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The spatial solution for

utilities and government

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Administrator

Munsys Administrator simplifies database operations such as assigning user rights, changing system settings and defining default values for application lookup tables from an Oracle Client PC.

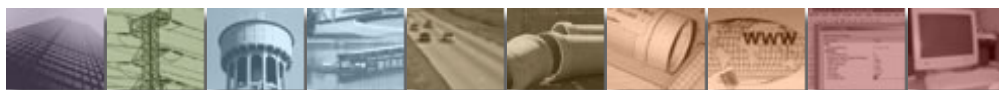
The user interface simplifies the task of the database administrator in generating complex SQL statements to perform various tasks.

Munsys Administrator caters for more advanced database operations such as altering existing and defining new spatial tables for custom spatial objects. With the link table option, related data derived from internal or external sources can be viewed in any Munsys application. Database administrators can easily manage and view user locks to determine which data has been locked and who has locked it. Munsys Administrator provides validation capabilities that are used to verify Munsys tables against validation rules required by Munsys. Tables from other systems are migrated to Munsys spatial tables with ease.

The **Munsys Export Utility** enables the exporting of spatial data to formats supported by various GIS vendors. The **Munsys Schema Utility** prepares the Munsys schema to store spatial and attribute data for Munsys database structures. The user also has the option to export data or drop a schema, using this utility. The **Munsys Schema Update Utility** is designed for existing Munsys users to upgrade current database structures to Munsys 9.2.

Benefits:

- The utility allows the administrator to control aspects such as user rights and passwords.
- The database administrator configures the required application settings from a central database.
- With the linked tables function, users can view data from external sources.
- The application caters for lock administration.
- The data validation capabilities enhance data integrity.
- Creating customized spatial tables is possible.
- The utility caters for adding or modifying columns in spatial tables.
- Facilitates the building or rebuilding of spatial index tables.



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Munsys Water is used for the capture and maintenance of potable, abandoned, reclaimed and raw water networks and related data such as water tower zones.

Various tools are available for cleaning pipe intersections during capture, as well as indicating which pipes are crossing over each other. Nodes can easily be placed on pipes with automatic symbol alignment, whilst pipes can easily be broken without the need for lengthy editing procedures.

Both spatial and attribute data integrity are checked before objects are posted to the database. Munsys Water supports the ability to easily insert nodes into existing pipes, whilst at the same time generating connectivity between nodes and pipes.

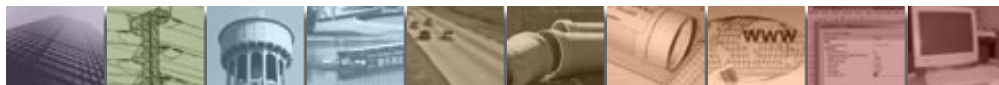
Service connections can be linked to land parcels for determining flow parameters.

Objects provided for include:

- pipes
- nodes
- valves
- service connections
- water zones
- water symbols

Benefits:

- Advanced capture and editing capabilities cater for functions such as the joining and breaking of pipes.
- Placing of nodes on underlying pipes, automatically break pipes and maintain network integrity and connectivity.
- Service connections link to parcel information such as water consumptions.
- The storage facilities of Munsys caters for the integration of external applications to easily model the networks.





With Munsys Sewer users can easily construct and maintain pressure, gravity and vacuum sewer networks. The application also caters for sewer basins that represent different parts of the sewer network.

Munsys Sewer automatically maintains the integrity of the sewer network model by ensuring consistent connectivity between pipes, nodes and service connections.

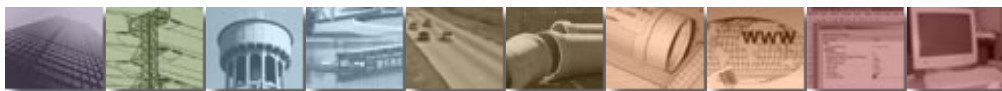
Built-in business rules simplify changes in the sewer network such as inserting new nodes or replacing existing pipes.

Objects provided for include:

- gravity networks
- pressure networks
- vacuum networks
- service connections
- sewer basins
- residential sewer pipes
- sewer symbols

Benefits:

- Start and end identifiers are stored with each pipe to maintain connectivity.
- The network model can easily be used by external applications for flow modeling purposes.
- The application caters for advanced editing such as inserting a new manhole into existing pipes, new levels are interpolated for pipes and nodes.
- Munsys Sewer caters for integration with other systems such as billing and asset management systems.





Munsys Drainage is used for the capture and maintenance of storm water networks and related information including rivers, floodlines, and dams.

The network model information detailing the connectivity of the storm water network is automatically maintained by Munsys Drainage, allowing customers to easily extract the model for third party network modeling and analysis software.

Munsys Drainage also contains business rules, allowing users to edit existing networks with minimal effort. When inserting a new manhole onto an existing pipe, Munsys will, for example, automatically re-calculate the connectivity model and also interpolate new levels for the objects from existing information.

Objects provided for include:

- pipes
- channels
- culverts
- catchments
- rivers
- dams
- floodlines
- drainage nodes

Benefits:

- Capture routines automatically clean pipe intersections and snap nodes onto pipes.
- Network connectivity is generated from the start and end nodes which are automatically stored with a pipe.
- Editing of networks interpolates new pipe and node levels.





Munsys Roads is used to capture and maintain road networks and associated data such as traffic intersections. Roads are constructed within road reserves or at a specified offset from cadastral boundaries.

When creating or modifying roads, Munsys Roads automatically maintains network integrity between the road center lines and intersections. Attributes such as road names and route numbers are maintained in master lookup tables, ensuring consistent spelling and naming conventions.

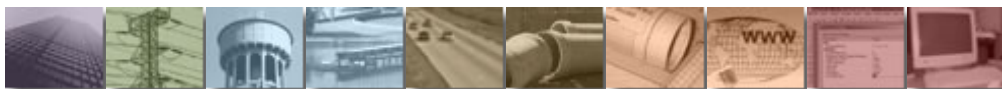
The intersection menu is used to design pedestrian crossings, islands, lanes, guard rails, traffic signals, road markings and warning signs. The design is saved as a drawing, which is referenced by an intersection marker.

Objects provided for include:

- center lines
- intersections
- road areas
- road edges
- walkways

Benefits:

- The storage of the start and end intersection of each road segment contributes to the accurate network connectivity capabilities.
- Various tools are available to clean road intersections.
- When a user breaks a road segment, advanced editing tools assign attribute information to new road segments.
- The application caters for the ability to integrate with pavement management systems.





Munsys Electricity is used for the capture and maintenance of electricity distribution networks and related data. The capture functionality supports networks of Extra High Voltage, High Voltage, Low Voltage and Street Lights, as well as the capture of Service Connections and Electricity Zones.

Munsys Electricity automatically generates network connectivity and also calculates cable slack information for each length of cable. The application also maintains a set of connectivity rules thereby preventing users from inadvertently connecting the wrong cables.

Supply node information is carried along during the capture process, enabling users to identify which regions are supplied from a specific substation.

The flexible storage mechanism of Munsys caters for the integration with other systems such as volt drop analysis.

Objects provided for include:

- extra high voltage networks
- high voltage networks
- low voltage networks
- streetlight networks
- service connections
- cable ducts
- electricity zones

Benefits:

- The start and end points of electricity cables are automatically tied into nodes when captured.
- Users can change the rule based connectivity that is stored in the database.
- Service connections can automatically be linked to parcels, creating a link between the network and parcel related information.
- Munsys Administrator caters for the ability to integrate with other applications that provide information such as electricity consumption and meter information

