

12d Model Data Management

12d Synergy is the only data management system that can effectively store, share and manage 12d Model projects, customisation, inputs, outputs and plots. The software is designed with an optional 'Advanced Data Management' module to enable these capabilities.

Version Control and History

As with many engineering application software, such as TUFLOW, HECRAS and many GIS systems, 12d Model stores data across multiple files. The ability to manage these "folder of files" is one of the features that sets 12d Synergy apart from the competition. 12d Synergy can keep track of all changes to a 12d Model project (and folder of files) - who changed it, why it was changed and when. This history is useful for audits and works in conjunction with version control to allow roll back to earlier versions of 12d Model projects for review and to conduct "what-if" design changes.

Permission Control

12d Synergy can control exactly who can view or access 12d Model projects. Unlike standard Windows file and folder permissions, the interface is more user friendly and contains extended permission grouping for Users, Groups and Team Roles. An access log is maintained which records the activity of all users who have opened, edited or accessed shared models from 12d Model projects.

Local Caching Technology for 12d Model projects

12d Model's performance is enhanced when using 12d Synergy. When a 12d Model project is checked out by a user for the first time, 12d Model project data is transferred in entirety from the 12d Synergy server and cached locally in the reserved workspace on the user's PC. During the editing session, 12d Model will only be opening and making changes on the cached copy which is on the local drive and not the master copy on the server. During check-in, only the new or changed files are uploaded to the server, which results in data transfer reduction of over 95%.

This caching process saves time and reduces network traffic as the amount of data carried on the network will be greatly reduced. This is particularly beneficial when users are on slower or overloaded connections or connecting from outside of the office and at project site offices.

Regional and Global workshare

12d Synergy provides users access to 12d Model projects from within the office LAN or remotely through a WAN.

The local caching process employed by 12d Synergy reduces the amount of data transferred across the LAN or WAN making it a valuable tool for inter-office collaboration.

12d Synergy's data management process ensures a single source of truth for the company's priceless data; it is a robust platform for regional and global work sharing.



Sharing

12d Model data (models and TINs) can be shared and permissions defined from within 12d Synergy. This provides project managers greater control over the project.

Offline 12d Model Projects

12d Synergy's 'pack and go' capability can offline a 12d Model project to the user's computer for use in the field or to be used in a satellite office which may have poor or no Internet connectivity. The offlined project will include all the lifestyles, symbols and shared data. The user will be assured that no data will be missing or 'not available' when working on the 12d Model project in the field.

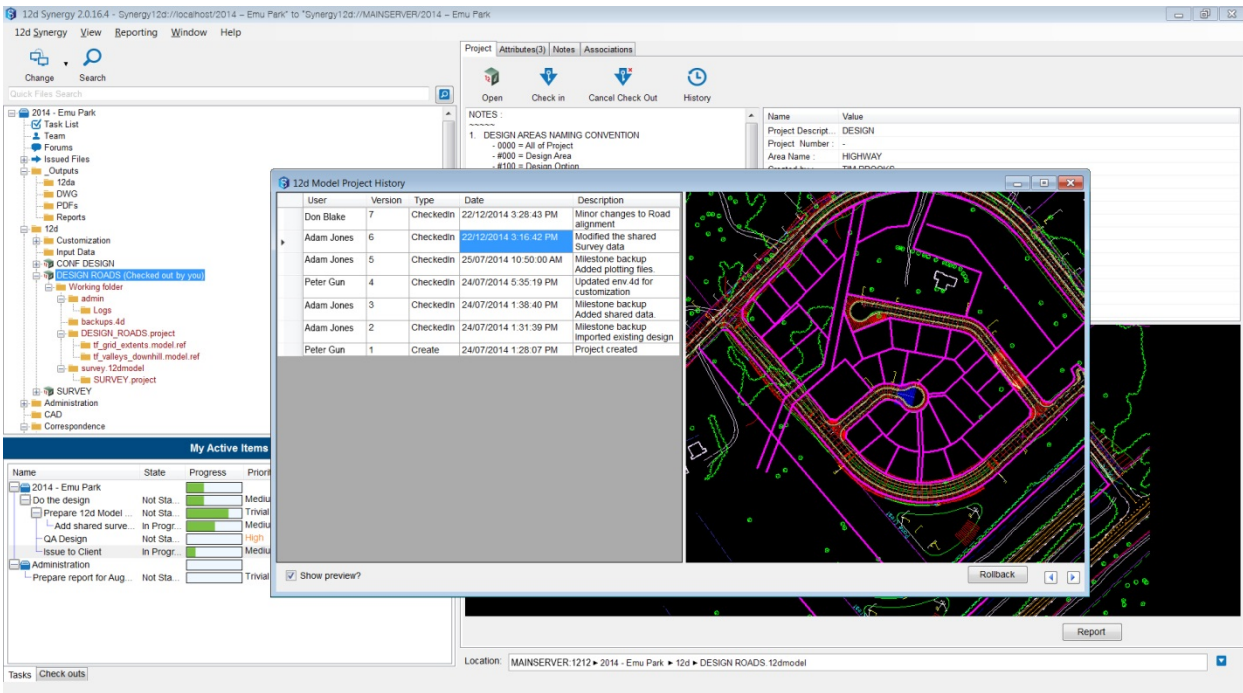
12d Synergy will compare the data on the user's computer and the copy on the server when the user checks in the 12d Model project and update the server accordingly.

Manage 12d Customisation

12d Model customisations can be complex to manage – storing the customisation on a network drive where everyone can access or make changes to the customisation can be risky and costly, leading to time-consuming corrective actions when things do go wrong. Customisations can be stored and secured inside 12d Synergy, automatically delivering updated customisation to users when there are changes.

Utilise 12d Synergy Attributes in 12d Model Projects (e.g. plotting & title blocks)

12d Synergy attributes are available for use in documents as well as 12d Model projects. The attributes can be used in 12d Model macros or embedded directly in title blocks. If any changes are made to the value of the attributes within 12d Synergy, all documents, including 12d Model projects which reference the attributes, will be updated accordingly.



The screenshot displays the 12d Synergy software interface. The main window shows a project tree on the left with folders like '2014 - Emu Park', '12da', 'Customization', and 'DESIGN ROADS'. A 'My Active Items' table is visible at the bottom left. A '12d Model Project History' dialog box is open in the center, showing a table of project changes:

User	Version	Type	Date	Description
Don Blake	7	Checkedin	22/12/2014 3:28:43 PM	Minor changes to Road alignment.
Adam Jones	6	Checkedin	22/12/2014 3:16:42 PM	Modified the shared Survey data
Adam Jones	5	Checkedin	25/07/2014 10:50:00 AM	Milestone backup Added plotting files.
Peter Gun	4	Checkedin	24/07/2014 5:35:19 PM	Updated env 4d for customization
Adam Jones	3	Checkedin	24/07/2014 1:38:40 PM	Milestone backup Added shared data
Adam Jones	2	Checkedin	24/07/2014 1:31:39 PM	Milestone backup Imported existing design
Peter Gun	1	Create	24/07/2014 1:28:07 PM	Project created

The background shows a 3D model of a road network with various colored lines and markers. The interface includes a menu bar (File, View, Reporting, Window, Help), a toolbar, and a status bar at the bottom showing the current location: 'MAINSERVER:1212 > 2014 - Emu Park > 12da > DESIGN ROADS: 12dmodel'.