

# Bentley Building Electrical Systems

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## v08.09.03.05

### New Features

In addition to the exciting new features in MicroStation V8 XM Edition, Bentley Building Electrical Systems includes several new features:

**User Defined Attributes (UDA)** – UDA's define properties for electrical objects. UDA's are customizable by users and linked to symbol subtypes. A default set of properties are delivered for power distribution panels, luminaires, transformers, and other electrical objects.

**Online Panel View** – The Online Panel View filters panel circuiting design data in the Cable Manager. Users can define 1P, 2P and 3P circuits, edit circuit breaker sizes, define circuit descriptions, identify panel circuit breaker spares and blanks, and dynamically view load information.

**Circuit Lines** – Manual circuit lines and home runs are now supported. Users can define type, style and location

**Raceway Line Styles** – Custom line styles can now be defined for 2D raceway symbology.

**Reflected Ceiling Plans** – 2D reflected ceiling plans include a “wipe” for correctly displaying fixture cells.

**Device Tags** – Tags for devices in plan view can now be placed on elevations above finished floor for mezzanines, reflected ceiling plans, etc.

**Tag sets** – Tag Sets for device attributes can be defined including properties, text style and location, the definitions can be stored in the Symbol Manager for reuse.

**Conduit Types** – The Raceway library has been expanded to include all conduit trade sizes for GRS, IMC, EMT, PVC schedule 40 and 80, FMC and LFMC conduit types.

**Output Manager enhancements** – The Output Manager has been enhanced to report User Defined Attributes in schedules, import manufacturers' data to Luminaire schedule, and link schedules to a master MS Excel workbook. New Schedule types include:

- Luminaire
- Power panel
- Panel list (project)

- Transformer list (project)

**Raceway Symbol Library Enhancements** – The Raceway library has been expanded with the addition of approximately 2000 cable tray fittings and straight sections. Cable tray depths up to 7 inches and fittings with bend radius of 36 inches and 48 inches have been added. Also, straight sections in lengths of 20 feet and 24 feet have included.

**SmartLine Conversion Tool enhancements** – The SmartLine conversion tool to raceway now includes preferences for cable tray bend radius and straight lengths.

**Busway Library enhancements** – The busway library has been expanded to include 1600 A busway with new fitting types for flanges, feeder bus, cable tap boxes, etc.

**Building Manager Pick Text** – The Pick Text option now supports text nodes (multi-line text).

**Generate Individual Room Name** – An option to Generate Individual Room Name has been added to the Lighting Analysis dialog. This creates a unique ID for each room shape exported to the lighting analysis program.

**Swap Symbols** – The new command, Swap Symbols, allows users to replace existing cells.

**Cell Levels** – Cells with multiple dgn levels are now supported.

**DGNLib Support** – Cell placement with level derived from DGNLib now places cell on correct level instead of default level.

**Raceway Cell Library Cache Option** – Local cache option for raceway cell library and database has been optimized for performance across a network. The local cache option now supports versioning along with local caching of the .CEL file.

**Legend Generation** – Automatic legend generation now supports reference files.

**Raceway Place Part / Options** – With the Place Part / Option dialog the user can select the cursor position (bottom/left, center/left, center/center, etc.) relative to the top view of a raceway fitting during placement. When used with AccuDraw, fittings can be easily located or offset relative to walls and other features.

**Raceway Place Part / Cycle** – A Place Part / Cycle option has been added to the Raceway Create dialog to automatically cycle back to Place Part command.

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