AVEVA Everything3D™

Update and roadmap

Roberto Carlini, Technical Sales Consultant
AVEVA E3D 2.1 – Release Updates
AVEVA E3D 2.1 – Already Released
AVEVA E3D 2.1 – Future Releases
AVEVA E3D 3.1 – The Evolution Continues
Update 2
- Bocad Steel Interface
- SDNF Interface

Update 4
- Mining
- Vessel Supports

Update 6
- Trunnion Dimensions
- SpaceMouse Support

Update 8
- Pipe Fabrication
- Cable developments
- Supports Conversion
- Auto Hole sizing

Update 10
- FT100 Frameworks
- Supports to Civils
- Model - Add Within

Update 12
- Alternative SKEY for Supports.

Update 14
- Multi-Project Hole Mgt
- Automatic Cable Routing
- Outfitting Piping

Update 3
- Multi Port Valves
- Compatibility Updates

Update 5
- Terrain
- CPL Interface
- Configurable Trunnions

Update 7
- IFC Import
- Licad® Hanger Interface
- Simultaneous dressing of Cableways

Update 9
- Cable Developments
- Support Groups
- PSL® and Generic Hanger Interfaces
- Developer Ribbon

Update 11
- Level Gauge SKEY
- Lighting Supports
- HVAC Developments
- Cable Developments
- LFM Server Upgrade

Update 13
- SLH Step Ladders
- Data Reuse
- Automatic Joint Selection
Update 15
- IFC Export
- AVEVA ERM Interface
- Multi-Copy
- MDU Copy Tool
- Intelligent Frameworks

Update 17
- Supports: Max. Slope
- Backstage

Update 19
- Inside / Outside CWAY Radius

Update 21
- Bounded Plate
- ObjectSnaps - Surface

E3D 2.1

Update 16
- Maintenance

Update 18
- Compound Joints

Update 20
- Maintaintance

Future
- Cable Layout & Visualisation
- Etc…
AVEVA E3D
Already released
IFC Export from AVEVA E3D
Reuse of existing design

Data Reuse

- Better tools for re-using existing design
- Reference plants
- Multi-block units
- Modular design
Reuse of existing design

Data Reuse

- Rename and attribute modification rules functionality per element type
- Multiple rules can be applied to same element type
Little, big improvements

- Merged Joints
- Step Ladders
- Multiple copy enhancements
- Manual slope for supports
AVEVA E3D 2.1
Future Releases
Cable Design

Cable Layout

True Cable Fill Calculations

Several Pseudo Attributes for Installation Method

- 1700
- 6000
- 3000

- 1300
- 2000
- 1400
- 1500

- Installation method, see MATTYP SECT of CATREF or SPREF of tray
- [1] Undefined, 2000
- [2] Free Route, 5900
- [3] Perforated, 6000
- [4] Unperforated, 0
- [5] Conduit, 3000

- (No Material)
- (Open Air)
- (Ladder Rack)
- (Solid Tray)
- (Conduit)
Cable Bundles

- New element under zone to store cables in a bundle
- Name of bundle can be used as bandage code
- Layout mode of bundle can be:
  - Trefoil
  - Flat
  - Layered
  - Packed
Cable Segregation

A cable way branch can now have more than one iclass
2D Draw Import

Importing .DWG files in the 3D Model

• Can be grouped by Autocad Layers or not

• Autocolour rules can be applied to different layers
AVEVA E3D 3.1
The Evolution Continues
AVEVA E3D 3.1

Outline Scope

• Add Marine capabilities
  • New Hull Structural Design application
  • Enhancements for all Plant & Marine customers
• Generic new capabilities
  • New Space Management capabilities
  • DRAW enhancements
  • Support for very large co-ordinates - graphics and spatial map
  • Up to 5000 databases/ MDB
• Enhancements/extensions to Modelling/Design capabilities
• Ductwork /HVAC redesign
  • At a 3.1 update release
• Laser Improvements
AVEVA E3D 3.1

Hull Design

• Brand new hull basic design bringing a new level of efficiency
• With improved capabilities for early design and creation of 3D GA
• Output to Finite Element Analysis
• Rapid output of classification drawings
AVEVA E3D 3.1

New Hull – The Vision

• Based on 50 years of experience
• Using a new robust and open platform
• New, extremely efficient User Interface
• Getting rid of old architectural limitations
• Brand new features and functions

A new shipbuilding system for the next 20 years
Generate and use Global Information of a Ship/Plant
AVEVA E3D 3.1

Space Management

• Create all kind of space arrangements
• Drive early coordination (GA) directly in 3D instead of isolated drawings
• Manage spaces by properties, by purpose, by location...
• Run calculations, lists and reports by spaces
• Available for all design disciplines
AVEVA E3D 3.1

Quick Draw

• Draw integrated in Model

• Partial Model Update

• More Drawing View Types

• Lazy Loading on opening
Engage graphics in AVEVA E3D

Engage graphics in the design application

ARF in E3D - Future 3.1 Update
Independent Cloud Services to extend AVEVA E3D

Whitespace Service

• Fast clean up of drawing annotation
• Optional batch mode
Independent Cloud Services to extend AVEVA E3D

MCAD Model Simplification

- Multiple format
- Remove small parts and holes
- Reduce file size
HVAC Redesign

Will include ...

• Quick HVAC router (working similar to Quick Pipe Router)

• Improved user experience
  • faster workflows and updated modern UI
  • feedback in graphics for dimension
  • gaps in ducting easily identified and filled
HVAC Redesign

Improved HVAC Specification management, similar to Piping Application

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Total Items = 56
Laser Enhancements

- Solid PointCloud
- AVEVA E3D will now support more than 7 XGEOMs
- Measurements of structural profiles
- Extended Colour Highlight
Solid Pointcloud
Extended colour highlight
... The Evolution Continues
ABOUT AVEVA

AVEVA is a global leader in engineering and industrial software driving digital transformation across the entire asset and operational life cycle of capital-intensive industries.

The company’s engineering, planning and operations, asset performance, and monitoring and control solutions deliver proven results to over 16,000 customers across the globe. Its customers are supported by the largest industrial software ecosystem, including 4,200 partners and 5,700 certified developers. AVEVA is headquartered in Cambridge, UK, with over 4,400 employees at 80 locations in over 40 countries.

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