Reality Modeling:
Ground Extraction from Mesh or Point Cloud

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Rapidly extract ground from a Reality Model

The advantages of using reality modeling to deliver 3D engineering ready reality meshes

• How to extract ground from a mesh or point cloud automatically

• How to create scalable terrain models, cut cross sections, and add break lines
Two workflows

• Quick Ground Extraction
  • Extracts terrain in a Scalable mesh (3SM) from a user defined area.

• Ground Extraction
  • Extracts terrain and automatically classifies ground points in reality models (reality meshes and point clouds).
Quick Ground Extraction

Extracts terrain in a Scalable mesh (3SM) from a user defined area.

- The Quick Ground Extraction tool extracts ground in a user defined area.
- The user can draw a Block, a Shape or select a closed element
- The tool extracts the ground in a new 3SM attachment
- Then both 3SM attachments are clipped for seamless display
  - Original 3SM is clipped using a Clip Mask
  - New 3SM is clipped using a Clip boundary.
Ground Extraction

Extracts terrain and automatically classifies ground points in reality models (reality meshes and point clouds).

- Create Ground Points Automatically
- Create Classified Point Cloud
- Create Scalable Terrain Model (STM)
- Create Scalable Mesh (3SM)
Questions?