlow" field for mainline reports. Also fixed a minor problem in mainline design summary report when running VIH outlets had -ve heads, these previously were not displayed in the report.
- Added extra information about the number of contour segments during "Import Elevations". The number of raw and simplified segments is now shown.
- Changed the recommended minimum pressure to 1.0 m in tapes and tape block dialogs.
- Fixed a bug where using snap parallel would be cause a pipe to be disconnected.
- Made a change to LP that fixes a number of odd "LP failed to find solution" problems.
- Fixed a problem where the representations of contours and block boundaries would disappear when drawn on top of Images.
- Fixed a problem that could give error 356 for some child blocks during zone reports.

Version 9.08

22-Feb-2008

- Fixed a crash (introduced in 9.07) that would occur if drawing objects were selected and then the Label tool applied.
- Fixed a minor bug when slicing in the subdivide tool. Previously, with the "Perpendicular to Laterals" option selected, subdividing blocks with vertical laterals could "miss out" part of the parent block.
- Enabled more keywords for Plot Templates:-

#DDES#	Design Details Description
#CLSN#	Client Details Short Name
#CLAD#	Client Details Address
#CLHP#	Client Details Home Phone
#CLPH#	Client Details Work Phone
#CLFA#	Client Details Fax
#CLCO#	Client Details Code (3 chars only)

Version 9.07

22-Feb-2008

- Fixed a problem introduced in 9.07 where the colour of tapes in a tape block entity were incorrect.
- Allow for zones with single centre fed laterals in "Assign Zones to System Flows", in previous versions these zones were not displayed.
- Improved the display of single lateral zones in "Assign Zones to System Flows".
- Ensured that Sprayline Block outlines are created on the Irrigation Areas layer by default.
- Fix a minor bug in "Zone Design Configuration" where the D/S zone pressure was not allowed to be 0.0 in some circumstances.
- Nominal flows for Sprayline blocks are now calculated for Block Labels and the Subdivision tool.
- The design default lateral line width is now used for Block Entities (if <Default> is selected).
- The design default zone line width for is now used for submain pipes in Block Entities.
- <ByLayer> line width now functions correctly in Block Entities.
- Allow the DEM to be calculated regardless of the presence of tapes or the DEM calculation mode.
- Fixed a crash the could occur when using keyboard entry in copy tools.
- Fixed various problems that could occur when some temporary files were readonly.
- Fixed a bug where manually implemented perpendicular and parallel snaps on hydraulic objects would place items in the correct location but would not "attach" to other hydraulic objects correctly.
- When labeling pipes, with the "Combine Pipes" option set, Zone and Mainline pipes are now considered independently. This means, for example, that submain connected to an inline valve doesn't force multiple labels in the mainline pipes at that point.
- Fixed a bug when labeling pipes, with the "Combine Pipes" option set and using the #Length# keyword, where in some circumstances the length of a pipe segment could be counted in two labels.
- Fixed a minor problem where the "Delay Time" for warning message reverted to it's default value unless the "Design Parameters" dialog was accessed and "OK" clicked.
- Fixed a problem in the "Datum" and "Leader" tools (introduced in 9.07)
- Fixed a bug where a DEM from a previously loaded design could be used in a design with no elevation information.
- Fixed a problem where the DEM was not recalculated if all Elevation information was removed from a design.
- Fixed bug where the actual Valve pressure and minimum/maximum emitter pressures were not displayed in "Zone Design Configuration" in some circumstances.
- Fixed a crash the could occur when using keyboard entry in the Move and Rotate tools. This only occurred when a selection was present and the "Offset Point" was specified via the keyboard.
- Made a change to Zone LP Design so that if the Valve pressure is set (in "Zone Design Configuration") then this pressure is fixed during the LP process. Previous versions allowed the resulting valve pressure to vary up to the specified pressure. This method has the slight disadvantage that LP may fail if an inappropriate valve pressure is used.
- Fixed a crash that would occur during Block creation/editing if another tool was selected (e.g. the select tool) while waiting for input when manually specifying a submain or lateral direction.
- Fixed a minor long standing bug that could cause headlosses in "**** No Pipe Selected ****" pipes with apparently no flow.
- Fixed a problem where running a Zone Design would cause 187 errors followed by an error reading the temporary.zne file. This only occurred with certain databases and in a design that contained segments of pipe with no flow.
- Undelete is now disabled after any design/costing run. This avoids a potential crash when undeleting items.

- Fixed a problem that could occur, in a new design containing spraylines, if "Assign Zones to Systems Flows" was run. Zone design would then produce OOP_7 errors. Once the design was saved (either before or after "Assign Zones to Systems Flows") the problem would not occur.
- Fixed a bug, introduced in 9.05, where relabeling pipes with the "combine pipes" option didn't work correctly.
- Fixed a minor problem which could prevent that last lateral in the last sub-block from being created when slicing blocks.

Version 9.04

08-Feb-2008

- The lateral direction of Irrigation Blocks can now be changed.
- The submain direction (when using the distance option) for Irrigation Blocks can be changed.
- Irrigation Block entities may now be sprayline blocks (Zone/Spray Irrigation Block)
- The Change/Match dialog has been changed to a grid format.
- The contour limits message has been corrected when no elevations are imported.
- Changes to allow multiple editing of Spray Irrigation Blocks.
- In colour contours tool, fix the minimum/maximum to display correctly when using U.S. units. Add the location for the minimum and maximum values.
- Fix a problem in colour contours where the colour of spot heights were not changing.
- Create or recalculate the DEM if it is not present or is out of date when running the "3D Dem View" report.
- In Zone Design Configuration fix bug where depths and Outlet Connection losses not accounted for when displaying the minimum and maximum emitter pressures. Also improve the checking for Min/Max allowable pressures.
- When creating a Block (Tape or Sprayline) make sure the block polyline is visible during zooms.
- Enable standard drawing snaps for hydraulic tools.
- Added Undo Vertex when drawing polyline items (applies to all hydraulic and drawing "Polyline" tools).
- Enable running snaps for hydraulic tools.
- Allow any line to be used when specifying the submain direction (i.e. not just block boundaries).
- Fixed a minor problem that could cause zero length submain segments and duplicate junctions when making a submain with the "distance" option in some circumstances.

Version 9.03

08-Feb-2008

- Fixed a problem where management reports were not displayed after using the "Zone Times" management options.
- Fixed a bug that would cause multiple submain segments if a block with a centre or Set Distance auto submain had the valve position changed.
- Stop Hydraulic items being changed into irrigation blocks.
- Fixed a minor bug where changing the submain for an Irrigation block would cause all junctions to have the "permanent" flag set.
- Fixed a bug in the "Submain distance" option of Irrigation Blocks. This could occur if the distance selected was longer than some laterals and therefore the submain "snapped" to ends of these laterals. This could cause very small or 0 length tapes in block entity.

- Fixed a bug where zone hydraulic items could connect to mainline items (and *vice versa*) using "Snap to ...".
- Allow for converting tapes in Irrigation Blocks to spraylines. Note spraylines in Blocks are not fully supported yet.
- Fixed a bug where the location of the minimum and maximum emitter in the Zone Summary report would always be on the first lateral for PC tapes/Outlets.
- Elevations are now re-interpolated automatically when the "Elevation Calculation Method" is changed to DEM elevations or when the "DEM Grid Size" changes.
- "Re-interpolate Elevations" on the "Design" menu now re-interpolates all elevations (not just new Hydraulic Items).
- Enable "Change" for tapes that are part of a block. Note only Layer and Line Thickness can be changed.