# DYNAMICALLY CONNECTED WORKFLOW FOR A STABILITY ANALYSIS OF AN EMBANKMENT DAM

Bridging 3D Geology and Geotechnical Analysis for Smarter Engineering Decisions

## Featuring:


**RICHARD LOWRIES**
Customer Success Manager,
Seequent

**CHOO JUNE SHYAN** P.E.
Technical Director,
Otte International Pte Ltd


## Synopsis

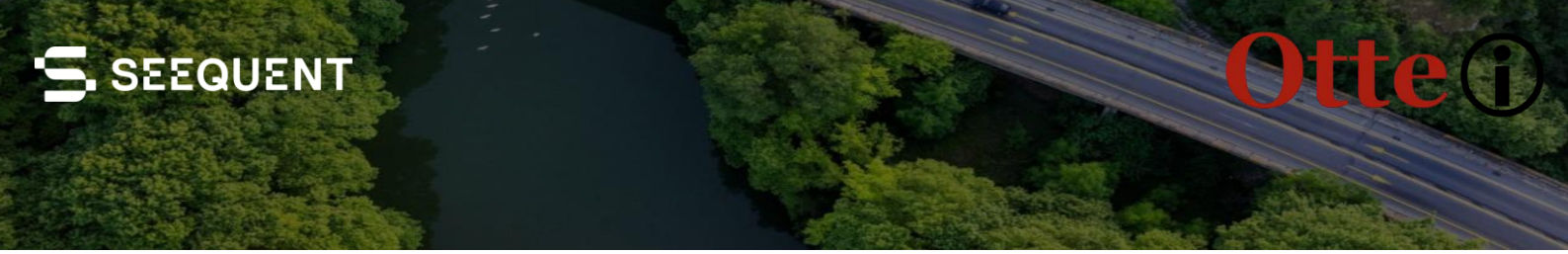

This session presents a streamlined workflow for conducting stability analysis of embankment dams using Leapfrog Works, Seequent Central, and GeoStudio. It demonstrates how to efficiently develop a geological model, define construction stages, and perform slope stability analysis within an integrated environment.

The process begins with setting up a subsurface model in Leapfrog Works by importing borehole data, establishing topography using a digital elevation model, and building a 3D geological model. Construction stages are then created by combining geological and design interpretations, generating cross sections, and exporting volumes for analysis.

These models are published to Seequent Central, where cross sections and geometry are stored and prepared for use in GeoStudio. In GeoStudio, the 2D and 3D geometries are imported, materials are assigned to geological layers, and slope stability analyses are performed for different construction stages. This connected approach supports the accurate evaluation of dams, levees, and embankments, helping to reduce rework and improve confidence in engineering decisions.


## Key Topics Covered

- Setting up subsurface model
  - Import borehole data into Leapfrog Work
  - Established Topography with digital elevation modal
  - Creating 3D Geological model
- Creating Staged Construction Geometry in Leapfrog Works
  - Combine geological and design interpretations
  - Visualize 2D problems and generate cross sections for analysis
  - Export 3D volumes for analysis
  - Import the geometries to Seequent Central
- Publishing and Managing Models in Seequent Central
  - Publish geological and design models
  - Store cross sections and model outputs
  - Prepare geometry for import into GeoStudio
- Importing and Preparing Analysis in GeoStudio
  - Import 2D and 3D geometries from Central
  - Assign materials to GMV layers
  - Set up 2D and 3D slope stability analysis




# COURSE INFORMATION

**DYNAMICALLY CONNECTED WORKFLOW FOR A STABILITY ANALYSIS OF AN EMBANKMENT DAM**

**Date:** 15th July 2025 (Tuesday)
**Time:** 9:00 am – 12:00 pm (Registration start 08:30 am)
**Venue:** #13-06, Level 13, Menara MBMR, No. 1, Jalan Syed Putra, 58000 W.P. Kuala Lumpur, Malaysia.

Terms & Conditions:

1. Due to limited seats, registration is on a first-come-first-served basis. If registered participant does not show up. A Penalty of RM 50 will be imposed.

# REGISTRATION FORM

Company Name: ..... Person in Charge: .....

Address: .....

Tel (O): ..... (HP): ..... Email: .....

| | Participant Names | PE No | Job Title | Email |
|---|---|---|---|---|
| (Dr/Mr/Ms) | | | | |
| (Dr/Mr/Ms) | | | | |
| (Dr/Mr/Ms) | | | | |
| (Dr/Mr/Ms) | | | | |
| (Dr/Mr/Ms) | | | | |

I/We hereby agree to abide the terms and conditions stated above.

**Person in charge Signature** **Date & Company Stamp**

Please submit the completed registration form to mysales@ottegroup.com. A confirmation email will be sent to you upon receipt of your registration.

**Otte Utama (M) Sdn Bhd** (co.Reg.No. 650546-T)
#13-06, Level 13, Menara MBMR, No. 1, Jalan Syed Putra, 58000 W.P. Kuala Lumpur, Malaysia.
Tel: +603 9212 9383 Email: mysales@ottegroup.com www.ottegroup.com