



## ARCADY 7.0.1 was released in March 2010.

A summary of changes incorporated into this version of the software is given below. A new version of the User Guide (Issue B) accompanies the program.

Existing users should not need a new unlock code. For new users, instructions of how to register the software (if appropriate), can be found in the SOFTWARE\_REGISTRATION document that is provided with the program.

If you are using **Windows Vista** or **Windows 7**, please note that you may need administrator permissions to install the software.

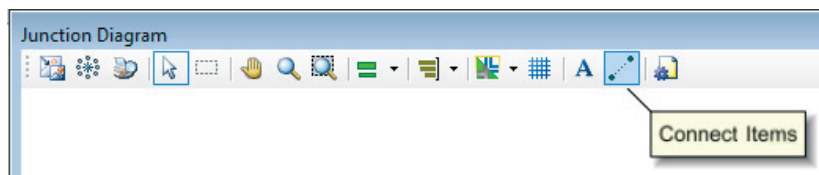
Results from ARCADY 7.0.1 should give good agreement with those from ARCADY 6.2 AG (released Feb 2010). Please note that output from ARCADY 6.2 AG will not necessarily *exactly* match ARCADY 7.0.1, because there are many subtle differences between the implementation in the two programs. Due to bug fixes, there may be slight differences between results from ARCADY 7.0.1 and previous versions of ARCADY 7: these particularly affect pedestrian crossings and linked roundabouts. If in doubt, ARCADY 7.0.1 should be used.

For further information on ARCADY 7 or any of our software products please email us at [software@trl.co.uk](mailto:software@trl.co.uk) or go to [www.trlsoftware.co.uk](http://www.trlsoftware.co.uk).

## Summary of changes to the software:

- ◆ GUI: general operation of the GUI is significantly faster, including updating and refreshing. Certain individual screens have also been optimised for speed.
- ◆ GUI: the size of data files is now significantly smaller. Files saved from ARCADY 7.0.1 can be up to 90% smaller compared to files saved from previous versions. Files saved from previous versions can be loaded into ARCADY 7.0.1 without issue. (You may, however, see a screen warning about version differences, which can usually safely be ignored.) **Files saved from ARCADY 7.0.1 cannot by default be loaded into older versions.** If you need to do this, you should select, from within ARCADY 7.0.1, *File>Export>To ARCADY 7.0.0 (Uncompressed)*. This will use the same saving system as used in older versions and the file will then be fully compatible with any version of ARCADY 7.
- ◆ MODEL: new options are available when modelling linked roundabouts. In essence, these allow you to distinguish between closely and widely spaced roundabouts. For full details, please see Section 13.2 of the User Guide. The article '*Using ARCADY 7 to model linked roundabouts*' from *TRL Software News Issue 50*, January 2010, also explains the changes: [http://www.trlsoftware.co.uk/files/newsletters/TSN50\\_January\\_2010.pdf](http://www.trlsoftware.co.uk/files/newsletters/TSN50_January_2010.pdf). When loading an existing file that contains linked roundabouts, a compatibility mode will be automatically selected so that the results are as close as possible (note that they may not exactly match) compared to previous versions. You should, however, review the new options and if necessary select one of the new modes. This aspect of the model is still relatively new and so we welcome any feedback and/or data relating to its application.

- ◆ GUI: Linked roundabouts: to set up linked roundabouts it is no longer necessary to enter individual IDs in the Flows screen. Instead, the Junction Diagram contains a new *Connect Items* mode. When in this mode, simply click on two arms on two different roundabouts and ARCADY 7 will automatically create a link between the roundabouts. The relevant IDs will be entered automatically in the Flow screen and can then be adjusted if necessary. See Section 13.2 of the User Guide for more details.



- ◆ GUI: Intercept and Capacity adjustments screen: the way the automatic calculation screens work have been changed. Non-essential columns have been removed, to simplify operation. Automatic capacity calculation now applies to all arms. See Section 13.12.5 of the User Guide for more details.
- ◆ MODEL: Certain combinations of model features, such as flow/capacity scaling in conjunction with linked roundabouts, are now banned as they cause the model to become unreliable and/or ambiguous. If you try to set up such a combination, the Task List will show an error.
- ◆ MODEL: Sometimes when a file is run, warnings or errors become apparent. For example, the capacity may drop to zero because of a pedestrian crossing, or the model may fail to converge. Such messages have always been shown in the Task List following a run but this is now made more obvious by a link shown in the Summary Results screen. If running multiple Analysis/Demand sets, this message indicates that warnings apply to at least one set.
- ◆ MODEL: Bug fixes to the pedestrian crossing models. The capacity of affected arms may differ to those calculated in previous versions of ARCADY 7. In particular, a bug in ARCADY 7.0 resulted in the under-estimation of blocking back due to zebra crossings. If in doubt, you should always use the newest version of ARCADY 7.
- ◆ MODEL: Bug fix for problem that caused "Unhandled Case" error
- ◆ MODEL: Demand Sets: it is now possible for an Analysis Set to reference more than one specific Demand Set. Usually, each Analysis Set uses ALL Demand Sets. (E.g., A1 runs D1, D2, D3... automatically.) In ARCADY 7.0.0 it was possible to specify that, for example, A1 should ONLY run, say, D2. It is now additionally possible to specify that, for example, A1 should specifically run, say, D2 and D3 but not D1. See Section 9.6 of the User Guide for more details.
- ◆ GUI: Data Grids: if you adjust the width of a field column, the new width is stored and used whenever you return to that data section. Previously, column widths would revert to their default value as soon as you navigate to a different data section.
- ◆ GUI: the Summary Results screen now draws a line to separate multiple roundabouts. Each arm in the leftmost column is now a clickable item that, when clicked, will select that arm in the Data Outline and any other appropriate screens. This makes it easier to identify arms from the Summary Results screen.
- ◆ GUI: Analyser screen: the 'Add all arms' button now applies to all roundabouts (i.e. all arms in the file rather than just the currently selected roundabout)
- ◆ GUI: the 'Results' button on main vertical toolbar now has a drop-down menu offering quick access to results for either time segments or for the whole period.

- ◆ GUI: the *File>Preferences* screen now includes a link to the current application *Preferences folder*. Clicking this link will open a folder in Windows Explorer where you will find a configuration file that contains all user preferences. You can make a copy of this file and transfer it to the equivalent location on a colleague's PC. Your colleague's version of ARCADY 7 will then adopt the user preferences as used on the original PC.
- ◆ GUI: the *File>Preferences* screen includes a new option: *Default Arm 1 Position*. This controls how new roundabouts should be laid out. Historically, the UK convention for ARCADY is that the 'first' arm is located at 3 o'clock (east). Users in other countries can use this setting according to their local preference.
- ◆ Junction Diagram: when working with multiple roundabouts, roundabout IDs are shown in the centre of each roundabout. To turn this off, use the new option *Junction Diagram Options>Other>Show Roundabout ID*. When roundabout IDs are displayed you can drag them to drag the entire roundabout, or drag whilst holding SHIFT to drag the label only.
- ◆ Junction Diagram: dragging an arm ID now rotates that arm around the centre of the roundabout. To drag an arm to a different position, drag the grey 'interior' of the arm. For more detailed movement, you can also drag the individual control points and/or the entry/exit segments.
- ◆ Junction Diagram: a new button allows the background (if present) or the diagram to be shown individually. This makes it easy to toggle the background on and off, rather than only being able to show the background and the diagram together.



- ◆ Junction Diagram: if a background image is present, this is now included when you print or copy as a metafile.
- ◆ Junction Diagram: various minor improvements, such as the display of roundabout ID in tooltips (when working with multiple roundabouts). The ruler is now easier to manipulate.
- ◆ MODEL: Various minor bug fixes
- ◆ ARCADY 6 Import/Export: Various minor bug fixes
- ◆ GUI: Various other minor bug fixes and enhancements